# Request for Proposals:

# WSRE FCC Mandated Repacking Project

# RFP 8-2018/2019

**Due: January 10th, 2019 @ 2:00 PM, Local Time**

Pensacola State College is soliciting sealed bids for the installation of new Digital TV broadcast and transmission services, according to the contract documents, drawings, specifications and general conditions pertaining thereto for the work in Attachment A.

Please review and deliver your formal bid as the original and four copies by the date and time shown on the Bid Form to:

**SEALED BID # RFP -8-2018/2019**
Ted Young, Director of Purchasing and Auxiliary Services
1000 College Blvd.
Pensacola, FL 32504

Please indicate the bid number on the outside of your sealed bid envelope to assist in identifying your bid.

Pensacola State College is a political subdivision of the State of Florida and as such is exempt from all Federal and State taxes. Pensacola State College reserves the right to reject any portion or all bids, to resolicit bids or not and to waive informalities as deemed in the best interest of Pensacola State College.

Public bid opening: Pensacola State College will conduct a Public bid opening on the date and time listed above at Pensacola State College Board Room, 1000 College Blvd. Pensacola, FL 32504 Room 736. The College may choose to only open the individual bids and publicly announce who a bid was received from. The actual bid prices submitted will not be a public record until the date of posting or the number of days as defined in FS 119.071. Immediately following the bid opening, the Bid Evaluation Committee will evaluate the bids. This may require additional review by the committee or representative.

ANTI-COLLUSION STATEMENT: The Bidder by signing and submitting a bid has "not" divulged to, discussed or compared his/her bid with any other Bidders and has not colluded with any other Bidders or parties to a bid whatsoever. (NOTE: Including there have been No premiums, rebates or gratuities paid or permitted either with, prior to, or after any delivery or personal contact. Any such violation will result in the cancellation of award of any resulting contract from this bid and the Bidder being debarred for not less than three (3) years of doing business with Pensacola State College.)

1.0 OVERVIEW

Pensacola State College is soliciting qualified bids from qualified firms to provide installation of the Re-Packing Project as defined in **Attachment A**.

1.01 Bidders may contact Ted Young, Director of Purchasing and Auxiliary Services by email purchasing@pensacolastate.edu for questions related to the College's requirement relative to this RFP.

1.02 In order to maintain a fair and impartial competitive process, Pensacola State College shall avoid any oral communication with prospective bidders other than through the purchasing office during the bid process. However, all solicited bidders will be provided a copy of all written questions submitted and Pensacola State College's responses to them, unless the written inquiry pertained to an administrative or procedural matter. Send all inquiries to the attentions of:

Ted Young, Director of Purchasing and Auxiliary Services
Pensacola State College
1000 College Blvd.
Pensacola, FL 32504
PHONE: (850) 484-1779 FAX: (850) 484-1839
Email: purchasing@pensacolastate.edu

All written questions and inquiries are due no later than **10:00 AM, local time, January 4, 2019.**

1.03 Any addenda issued prior to the opening of the RFP for the purpose of changing the specifications of this request for proposal or related documents, or clarifying the meaning of the same, shall be binding in the same way as if originally written in the RFP specifications and related documents. Since all addenda are available to proposers at the office of the Pensacola State College Director of Purchasing and Auxiliary Services, it is each bidder's responsibility to check with the issuing office and immediately secure all addenda before submitting your bid. The Pensacola State College Director of Purchasing and Auxiliary Services emails addenda to all known prospective bidders, but no guarantee can be made that addenda will be received.

1.04 The bidder is assumed to be familiar with all Federal, State of Florida and local laws, ordinances, rules and regulations that in any manner affect the work. Ignorance on the part of the proposer will in no way relieve you from your contractual responsibility. Any resultant award shall include requirements that the resultant contract shall be governed by the laws of the State of Florida.

1.05 As deemed in the College's best interest, the College reserves the right to:

1. Reject any or all bids submitted.
2. To resolicit bids or not.
3. To award any portion(s) of this RFP.
4. To waive informalities.
5. To issue to all responsive bidders request for information (RFI's).
6. To issue requests to negotiate with finalist and solicit best and final offers.
7. To evaluate to determine technical equivalents.
8. To award this RFP on a Lot by Lot basis to the responsive low bidder meeting specifications.
9. To award on an outright purchase or lease basis.

1.09 The bid shall remain in force for thirty (30) days after the time of opening.

1.10 SCHEDULE: All items pertaining to this project must be complete by ***October 19, 2019***.

Important Bid Dates:

| TIME | DAY/DATE | DESCRIPTION |
|---|---|---|
| | **December 17, 2018** | Advertise RFQ |
| 2:00 PM | **January 4, 2019** | Questions regarding RFQ due |
| 2:00 PM | **January 10, 2019** | RFQ due |
| 3:00 PM | **January 17, 2019** | Meeting to review, rank, and Shortlist Proposals |
| 1:00 PM | **January 24, 2019** | Interview Shortlist and Final Ranking*, If deemed necessary by the College |
| 5:00 PM | **February 19, 2019** | Final ranking approved by Board of Trustees and approval to negotiate and execute a contract. |

1.11 QUALIFICATIONS: Bidders shall furnish documentation of the following:

a. He or She presently maintains a permanent bona fide place of business practicing this type of work and has had the appropriate experience.
b. He or She has available, or can obtain, adequate equipment and financial resources to undertake and execute the Contract properly and expeditiously, in accordance with present day practices.
c. He or She shall submit with the Bid the enclosed document entitled "Sworn Statement under Section 287.133(3) (a), Florida Statutes. On Public Crimes".

1.12 DISQUALIFICATION OF BIDDER: More than one Bid from an individual, firm, partnership, corporation or association under the same or different names will not be considered. Reasonable grounds for believing that a Bidder is interested in more than one Bid for the same will cause the rejection of all Bids which such Bidder is believed to be interested. Bids will be rejected if there is reason to believe that collusion exists between Bidders. Bids in which the prices are obviously unbalanced may be rejected.

1.13 MODIFICATION OF BID: Bid modifications will be accepted from Bidders if addressed to the Owner at the place where Bids are to be received and if received prior to the opening of the Bids. Modifications may be in written or telegraphic form. Modifications will be acknowledged by the Owner before opening of formal Bids.

1.14 WITHDRAWAL OF BIDS: Bids may be withdrawn by written or telegraphic request received from Bidders prior to the time fixed for opening. Negligence on the part of the Bidder in preparing the Bid confers no right for the withdrawal of the Bid after it has been opened.

1.15 SECURITY: The Contractor shall be responsible for maintaining security, and the contractor shall be responsible for replacement or repair of items and/or equipment stolen, lost or damaged while the building security is under the care of the Contractor. The Contractor shall be responsible for having a job superintendent present whenever work is in progress. The Contractor shall not change superintendent without the Owners approval.

2.00 GENERAL

Must meet or exceed the specifications listed in Attachment A.

2.01 BASIC DEFINITIONS: Unless otherwise expressly stated, wherever in the Contract Documents the word 'provide' is used, it shall mean furnished and installed in place, complete and tested. The terms Architect and Engineer are used interchangeably.

2.02 CORRELATION AND INTENT OF THE CONTRACT DOCUMENTS: If a discrepancy occurs on drawings, in specifications, or between drawings and specifications, the greater quantity or value takes precedence.

2.03 WARRANTY: The warranty herein guarantees the proper operation of all structures, components and systems constructed or installed by the contractor for a period of one year after the date of substantial completion.

If within the guarantee period, repairs or changes are required in connection with the guarantee work, which in the opinion of the Architect is rendered necessary as the result of the use of materials, equipment, or workmanship, which are defective, or inferior, or not in accordance with the terms of the Contract, the Contractor shall, promptly upon receipt of notice from the Owner, and without expense to the Owner, proceed to:

Place in satisfactory condition in every particular all of such guaranteed work, correct all defects therein; and make good all damages to the structure or site, or equipment or contents thereof which, in the opinion of the Architect are the result of the use of materials, equipment or workmanship which are inferior, defective, or not in accordance with the terms of the Contract, or the equipment and contents or structures or site disturbed in fulfilling any such guarantee.

2.04 INDEMNIFICATION: The Contractor shall, for the sum of one hundred dollars ($100.00) and other good and valuable consideration paid by the Owner and Architect, individually, receipt of which is hereby acknowledged by the Contractor, indemnify and hold harmless the Owner and Architect and their agents and employees from and against all claims, damages, losses and expenses, including attorney's fees, out of or resulting from the performance of the work provided that such claims, damage, loss or expense: (1) is attributable to bodily injury, sickness, disease or death, or injury to or destruction of tangible property other than the work itself, including the loss of use resulting there-from, and (2) is caused in whole or in part by a negligent act or omission of the Contractor, subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any one of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder. This obligation shall not be construed to reduce or negate any other right or obligation of indemnity which would otherwise exist as to any party or person described in this invitation to bid.

2.05 SUBCONTRACTORS: The Contractor shall not contract with any person or entity declared ineligible under Federal laws or regulations from participating in federally assisted and/or funded projects or to whom the Owner or the Architect has made reasonable objection.

2.06 CHANGES IN WORK: Maximum percentages of overhead and profit which may be added by the Contractor to actual costs of such changes in the work are specifically set forth as follows:

For all work done by his organization, or subsidiaries of his organizations, including work traditionally considered as subcontractor work, the Contractor may add 15% of his actual costs for combined overhead and profit.

For any work performed by a subcontractor or forces under the respective subcontractor including any sub-subcontractors or persons not in the direct employ of the subcontractor, a total of 15% of the cost of the change, with 10% to be assigned to the subcontractor and any forces under him and the General Contractor may add 5% of the cost above subcontractor's cost for his overhead and profit.

The above percentages shall be considered reasonable allowance for overhead and profit due to the contractor.

The Contractor shall submit receipts or other evidence showing his costs and his right to the payment claims. All changes in work shall be provided with a detailed cost breakdown indicating material and labor units for all work to be performed. In addition, the cost breakdown shall contain all current tax and labor burden. The allowable amount for the material tax shall be 7.25% and for labor burden shall be 30%.

2.07 INSURANCE AND BONDS: The Contractor shall not commence any work in connection with this agreement until he has obtained all of the following types of insurance with the Owner as additional named insured and such insurance has been approved by the Owner, nor shall the Contractor allow any subcontractor to commence work on his subcontract until all similar insurance required of the subcontractor to commence work on his subcontract has been obtained and approved.

All insurance policies shall be with insurers qualified and doing business in Florida.
THE CONTRACTOR SHALL PROCURE AND MAINTAIN FOR THE LIFE OF THIS CONTRACT:

1. Workers Compensation and Employers' Liability as follows:
    a. WC Statutory Limits per FS 440
    b. E.L. - Each Accident $500,000
    c. E.L. Disease – Each Employee $500,000
    d. E.L. Disease – Policy Limit $500,000
2. Comprehensive General Liability with minimum limits as follows:
    a. Each Occurrence - $ 1,000,000
    b. Damage to Rented Premises (Each occurrence)- $100,000
    c. Medical Expense (Any one person) $5,000
    d. Personal Advertising Injury - $1,000,000
    e. General Aggregate - $2,000,000
    f. Products-Completed Aggregate - $2,000,000
    g. General Aggregate applies to Per Project
3. Automobile Liability providing coverage on any auto to include all owned, hired and non-owned vehicle with following minimum limits:
    a. Combined Single Limit (Each Accident) - $1,000,000 OR
    b. Bodily Injury per person - $500,000, Bodily Injury per Accident - $1,000,000, Property Damage per Accident - $500,000
4. Excess/Umbrella Liability on Occurrence Form with following limit:
    a. $1,000,000 each occurrence
    b. $2,000,000 aggregate
    c. Retention /Deductible - $5,000

The Contractor liability policy shall provide "XCU" (Explosion, Collapse, Underground Damage) coverage for those classifications in which they are included.

Broad Form Property Damage shall be required on Contractor's public liability so that completed operations coverage extends to work performed by the Contractor.

Risk Insurance: Contractor shall purchase and maintain in effect a completed value risk policy issued by an admitted carrier in an amount equal to the full completed value of the project. Such insurance shall be issued on an all risk form. The Contractor shall be responsible for any deductible amounts.

3.00 SPECIAL CONDITIONS

3.01 Florida sales tax exemption no: 85-8012557294C-2. This project is funded utilizing Federal Funds. As such all applicable Federal Laws must be followed. This includes but it not limited to the Davis Bacon Act.

3.02 Pensacola state college reserves the right to reject any or all RFPs/proposals received, to resolicit or not and to waive informalities as deemed in the best interests of the College.

3.03 As a bidder/proposer our company attests we have not been convicted of a public entity crime of the State of Florida or any federal agency and are not listed in the excluded parties list system (EPLS) maintained by the General Services Administration(GSA).

Pursuant to OMB Circular a-110,subpart b, section 13 a person or affiliate who has been placed on either the federal excluded parties list system or the state of Florida convicted vendor list following a conviction for a public entity crime may not submit a bid or enter into a contract to provide any goods or services to a public entity, may not submit a bid or enter into a contract with a public entity for the construction or repair of a public building or public work, may not submit bids on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in section 287.017, for category two (i.e. $25,000)while on the convicted vendor list. The excluded parties' list system can be found at http://epls.gov/epls/servlet/EPLSGETInputSearch

3.04 Any entity or affiliate who has been placed on the discriminatory vendor list may not submit a RFP on a contract to provide goods or services to a public entity, may not submit a RFP on a contract with a public entity for the construction or repair of a public building or public work, may not submit RFPs on leases of real property to a public entity, may not award or perform work as a contractor, supplier, subcontractor, or consultant under contract with any public entity, and may not transact business with any public entity. All invitations to RFP, as defined by 287.012(11)FS, request for proposals, as defined by 287.012(15)FS, and any written contract document of the state shall contain a statement informing entities of the discrimination provisions.

3.05 Pensacola State College reserves the right to award an individual lot or a combination of lots; reject any or all lots, whatever seems in the best interest of the College.

3.06 The specifications listed are meant to demonstrate the work parameters required, and the functional limits listed are to be considered minimal unless changed by addendum to the bid. Bid evaluation will be made strictly from the minimal specification. Each particular specification which the equivalent offered which does not meet must be identified and submitted along with the detailed specification sheet of the equivalent offered.

3.07 The successful bidder shall fully guarantee all items furnished against defect in materials and/or workmanship for a period of 365 days from date of final acceptance by Pensacola State College. Should any such defect, except for normal wear and tear, appear during the warranty period, the successful bidder shall commence repair or replace same at no cost to Pensacola State College within 72 hours after notice.

3.08 Any "notice of protest" involving the specifications, the terms and conditions or any other aspect of this invitation to bid (ITB), request for proposal (RFP) or request for qualification (RFQ) must be filed in writing within 72 hours after the receipt notice of the project plans and the solicitation specifications. Formal written protest must be

filed within 10 days after the date of the notice of protest is filed. (Saturdays, Sundays and legal holidays shall be excluded in these computations.) The formal written protest shall state with particularity the facts and law upon which the protest is based. Failure to file a notice of protest or failure to file a formal written protest within the time prescribed in section 120.57(3), Florida Statutes shall constitute a waiver of proceedings under chapter 120, Florida Statutes.

3.09 Bid tabulations with recommended awards will be posted on the purchasing web page http://pensacolastate.edu/purchasing/current_solicitations.asp
Unless changed by addendum, and will remain posted for a period of 72 hours (not including Saturdays, Sundays and legal holidays). Any notice of protest of award or recommendation of award shall be filed in writing to the Director of Purchasing, within 72 hours after the posting of the ITB/RFP/RFQ bid tabulation. "Failure to file a protest within the time prescribed in section 120.57 (3), Florida statutes shall constitute a waiver of proceedings under chapter 120, Florida Statutes." A formal written protest must be filed within 10 days (excluding Saturdays, Sundays, and legal holidays) after the date the notice of protest was filed. The formal written protest shall state with particularity the facts and law upon which the protest is based upon. Failure to file a formal written protest within the time prescribed shall constitute a waiver of proceedings under chapter 120.57(3) Florida Statutes. Inspection or examination of sealed bids or proposals are available for inspection during normal working hours by appointment, upon notice of a decision or intended decision, or 10 days after invitation to bid or proposal public opening, whichever is earlier.

3.10 As this solicitation may be federally funded. The sections within this RFP are an overview of Federal Compliance Conditions and Regulations that all bidders must comply with.

CERTIFICATION OF DRUG-FREE WORKPLACE PROGRAM

IDENTICAL TIE BIDS - Whenever two or more bids which are equal with respect to price, quality, and service are received by the State or by any political subdivision for the procurement of commodities or contractual services, a bid received from a business that certifies that it has implemented a drug-free workplace program shall be given preference in the award process. Established procedures for processing tie bids will be followed if none of the tied vendors have a drug-free workplace program, or if all of the tied vendors have drug-free workplace programs. In order to have a drug-free workplace program a business shall:

(1) Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.

(2) Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.

(3) Give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in subsection (1).

(4) In the statement specified in subsection (1), notify the employees that, as a condition of working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation of chapter 893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) days after such conviction.

(5) Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community, by any employee who is so convicted.

(6) Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.

AS THE PERSON AUTHORIZED TO SIGN THE STATEMENT, I CERTIFY THAT THIS FIRM COMPLIES FULLY WITH THE ABOVE REQUIREMENTS.

BIDDING FIRM OR ENTITY NAME: _____

SIGNATURE OF VENDOR REPRESENTATIVE: _____

TYPED OR PRINTED NAME OF VENDOR REPRESENTATIVE: _____

DATE: _____

MINORITY BUSINESS ENTERPRISE/WOMAN BUSINESS
ENTERPRISE CERTIFICATE

I HEREBY DECLARE AND AFFIRM that I am the _____ (Title) representative of the firm of _____ (Company Name) minority business enterprise (MBE/WBE)_____ (Minority Type) as defined by Pensacola State College in the specifications for _____(RFP Name & Number) that I will provide information requested by PENSACOLA STATE COLLEGE to document this fact. The foregoing statements are true and correct and include all material necessary to identify and explain the operations of _____ (Company Name) as well as the ownership thereof. Further, the undersigned does agree to provide PENSACOLA STATE COLLEGE current, complete and accurate information regarding actual work performed on the project, the payment therefor and any proposed changes in any of the arrangements hereinabove stated and to permit and audit an examination of the books, records and files of the above named company by authorized representative of PENSACOLA STATE COLLEGE. It is recognized and acknowledged that the statements herein are being given under oath and material misrepresentation will be grounds for terminating any contract which may be awarded in reliance hereon. Termination is understood to forfeiture of payment for all work not performed at time of notification.

I DO SOLEMNLY DECLARE OR AFFIRM UNDER THE PENALTIES OF PERJURY THAT THE CONTENTS OF THE FOREGOING DOCUMENTS ARE TRUE AND CORRECT, AND THAT I AM AUTHORIZED, ON BEHALF OF THE ABOVE FIRM, TO MAKE THIS AFFIDAVIT.

_____
Signature of Company's Authorized Representative

State of _____County of _____City of _____

On this _____ day of _____, 20_____, before me, in the foregoing affidavit and acknowledged that he (she) executed the same in the capacity therein stated and for the purpose therein contained.

In witness thereof, I hereunto set my hand and official seal.

Signed: _____ (SEAL)
Notary Public

My commission Expires:

Minority Type: # M1 Black American Man; M2 Hispanic American; M3 Asian American; M4 Native American (Eskimo & Aleutian); M5 Native Hawaiian; M6 Small Business; M7 Disabled; M8 American Woman; M9 Black American Woman; and NM Not Minority. (Must have greater than 51% minority ownership). "Minority/Woman Business Enterprises that file false misrepresentation of their MBE/WBE status shall be found guilty of a felony of the second degree and be debarred from bidding no less than 36 months pursuant to 287.094 Florida Statute".

EQUAL OPPORTUNITY CERTIFICATE OF COMPLIANCE

This is to certify that the undersigned contractor on subject project does now and will during the entire length of this project comply with all applicable laws, rules and regulations relating to equal employment opportunity, and any Federal, State, or Local laws, rules, or regulations pertaining thereto; and further certifies compliance specifically with Executive Order 11246 originally issued by the President of the United States on September 24, 1965, as amended from time to time thereafter, including:

1. The Contractor does not discriminate in any manner in its employment policies as to race, color, religion, sex or national origin; and,

2. The Contractor does maintain an affirmative action plan to recruit, employ, and promote qualified members of groups that may have been formerly excluded because of race, color, religion, sex or national origin.

BIDDING FIRM OR ENTITY NAME: _____

SIGNATURE OF VENDOR REPRESENTATIVE: _____

TYPED OR PRINTED NAME OF VENDOR REPRESENTATIVE: _____

DATE: _____

PUBLIC ENTITY CRIMES

Any person submitting a Request for Proposal in response to this invitation must execute the enclosed for PUR 7068, SWORN STATEMENT UNDER PARAGRAPH 287.133(3)(A), FLORIDA STATUTES**,** ON PUBLIC ENTITY CRIMES, including proper check(s), in the space(s) provided, and enclose it with the said statement. However, if you have provided the completed form to the submittal address listed in this invitation and it was received on or after January 1, 2009, another completed form is not required for the remaining calendar year.

THIS FORM **MUST BE SIGNED IN THE PRESENCE OF A NOTARY PUBLIC** OR OTHER OFFICIAL AUTHORIZED TO ADMINISTER OATHS.

This sworn statement is submitted to:

_____

(print name of the public entity)

By_____

(Print name of entity submitting sworn statement)

Whose business address is

_____

And (if applicable) its Federal Employer Identification No. (FEIN) is:

_____

(If the entity has no FEIN, include the Social Security Number of the individual signing this sworn statement:_____

I understand that a "public entity crime" as defined in Paragraph 287.133(1)(g), Florida Statutes**,** means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or of the United States, including, but not limited to, any proposal or contract for goods or services to be provided to any public entity or an agency or political subdivision of any other state or of the United States and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misrepresentation.

I understand that "convicted" or "conviction" as defined in Paragraph 287.133(1)(b), Florida Statutes, means a finding of guilt or a conviction of a public entity crime, with or without an adjudication of guilt, in any federal or state trial court of record relating to charges brought by indictment or information after July 1, 1989, as a result of a jury verdict, non-jury trial, or entry of a plea of guilty or nolo contendere.

I understand that an "affiliate" as defined in Paragraph 287.133(1)(a), Florida Statutes, means:

A predecessor or successor of a person convicted of a public entity crime: or

An entity under the control of any natural person who is active in the management of the entity and who has been convicted of a public entity crime. The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of an affiliate. The ownership by one person of shares constituting a controlling interest in another person, or a pooling of equipment or income among persons when not for fair market value under an arm's length agreement, shall be a prima facie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months shall be considered an affiliate.

I understand that a "person" as defined in Paragraph 287.133(1) (e), Florida Statutes, means any natural person or entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which proposals or applies to proposal on contracts for the provision of goods or services let by a public entity, or which otherwise transacts or applies to transact business with a public entity. The term "person" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of an entity.

Based on information and belief, the statement which I have marked below is true in relation to the entity submitting this sworn statement **(indicate which statement applies).**

_____Neither the entity submitting this sworn statement, nor any officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity, nor any affiliate of the entity have been charged with and convicted of a public entity crime subsequent to July 1, 1989.

_____The entity submitting this sworn statement, or one or more of the officers, directors, executive, partners, shareholders, employees, members, or agents who are active in management of the entity or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989.

_____The entity submitting this sworn statement, or one or more of its officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989. However, there has been a subsequent proceeding before a Hearing Officer of the State of Florida, Division of Administrative Hearings and the Final Order entered by the Hearing Officer determined that it was not in the public interest to place the entity submitting this sworn statement on the convicted vendor list **(attach a copy of the final order).**

**I UNDERSTAND THAT THE SUBMISSION OF THIS FORM TO THE CONTRACTING OFFICER FOR THE PUBLIC ENTITY IDENTIFIED IN PARAGRAPH 1 (ONE) ABOVE IS FOR THAT PUBLIC ENTITY ONLY AND, THAT THIS FORM IS VALID THROUGH DECEMBER 31 OF THE CALENDAR YEAR IN WHICH IT IS FILED.**

**I ALSO UNDERSTAND THAT I AM REQUIRED TO INFORM THE PUBLIC ENTITY PRIOR TO ENTERING INTO A CONTRACT IN EXCESS OF THE THRESHOLD AMOUNT PROVIDED IN SECTION 287.017, FLORIDA STATUTES FOR CATEGORY TWO OF ANY CHANGE IN THE INFORMATION CONTAINED IN THIS FORM.**

Sworn to and subscribed before me this_____day of_____20_____

Personally known_____

OR Produced identification_____Notary Public - State of_____

_____. My commission expires_____(Type of identification)

_____

(Printed, typed and/or stamped commissioned name of Notary Public)

A person or affiliate who has been placed on the convicted Firm list following a conviction for a public entity crime may not submit a proposal on a contract to provide any goods or services to a public entity, may not submit a proposal on a contract with a public entity for the construction or repair of a public building or public work, may not submit proposals on leases of real property to a public entity, may not be awarded or perform work as a Firm, supplier, Sub-Firm, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017, for CATEGORY TWO for a period of thirty-six (36) months from the date of being placed on the convicted Firm list.

UNITED STATES FEDERAL ATTESTATION FORM

Note: Certain of these assurances may not be applicable to sale of your products or services. If you have questions, please contact the Pensacola State College Purchasing and Auxiliary Services Department. Further, certain Federal awarding agencies may require PENSACOLA STATE COLLEGE certify additional assurances. If such is the case, you will be notified.

Our company understands this purchase has Federal funding and by signing this Federal Attestation Form we agree to:

1. Give the Federal Government, the Comptroller General of the United States, through their authorized representative, access to and the right to examine all records, books, papers or documents related to this purchase, as well as establish a proper accounting system in accordance with generally accepted accounting standards and to retain all records a minimum of five years.

2. Establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.

3. Initiate and complete the scope of work within the applicable time frame after receipt of an approved PENSACOLA STATE COLLEGE purchase order.

4. Comply with the Intergovernmental Personnel Act of 1970 (42 U.S. C. 4728-4763 relating to prescribed standards for merit systems for programs funded under one of the nineteen statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).

5. Comply with all Federal statutes relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L.. 88.352) which prohibits discrimination on the basis of race, color, or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. 1681 – 1683, and 1685 – 1686), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. 6101 – 6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92.255) as amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91.616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) 523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. 290 dd.3 and 290 ee-3), as amended, relating to confidentially of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. 3601 et seq.) as amended, relating to nondiscrimination in the sale, rental, or financing of housing; (i) any other nondiscrimination provisions in the specific statue(s) under which application for Federal assistance is being made; and (j) the requirements of any other nondiscrimination statue(s) which may apply to the application.

6. Comply, or has already complied, with the requirements of Title II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91.646) which provides for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.

7. Comply with the provision of the Hatch Act (U.S.C. 1501 – 1508 and 7324 – 7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.

8. Comply as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. 276a - 276a 7), the Copeland Act (40 U.S.C. 276c and 18 U.S.C. 874, and the Contract Work Hours and Standards Act (40.327 – 333), regarding labor standards for federally assisted <u>construction</u> sub-agreements.

9. Comply, as applicable, with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L.91.190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in flood plains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. 1451 et seq.) (f) conformity of Federal actions to State (Clear Air) implementation Plans under Section 176(c) of the Clear Air Act of 1955, as amended (42 U.S.C. 7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended, (P.L. 93.523; and (h) protection of endangered species under the Endangered Species Act of 1973, as amended. (P.L 93.205).

10. Comply, as applicable, with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. 1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.

11. Assist the United States Federal Government (as requested) in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. 470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. 469a.1 et seq.).

12. Comply, as applicable, with P.L. 93.348 regarding the protection of human subjects involved in research, development, and related activities supported by this award of assistance.

13. Comply, as applicable, with the Laboratory Animal Welfare Act of 1966 (P.L) 89.544, as amended, 7 U.S.C. 2131 et seq.) pertaining to the care, handling, and treatment of warm blooded animals held for research, teaching, or other activities supported by this award of assistance

14. Comply with all applicable requirements of all other Federal laws, executive orders, regulations and policies governing this purchase.

15. Strongly strive to provide subcontracting opportunities to small businesses owned and controlled by socially and economically disadvantaged individuals (WBE/MBE) in accord with Executive Order 12928.

16. Compliance with Executive Order 11246 of September 24, 1965, entitled "Equal Employment Opportunity," as amended by Executive Order 11375 of October 13, 1967, and as supplemented in Federal regulations (41 CFR Chapter 60).

17. Compliance with all applicable standards, orders, or requirements issued under section 306 of the Clean Air Act (42 U.S.C. 1857(h), section 508 of the Clean Water Act (33 U.S.C. 1368), Executive Order 11738, and Environmental Protection Agency Regulations (40 CFR part 15).

18. Compliance with mandatory standards and policies (as applicable) relating to energy efficiency which is contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Pub. L. 94 – 163, 89 Stat. 871).

19. Compliance with the Federal agency requirements and regulations (as applicable) pertaining to patent rights with respect to any discovery or invention which arises or is developed in the course of or under such contract, as well as awarding agency requirements and regulations pertaining to copy-rights and rights in data
    B. Supplier agrees to provide access to the Federal grantor agency, the Comptroller General of the United States, or any of their duly authorized representatives to any books, documents papers, and records or documents of the supplier which are directly pertinent to this specific contract for the purpose of making audit, examination, excerpts, and transcriptions.
    C. Supplier agrees to retain all records relative to this procurement for five full years after PENSACOLA STATE COLLEGE makes final payment and all other pending matters are closed.

Our business _____attests that it is in full compliance with all of the cited U.S. Federal Attestations.

_____ _____ _____

Authorized Signature Signer's Title Date

Please return this signed form to with your bid submittal.

# ATTACHMENT A

**RFP 8-2018/2019 Mandated Repacking Project**

# Specifications
# for
# New Digital TV Broadcast
# Transmission Equipment & Services
# WSRE, Pensacola, FL

# SPECIFICATIONS

New Digital TV Broadcast Transmission Equipment & Services

**PART 1 - GENERAL**

## PURPOSE

The District Board of Trustees, Pensacola State College is the licensee of WSRE, Pensacola, FL. The Station has an FCC mandate to change the channel of WSRE from 31 to 24. The FCC is expected to reimburse the College for the costs of all equipment and services that are necessary to change channels. However, the College has elected to make some additional changes that will not be reimbursable. The costs of the reimbursable and non-reimbursable expenses must be clearly documented following the FCC requirements. The station will require a new transmitter, antenna, an interim antenna system to operate WSRE throughout the duration of the FCC-assigned phase (see below for phase and dates), and tower / antenna installation work.

## TIME IS OF THE ESSENCE

As mandated by the FCC and amended by a separate binding agreement,

- This is the FCC imposed deadline for **Phase 7**, which may be subject to change by the FCC.
    - Cease all operations on channel 31 no later than: **01/17/2020**.
- This is the separate binding agreement early deadline, which ***supersedes*** the FCC deadline. Failure to meet this deadline will cause the College to incur financial losses.
    - Cease operation on channel 31 no later than **10/25/2019**
- A tower analysis has not yet been completed so it is unknown if the tower will require modifications to support the antenna systems. If modifications are required, that work will be performed under a separate contract to be shared with Phase 5 repack station WMPV, which must be completed by the Phase 5 deadline. Therefore, the tower will be available for rigging of the WSRE antennas no later than **9/6/2019**. The Tower Contractor must coordinate with the tower modification contractor. The name of that contractor will be announced as soon as it is known.

## SITE LOCATION

Site Address: 26567 Earnest Patterson Road, Robertsdale, AL 36567 (Baldwin County, Alabama)

Site Coordinates: 30-36-41.0 N 87-36-26.4 W (NAD 83)

Directions: From I-10, take exit 53 Baldwin County 64 toward Wilcox Road, then refer to the following maps.


Untitled Map
Write a description for your map.
Legend
Feature 1
Oasis Travel Center
Route
RV Park
South Alabama Auto Auction
Styx River Resort
Styx River Shooting Center
Turn
Take exit 53 for Baldwin County 64 toward Wilcox Rd
Turn left onto Wilcox Rd
Turn left onto Patterson Rd
Turn right onto Ernest Patterson Rd
Deer Track Ln
Water Rapids Rd
Forest View Rd
Cowpen Creek Rd
Google Earth
4000 ft
N


Untitled Map
WSRE Transmitter Site
KGA
Legend
30 36 41.0 N, 087 36 26.4 W
30 36 41.0 N, 087 36 26.4 W
Google Earth
300 ft
N

## DISRUPTION TO PROGRAMMING

The Station conducts fund-raising events during targeted times of the year. These events are critical to the ability of the College to meet its financial goals for continued operation of the station. Contractors are required to avoid disruption to programming during those periods. Contractors are required to schedule all low-power and off-air time in advance with the College's Representative.

## DEFINITIONS

- The Station: WSRE owned by the District Board of Trustees, Pensacola State College (the College)
- Representative: The single point of contact for the College
- Bidder: Any Vendor or entity interested in submitting a bid and/or who submits a bid
- Contractor: Vendor(s) who are awarded a contract for equipment and/or services
- ATSC: Advanced Television Systems Committee
- DTV: Digital Television
- FCC: Federal Communications Commission
- OFDM: Orthogonal Frequency Division Multiplexing
- Baseline: In connection with Upgrades (see next), these would be items that are acceptable by the FCC for full reimbursement.
- Upgrade: Items with additional features and capabilities that the College has chosen to purchase instead of the FCC-acceptable Baseline items. Any additional costs associated with an Upgrade compared to a Baseline will not be reimbursed by the FCC.

## RESPONSIBILITY

Each Contractor shall be responsible for the overall supervision of their demarcated portion of the project. The Contractor shall be the single point of contact for all warranty issues on all equipment that the Contractor provides under the contract for the full warranty period.

## SUMMARY

**Contract Awards** – The Station reserves the right to award one or more contracts, each one for the highest-score described in the Bid Evaluation Factors section, below.

These specifications include equipment and services related to **two (2) sub-projects**. Bidders may bid on either or both of these sub-projects. The sub-projects are

- **Antennas** (Primary and Interim, including Testing), Rigging (installation and removal of antenna systems) and Tower Modifications (Mapping, Structural Analyses, Structural Designs, Structural Modifications, and all Inspections and Testing)

- **Transmitter** (including all interior RF components, Installation and Testing)

Bids may be submitted for either or both of the sub-projects described in these Specifications.

## Antennas

**Primary Antenna System** – The existing antenna is a horizontally polarized slotted coaxial (H-pol Slot), which cannot accommodate the FCC assigned channel, so it will have to be replaced with a new Slot antenna. Parameters for new antennas (Upgrade and Baseline) are included in these Specifications. The station had sweep tests performed on the existing transmission line, which resulted in a recommendation for replacement of all current elbows, including the elbow complex, with new ones tuned to the post transition channel, but the rest of the existing line can be used. The elbows must be retuned once the new antenna is installed.

**Interim Antenna System** – The station will have to continue operation on the licensed channel until its transition to the post-transition channel during phase 7. This will require an interim antenna and transmission line system side-mounted below the candelabra structure and above the FM multi-station antenna. Parameters for new antennas are included in these Specifications.

## Transmitter

**Primary Transmitter** – WSRE operates with an air-cooled solid-state transmitter, which cannot be re-tuned to the new channel. Parameters for new liquid-cooled solid-state transmitters (Upgrade and Baseline) are included in these Specifications.

**Electrical** - The transmitter will be provided with a complete installation package, except for electrical wiring and conduit from the transmitter to the three-phase source within the transmitter building and cooling pumps. Parameters are provided in Specifications for a separate bid for the Electrical work associated with each Transmitter option. The name of the Electrical Contractor will be provided as soon as it is known.

**Mechanical / HVAC / Plumbing** - The transmitter will have some plumbing requirements for pumps and an outdoor heat exchanger, as well as cooling requirements for the building. Parameters are provided in Specifications for a separate bid for the Mechanical work associated with the Transmitter. The name of the Mechanical Contractor will be provided as soon as it is known.

## FCC Cost Breakdowns

Transmitter and Antenna Bidders shall pay special attention to the following chart. The FCC will reimburse the College for all costs required to change channel. As a requirement of these specifications, each awarded Contractor, not the bidders, must provide additional pricing to the College, so the College can satisfy the FCC reimbursement justifications. The following is the list of specific costs that are required to satisfy the FCC, along with the WSRE Contractor that will be responsible for providing the costs. The total cost of all items in each sub-project must equal the total bid price of the sub-project.

| FCC Category | FCC Description | WSRE Contractors |
|---|---|---|
| Primary Transmitter | Additional Interior RF System | Transmitter |
| Primary Transmitter | ~~5 Ton system~~ 20 Ton system | Mechanical / HVAC / Plumbing |
| Primary Transmitter | 3" Rigid Conduit and Wiring (Cost per foot) | Electrical |
| Primary Transmitter | Transformer 3 phase/480v - 150 KVA | Electrical? |
| Primary Transmitter | Switchgear - industrial 800 amp | Electrical |
| Primary Transmitter | Standby Exciter and Switch | Transmitter |
| Primary Transmitter | Service entrance 3 phase/800 amp/208 volt | Mechanical / HVAC / Plumbing |
| Primary Transmitter | UHF - Liquid Cooled Solid State Transmitter 21 - 31 kW | Transmitter |
| Primary Transmitter | Plumb new outdoor heat exchanger(s) to Transmitter | Mechanical / HVAC / Plumbing |
| Interim Antenna | Elbow complex, single channel, at antenna input, per 8 3/16 feedline (if needed) | Antennas |
| Interim Antenna | Sweep test of existing antenna | Antennas |
| Interim Antenna | Side mount brackets for high power antennas (if not included in antenna base cost) | Antennas |
| Interim Antenna | Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost) | Antennas |
| Interim Antenna | UHF - High Power, Side Mount, basic slot antenna, 1000 kW ~~input~~ [ERP], directional, horizontally polarized | Antennas |
| Primary Antenna | Elbow complex, single channel, at antenna input, per 8 3/16. feedline (if needed) | Antennas |
| Primary Antenna | Sweep test of existing antenna | Antennas |
| Primary Antenna | UHF - High Power Top Mount (200-1000 kW), One station antenna, horizontally polarized | Antennas |
| Interim Transmission Line | Sweep Test | Antennas |
| Interim Transmission Line | ~~Rigid Transmission Line - copper, 8 3/16"~~ Modify existing 8 3/16" | Antennas |
| Primary Transmission Line | Sweep Tests | Antennas |
| Primary Transmission Line | ~~New elbows, single channel to accommodate channel 24~~ Rigid Transmission Line - copper, 8 3/16" | Antennas |
| Primary Tower | Major tower reinforcement/modifications | *Tower Owner*[1] |
| Primary Tower | Tower mapping for an undocumented/poorly documented tower and preparation of documentation necessary for tower load study | |
| Primary Tower | Complex Tower (includes, for example, those with candelabras and/or stacked antennas) | Antennas |
| Other Expenses | Equipment Storage | Transmitter, Antennas, Electrical, Mechanical / HVAC / Plumbing |
| Other Expenses | Equipment Delivery and Handling Charges | Transmitter, Antennas, Electrical, Mechanical / HVAC / Plumbing |
| Other Expenses | Disposal Costs (for equipment and other waste, net of any salvage value) | Transmitter, Antennas, Electrical, Mechanical / HVAC / Plumbing |
| Other Expenses | Local Zoning | *Tower Owner* |
| Other Expenses | Non-zoning permits | *Tower Owner* |

[1] This work will be performed by the tower owner, American Tower Company, or by a separate contractor in cooperation with collocated repack station WMPV.

**FCC Reimbursement Costs** – The Station has also decided to purchase several Upgrades; the Transmitter upgrade will have liquid cooling and a higher rated power to accommodate elliptical polarization, the Primary Antenna will have added vertical polarization, the Primary Transmission Line will be replaced in its entirety, using the existing Line as the Interim. The Station is purchasing the Upgrades, but the FCC will only reimburse the costs of the ***Baseline*** equipment and services: Transmitter with sufficient power for horizontal polarization, a horizontally polarized Primary Antenna, new elbows to improve the existing Primary Line, and new Transmission Line for Interim antenna. Bidders must provide prices in the Bid Form for the following baseline items to support the FCC reimbursements even though the College will not be purchasing these baseline items.

| FCC Category | FCC Description | Bidders for: |
|---|---|---|
| *FCC Baseline Prices* | | |
| Primary Transmitter | Solid-state, liquid cooled, 21.83 kW[2] | Transmitter |
| Primary Antenna | UHF – High Power Top Mount (200-1000 kW), One station antenna, horizontally polarized | Antennas |
| Primary Line | UHF – Replace Elbows, Labor, Tuning, Rigging | Antennas |
| Primary Line | Part of New Line above ~1,750', from bottom of Interim Antenna to new Primary Antenna | Antennas |
| Interim Line | Rigid Transmission Line - copper, 8 3/16" | Antennas |

## FCC Parameters and Miscellaneous References

| | |
|---|---|
| Pre-transition Licensed Channel | 31 |
| Post-Transition Channel | 24 |
| Post-Transition ERP kW | 859 |
| Interim Antenna ERP kW | 1,000 |
| Site Power, AC | 480Y/277 V 3φ 4w, plus 208Y/120 V |
| Power, RF | References to Transmitter power shall be the Average Power in the ATSC-1/8VSB mode associated with FCC Baseline specifications and ATSC-3/OFDM mode for Upgrade specifications |
| Transmitter Rated Power | At the Output of the Mask Filter |
| Mask Filter | Requires 8-pole for adjacent channel protection |
| Antenna Peak Gain | In the Main Beam |
| Antenna Beam Tilt | Positive numbers are below the horizontal plane |

To meet the mandatory channel change imposed by the FCC, it is necessary to purchase, install and test new DTV transmission equipment to provide a complete operable system with the following requirements and described in further detail in these Specifications, including Exhibit E - WSRE Specs - TRANSMITTER RF FLOW.

[2] The power required at the output of the mask filter to produce the authorized ERP is 21.83 kW. The transmitter that will be approved for reimbursement by the FCC is the model that will produce 21.83 kW after the mask filter

| | | |
|---|---|---|
| Primary Antenna System - UPGRADE | Status | New |
| | Channel | Post-Transition channel 24 |
| | Polarization | Elliptical |
| | Directional | Yes |
| | Input | 8-3/16, 75Ω, End Fed |
| | Rated Power kW, Min | 80 |
| | Mounting & Height AGL | Top of candelabra, 550 meters bottom of antenna |
| | Radome | Full |
| | Height/Length Ft, Max | 39.4, with lightning protector[3] |
| | Weight Pounds, Max | 4,685 |
| | Effective Area $Ft^2$, Max | 44, same as existing antenna being replaced[4] |
| | Peak Gain dBd – H, Min | 16.10 |
| | Peak Gain dBd – V, Min | 11.28 |
| | Beam Tilt Degrees | 1.0 |
| | Null Fill-in, 1st null, % | ~35 |
| | VSWR, Max | 1.1:1 over 6 MHz |
| | Transmission Line | New Line |
| | Type | 8-3/16 EIA, 75Ω |
| | Length | 607 meters |
| Interim Antenna System | Channel | Pre-Transition channel 31 |
| | Polarization | Horizontal |
| | Directional | Yes |
| | Input | 8-1/6", 75Ω |
| | Rated Power kW, Min | 25 kW |
| | Mounting & Height AGL | Side, ~533 meters center of antenna[5] |
| | Radome | Full |
| | Height/Length Ft, Max | 35.6 (w/o lightning protection) |
| | Weight Pounds, Max | 1,355 |
| | Effective Area $Ft^2$, Max | 30.3 |
| | Peak Gain dBd – H, Min | 17.87 |
| | Peak Gain dBd – V, Min | N/A |
| | Beam Tilt Degrees | 0.75 |
| | Null Fill-in, 1st null, % | ~35 |
| | VSWR, Max | 1.10:1 over 6 MHz |
| | Transmission Line | Use Existing Primary Line |
| | Type | 8-1/6", 75Ω |
| | Length | 583 meters |
| | VSWR, Max | 1.10:1 |
| Transmitter – UPGRADE | Status | New |
| | Type | Solid State |
| | Exciter | Dual Exciters with auto switchover |
| | Cooling | Liquid |
| | Power Rating kW, Min | 31.0 kW at the output of the provided mask filter |
| | Latent Heat into Room watts | 12,000 maximum |
| | | |
| Primary Antenna System – FCC Baseline | Status | New |
| | Channel | Post-Transition channel 24 |
| | Polarization | Horizontal |
| | Directional | Yes |

[3] The mechanical specifications shown have been given to the tower owner, ATC, to perform a structural analysis. Antennas offered with mechanical parameters that vary from those shown may require an additional structural analysis and/or additional tower upgrade modifications, which may delay the completion of the project causing the station to miss its deadline under the binding agreement resulting in financial harm.

[4] Antennas with a higher wind load than the existing antenna may be cause for rejection because the tower owner may increase the rent.

[5] The mechanical specifications shown have been given to the tower owner, ATC, to perform a structural analysis. Antennas offered with mechanical parameters that vary from those shown may require an additional structural analysis and/or additional tower upgrade modifications, which may delay the completion of the project causing the station to miss its deadline under the binding agreement resulting in financial harm.

| | | |
|---|---|---|
| | Input | 8-3/16, 75Ω |
| | Rated Power kW, Min | 80 |
| | Mounting & Height AGL | Top of candelabra, 550 meters bottom of antenna |
| | Radome | Full |
| | Height/Length Ft, Max | 39.4, with lightning protector |
| | Weight Pounds, Max | 4,685 |
| | Effective Area $Ft^2$, Max | 44 |
| | Peak Gain dBd – H, Min | 17.62 |
| | Peak Gain dBd – V, Min | N/A |
| | Beam Tilt Degrees | 1.0 |
| | Null Fill-in, 1st null, % | ~35 |
| | VSWR, Max | 1.1:1 over 6 MHz |
| | Transmission Line | Use existing, retune elbows[6] |
| | Type | 8-3/16 EIA, 75Ω |
| | Length | 607 meters |
| Transmitter – FCC Baseline | Status | New |
| | Type | Solid State |
| | Exciter | Dual Exciters with auto switchover |
| | Cooling | Air, if available at this power lever. Otherwise liquid. |
| | Power Rating kW, Min | WSRE is entitled to the manufacturer's transmitter model that is sufficient to produce 21.83 kW after the filter |

The new equipment shall be integrated with the existing equipment as diagramed in Appendix A.

## SUBMITTALS

The Station reserves the right to request the following from any Bidder prior to award of a contract. If requested, the Bidder shall submit the following within ten (10) days after receipt of a written request from the College's Representative.

1. Detailed manufacturer's specifications for each component specified, including data on features, ratings, and performance.
2. Calculations and assumptions to demonstrate compliance with specifications.
3. Minimum warranties specified in this Section.

The awarded Vendors / Contractors shall submit the following at least 30 days prior to shipping equipment.

1. Antennas
    a. Shop Drawings: Include plans, elevations, sections, details, and attachments to other Work.
    b. Dimensioned plan and elevation views of antenna. Include antenna mechanical data required for wind load / structural analysis as well as electrical data.
    c. Transmission line Diagrams: Show layout of transmission line. Include elbow complex and coaxial switches. Differentiate between manufacturer-installed and field-installed components.
    d. Coordination Drawings: Plans drawn to scale and coordinating mounting of antenna and transmission line, coaxial network switches, mask filter, and transmitter.
    e. Site plan: Show proposed workspace for cranes, rigging, and hoisting equipment.

[6] Testing revealed the line is in good working condition. Replace and retune elbows once the new antenna is installed.

   f. Schedule: Proposed schedule of the anticipated dates for being off the air.
2. Transmitter
   a. All equipment supplied shall include a complete technical manual delivered on a thumb drive. This manual shall include installation instructions, operating instructions, tuning instructions, maintenance instructions, theory of operation for all electronic circuits, detailed schematic circuitry diagrams, preventative maintenance and trouble-shooting procedures. The manual shall also include parts lists that include the part number, circuit designator, description and generic number wherever possible. The manual shall include wiring diagrams with wire numbers and circuit schematics with component designators and values.
   b. The Contractor shall provide as-built drawings for all equipment supplied in the contract.
   c. The transmitter manufacturer shall have a routine policy of providing service bulletins and instruction book updates on all equipment supplied in the contract.
   d. Field Test Reports: Indicate and interpret test results for compliance with performance requirements of installed systems. Submit prior to contract closeout.
   e. Schedule: Proposed schedule of the anticipated dates for being off the air.

## QUALITY ASSURANCE

1. Installer Qualifications: An experienced installer, for both installation and maintenance of units required for this Project, to supervise installation of the system.
2. Comply with 47 CFR 73.

## COORDINATION

1. Coordinate Work of this Section with requirements of the College, through the College's Representative.
2. Coordinate layout and installation of equipment and system components with other construction.

## WARRANTY

Minimum Warranty for all new Equipment and Services:

1. Written warranty, signed by Contractor agreeing to correct system deficiencies and replace components that fail in materials or workmanship within specified warranty period when installed and used according to manufacturer's written instructions. This warranty shall be in addition to, and not limiting, other rights The Station may have under other provisions of the Contract Documents. Contractor warrants that its Product is free from defects in material or workmanship existing at the time of shipment from the factory or that develop under normal use in a properly installed and maintained system for a minimum period of one (1) year following the date of commissioning.
2. The minimum warranty specified in this Article shall not deprive The Station of other rights the Station may have under other provisions of the Contract Documents and shall

be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract.

**PART 2 - PRODUCTS**

All equipment provided by the Contractor shall be new current production models. Equipment formerly used as demonstration models, out of production models, and used equipment is not acceptable.

## ANTENNA SYSTEMS

The Antenna system Contractor shall supply all materials and labor for new or modified antennas, transmission lines, antenna mounts and hardware, and any transmission line components and hardware as required (elbows, hangers, etc.) for complete operable antenna systems.

1. All antennas shall be manufactured and assembled in the USA
2. Bidders for antenna systems will be responsible for:
    a. A transmission line layout prior to beginning work on the antenna and/or transmission line installation
    b. Assessing the existing installation and ordering all parts before dismantling any antennas or transmission lines
    c. A rigging plan prior to beginning work on the tower
    d. Anything that may be necessary to mount the new antennas and/or transmission lines to the tower.

## TRANSMITTERS

The Transmitter bidder must provide a new transmitter and all equipment, materials and labor necessary to supply, install and set up the station on its new channel, conduct a proof of performance into a dummy load to demonstrate compliance with FCC and ATSC standards, and continue to run the transmitter on a dummy load for at least two (2) days from start-up to minimize the chance of failure when the transmitter is restarted for the permanent operation at the end of the assigned phase. Continuous operation at the factory during testing will count toward the minimum number of days provided that the transmitter initially starts-up on-site without any problems.

Include all hardware and materials for a complete operable system installed in the building, tested and ready to broadcast. Installation includes electrical services to connect the transmitter to the power source.

State-of-the-art Design – The transmitter shall generate a high quality ATSC television signal in accordance with these specifications and shall comply with all applicable FCC and EIA standards in effect at the time the transmitter system is delivered. It shall also be compatible with the next generation ATSC 3.0 standards. The transmitter shall be a current production model. The transmitter design shall incorporate the latest state-of-the-art techniques for high reliability, efficiency and performance.

The transmitter shall consist of one or more appropriate cabinets wired and tested in the manufacturer's plant to minimize assembly at the transmitter site. All transmitter wiring shall be clearly labeled at each termination for ease in troubleshooting. Transmitters shall meet the following general requirements:

1. System control with a Graphical User Interface ("GUI") screen on the front of the cabinet
2. DTV Exciter System - dual exciters; each exciter shall include all necessary automatic switching, control and status monitoring.
3. The Station will provide an ASI transport stream. The transmitter shall be capable of the following:
    a. The exciter(s) shall accept ASI and IP (ASI over IP) transport streams.
    b. The 8VSB DTV exciter(s) shall convert the transport stream to an 8VSB-modulated carrier. Exciters shall perform frame data randomization, Reed-Solomon encoding, data interleaving, Trellis coding, segment and field sync insertion, pilot insertion and VSB filtering.
    c. The 8VSB exciters shall be fully compliant with the ATSC A/53 Standard and all applicable FCC Regulations on any single specified FCC channel.
    d. The exciters shall be software upgradable to future ATSC 3.0 OFDM standards.
    e. The exciters shall provide indications necessary for routine adjustment and maintenance of the exciters, including but not limited to power supply voltages, internal stage reference levels, and power output level.
    f. Real-time automatic signal processing in the exciters for the pre-correction of the signal to compensate for linear and non-linear errors in the transmitter amplifier stages and to provide group delay correction for group delay errors introduced in the output RF system, as well as in an RF combiner when present, shall be included to meet the performance specifications of the DTV transmitters over the anticipated indoor and outdoor temperature ranges. The Bidder shall supply a detailed description of the correction capabilities and an explanation of the correction system operation.
4. Built-in compliance monitoring
5. Remote control interface via standard web browser and also provided with an interface that is fully compatible with a Burk Arc-Plus remote control system
6. When dual exciters are required, provide dual redundant TSoIP inputs, with seamless switching 10 MHz and 1 PPS inputs
7. Integrated GPS
8. Built in UPS to support dual exciters
9. Channel as specified above
10. Transmitter Output to comply with the rated power specified above

Mask Filter

1. A low loss, constant impedance type band-pass filter shall be supplied with the transmitter to meet the FCC DTV Mask requirements.
2. Electrical Specifications

a. I/O Ports: Adapt or match to appropriate components of the transmitter and interior RF transmission system
b. Rated Power as required to handle the transmitter output power in conjunction with various interior RF transmission components
c. Cooling: Air or Liquid Cooled
d. Channel as specified above
e. Factory Tunable
f. Bandwidth 6 MHz
g. ATSC 1.0 and ATSC 3.0 Compatible

Coaxial 4-Port Patch Panel - Coaxial 4-port manual patch panel may be required if necessary, to provide a switching network shown in Appendix A.

1. Specifications
    a. I/O Ports: Adapt or match to appropriate components of the interior RF transmission system
    b. Insertion Loss ≤ 0.1 dB
    c. VSWR ≤ 1.05
    d. Isolation > 60 dB
2. Rated Power as required to handle the transmitter output power in conjunction with various interior RF transmission components

Line Tuning Elements, used to improve VSWR (if required to comply with these Specifications)

1. General Specification:
    a. Number of Tuning Screws 4
2. Electrical Specifications
    a. I/O Ports: Adapt or match to appropriate components of the interior RF transmission system
    b. Channel as specified above
    c. Peak Voltage at Sea Level: as required to handle the transmitter output in conjunction with various interior RF transmission components
    d. Rated Power as required to handle the transmitter output power in conjunction with various interior RF transmission components
3. Mechanical Specifications
    a. Ambient Temperature 32°F (0°C) to 113°F (45°C)
    b. Length nominal 20.5"
    c. Weight nominal 5.0 lbs

Voltage Transformers

1. If required to match the transmitter to the site electrical power, the transmitter bidder must include a voltage transformer with rated power necessary for the voltage conversion and current requirements.

**PART 3 - EXECUTION**

## DEMARCATION

Points of demarcation shall be as follows:

1. **Antenna Systems** – Bidders for Antennas and transmission lines shall be responsible for providing complete operable RF systems including the gas stop inside the building to the antenna, as well as detailed antenna drawings for special tower mounting adapters. Installation must be included for a complete operating system, including demonstration of the system VSWR.
2. **Transmitter** – Bidders for Transmitters shall be responsible for a complete operable RF system from the transmitter to the gas stop inside the building. The Transmitters Contractor, Electrical contractor and Mechanical Contractor shall coordinate in providing services to the transmitter and any accessory equipment.
3. **Electrical** – Bidders for Electrical work shall be responsible for providing electrical panels, breakers, switchgear, conduit and wiring to the transmitters with guidance from the Transmitter Contractor and under the Electrical Contractor's contract with the College.
4. **Mechanical** – Bidders for Mechanical / HVAC / Plumbing work shall be responsible for providing cooling to support the transmitters with guidance from the Transmitter Contractor and under the Mechanical Contractor's contract with the College.

## EXAMINATION

The concept for the Transition is to continue to operate on the licensed channel until the date stated elsewhere in this document. This could be accomplished using the licensed equipment, interim equipment or other standby equipment, or a combination of any or all. In the meantime, the equipment for the Post-Transition facilities can be constructed and must be completed in time for the Testing period stated elsewhere in this document. In this regard Bidders shall:

1. Examine the building for space limitations related to the placement of new transmitters and ancillary equipment and access to the electrical power source. Survey the exterior for placement of pumps and heat exchangers for liquid cooled transmitters. Survey the space for additional cooling capacity provided by air conditioners related to air cooled transmitters. Some projects might require ducted cooling using filtered outside air.
2. Examine the site and tower structure for accommodation of mounting, rigging, ingress and egress of trucks and cranes and hoisting equipment, hazards to existing equipment, and other conditions affecting installation.
3. Proceed with installation only after unsatisfactory conditions have been corrected.

## MANUFACTURING PERIOD

Manufacturing of any custom products shall not begin until written consent is given by the College.

## PROJECT CONDITIONS

Environmental Limitations: System components shall be equipped and rated for the environments where installed.

1. Service Conditions for Outdoor Electrical/Electronic Equipment: Rate equipment for continuous operation under the following environmental conditions, unless otherwise indicated:
    a. Temperature: 0 deg F to plus 110 deg F.
    b. Equipment temperature outdoors in direct sun may reach 150 deg F.
    c. Relative Humidity: 5 to 100 percent.
    d. Weather: Enclosure housings to prevent entry of moisture due to melting ice build-up or driven rain or snow.
2. Service Conditions for Indoor Electrical/Electronic Equipment: Rate equipment for continuous operation under the following environmental conditions, unless otherwise indicated:
    a. Temperature: 50 deg F to 100 deg F.
    b. Relative Humidity: 0 to 95 percent.
3. Electrical: System components shall be equipped and rated for the electrical facilities where installed.
    a. This project anticipates that all equipment supplied by the Contractor will operate on the existing utility service, backed-up by the existing emergency generator.
    b. Contractors shall verify the utility power configuration at the site.

## DISPOSAL

Each Contractor is responsible for disposal of all equipment that it removes from service. All equipment removed from service shall be properly disposed of off-site.

## CLEANING

Each Contractor shall clean the site and leave it in a condition as good as it was found.

## ANTENNAS

1. The Antennas Contractor shall conduct azimuth pattern scatter analyses for all side-mounted Main / Primary antennas.
2. Manufacturer's Field Service: Inspect the antenna system and installation and supervise pretesting, testing, and adjusting of equipment under the supervision of a factory-authorized service representative.
3. Inspection: Verify that units are properly installed.
4. Pretest: Pretest components and functions to verify that they comply with specified requirements prior to installation on the tower. Replace malfunctioning or damaged items. Retest until satisfactory performance and conditions are achieved. Prepare equipment for acceptance and operational testing.

5. Test Schedule: Schedule tests after pretesting has successfully been completed and system has been in normal functional operation for at least 3 days. Provide a minimum of 10 days' notice of test schedule.
6. Operational Tests: Perform operational system tests to verify that system complies with Specifications. Include all modes of system operation. Test equipment for proper operation in all functional modes.
7. System Acceptance Tests: VSWR for designated channel(s)
8. Record test results.
9. Retest: Correct deficiencies identified by tests and observations and retest until specified requirements are met.

## TRANSMITTERS

The Contractor shall work closely with the College's representative and the other contractors, if any, to provide a system that efficiently utilizes the space required by suggesting layouts for locating the various major equipment modules.

1. Develop a system design and provide layout drawings.
2. Supply dimensions of all major equipment modules and cabinets proposed.
3. Supply information regarding heat radiating from equipment cabinets into the interior of the transmitter building.
4. Electrical – The Transmitters Contractor is responsible for providing detailed requirements of the electrical materials and services required for an Electrical contractor to perform the installation from the main breaker panel to the transmitter system AC terminals and all associated equipment supplied with the transmitters, including sub-panel(s) required for installation complying with all electrical codes.
    a. Supply complete information regarding electrical equipment and services that will be required by the Electrical contractor, including but not limited to the following.
        i. Complete list of electrical materials including AC wiring, breakers, and disconnects, and any transmitter RF and electrical inter-cabinet wiring, cabling, connectors and high voltage wire.
        ii. Electrical conduit requirements for power and inter-cabinet wiring as necessary.
5. Installation Materials - Contractor shall supply all installation materials, including but not limited to the following:
    a. Complete plumbing materials including any necessary pipe, tubing, fittings, valves, gauges, regulators, controls, etc. shall be provided if applicable.
    b. Enough coolant for startup operation of the transmitter shall be included if applicable.
    c. Contractor responsible for the transmitter shall be responsible for all indoor RF transmission line sections and components required for a complete operable system. The Antennas Contractor will be responsible for all outdoor RF transmission line sections and components required for a complete operable system.
    d. All outdoor equipment (for example, heat exchangers) shall be installed on existing pad if available or if space is not available provide a wire-mesh-

reinforced, 3,000-psi concrete pad at least 4 inches thick. The pad shall be sized to extend out in all directions a minimum of 12-inches beyond the dimensions of the equipment. All parts of the pad shall be at least one inch above grade or match existing, whichever is higher.

e. Provide and install 4" copper ground strap and grounding materials to connect all new cabinets to the site's existing ground system.

TRANSMITTER PROOF OF PERFORMANCE AND ACCEPTANCE TESTS

1. Factory Tests - Low level testing shall be performed on the Exciter(s), IPA's, Control Circuitry and Interlocks at the factory prior to shipment. Final test data including meter readings, dial settings, pads used and appropriate waveform photos shall be supplied to the Station for each serial number tested. This data shall be supplied no later than when delivery is made.
    a. The Contractor shall notify the College's representative at least ten days prior to conducting the factory tests to allow the representative and/or the College sufficient time to make arrangements to be present during the tests.
2. On-Site Tests - The Contractor shall furnish a field engineer/technician to perform a complete checkout and Proof-of-Performance of the completed transmitter facilities, including the RF/combining system where applicable.
3. Tests Required - The Contractor shall perform all measurements and tests and shall provide all equipment and qualified personnel to make such measurements and shall provide satisfactory evidence of test equipment calibration and accuracy where appropriate. Results of the tests and measurements shall be submitted to the College's representative in bound reports and shall consist of the following:
    a. Measurements appropriate for an FCC proof of performance and application for license. Original and two copies are required.
    b. All remaining performance measurements and tests. Original and two copies required.
4. The Station's representative will accept no tests unless a representative of the College's representative or the College is present and observes the test during any and all procedures described herein. Contractor shall give the Station five (5) working days notice prior to commencement of such tests.
5. The Contractor shall provide any additional test equipment (not already on-site or included in equipment purchased) required for completion of measurements and tests. Shipping charges pursuant to such additional test equipment shall be borne by the Contractor supplying these services. Additional test equipment shall remain the property of the Contractor.
6. The field engineer/technician shall be available to remain on site for as long as necessary at no additional charge if required to correct any problems, which are the responsibility of the Contractor.
7. The results of the following Proof of Performance Measurements are required to demonstrate compliance with the FCC Rules and with these specifications. Measurements shall be made at the output of the DTV Mask or, if present, the output of the RF combiner.
    a. Measure the transmitter power output at the output of the FCC Mask filter.

i. All tests and measurements of transmitter performance shall be conducted with transmitters operating at the power output levels required to meet the effective radiated power specified by the FCC construction permit or license.
ii. Power measurements shall be made with the transmitter operating into the dummy load using a calibrated directional coupler with a precision power meter and sensors.

b. DTV transmitter frequencies using a frequency counter of adequate accuracy to comply with FCC tolerances. Measurements shall be made at least three times with a minimum of eight hours between measurements. The frequency reading shall be compared with the reading obtained on the frequency monitor supplied.
c. Measure the spurious components from 0 Hz to 1.8 GHz (if any) apparent in the radiated output of the DTV transmitter to demonstrate compliance with 47 CFR 73.622(h)(1). Follow the measurement procedures described in 47 CFR 73.622 (h)(2).
d. Photographs or other printed facsimile of the waveform shall be taken and shall be included in the proof of performance report.
e. The engineer responsible for the measurements shall sign the report.

TRANSMITTER TRAINING

1. On-Site - After successful installation and checkout, the Bidder shall provide and coordinate a time and date satisfactory to the College for basic training on site for the College's personnel in the operation, maintenance, tuning and troubleshooting for the transmitter supplied and the care, installation and removal of all expendables at no additional cost.
2. In Factory - The Bidder shall provide a detailed training seminar at no additional cost at its factory for up to two (2) of the Station's staff within five (5) years of the completion and acceptance of each transmitter at each site. Training shall be provided for all equipment supplied. Travel and lodging expenses will be paid by the Station. The in-factory training shall cover as minimum and as applicable to the transmitter(s) provided:
    a. Transmitter operation and maintenance
    b. Preventative maintenance
    c. ATSC/8VSB exciter theory, operation and adjustment
    d. IPA/Driver theory, operation and adjustment
    e. High Voltage Beam Supply and contactor operation and maintenance
    f. Theory of operation and adjustment of correction circuits
    g. Theory of operation and maintenance of the transmitter control system
    h. RF output system theory and adjustment
    i. ATSC Combiner system theory and adjustment
    j. Test equipment package

TRANSMITTER DEMOLITION

1. After the station transitions to the new transmitter on the new channel, the Contractor shall return to the site to remove the old transmitter and all related unnecessary and/or unused components that are no longer in service on the new channel. Also see Disposal.

## ELECTRICAL

The Contractor shall work closely with the College's representative, the Transmitter Contractor, and the Mechanical Contractor to provide a complete operable system.

1. After the station transitions to the new transmitter on the new channel, the Contractor shall return to the site to disconnect the old transmitter and all related components that are no longer in service on the new channel and remove all unused electrical equipment and materials (wire, conduit, panels, etc.). Also see Disposal.

## MECHANICAL / HVAC / PLUMBING

The Contractor shall work closely with the College's representative, the Transmitter Contractor, and the Electrical Contractor to provide a complete operable system.

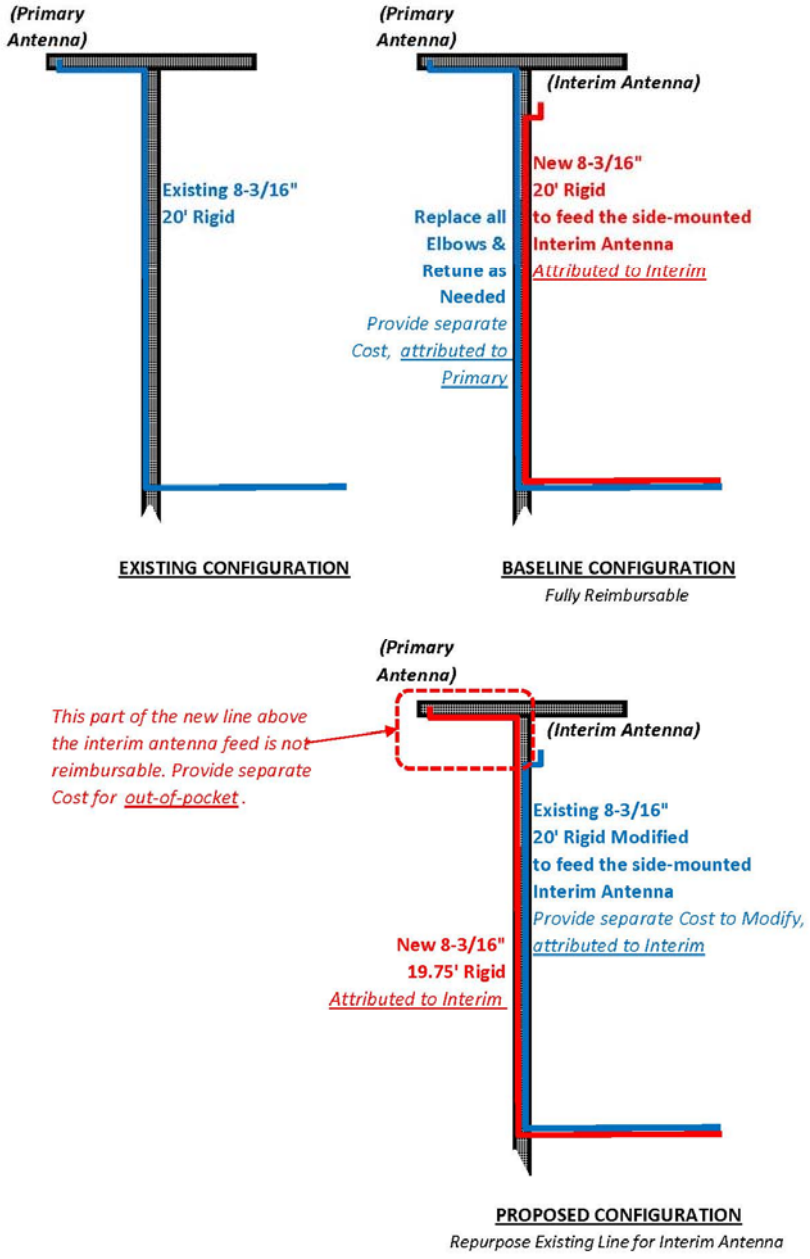
1. The Contractor shall remove all equipment detached from service to clear space for new equipment.
2. After the station transitions to the new transmitter on the new channel, the Contractor shall return to the site to remove all unused mechanical / HVAC / plumbing equipment and materials (air handlers, heat exchangers, pipes, etc.). Also see Disposal.

# APPENDIX A

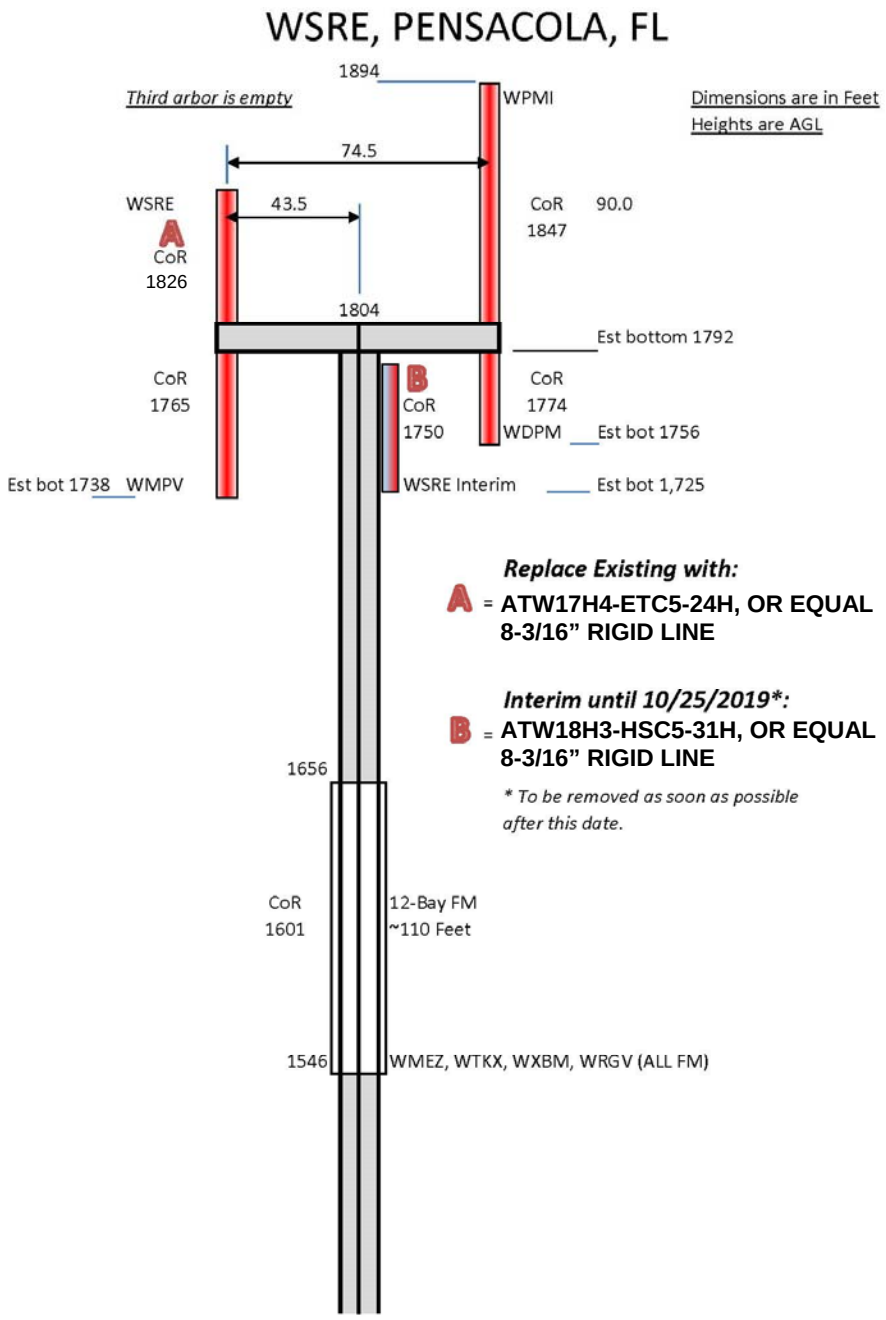
## List of Exhibits

| | |
|---|---|
| Exhibit A | Tower Sketches Demonstrating Transmission Line Work for Pricing |
| Exhibit B | Tower Sketch Showing Proposed Antenna Configuration |
| Exhibit C | WSRE Repack Transition Migration Plan |
| Exhibit D | Transmitter Room Layout (Separate pdf file) |
| Exhibit E | Transmitter RF Flow (Separate pdf file) |
| Exhibit F | Pictures (Separate zip file) |

# Exhibit A – Tower Sketches Demonstrating Transmission Line Work



# Exhibit B- Tower Sketch Showing Proposed Configuration




KESSLER AND GEHMAN ASSOCIATES, INC.

# Exhibit C- WSRE Repack Transition Migration Plan

This document includes drawings of the transmitter room and the RF flow for both the existing installation and the proposed new installation. There is apparently enough power and space available in the power boxes. There is room on the wall to add another box if needed. See attached photographs of the power boxes and the legend plates. The 230KW generator has plenty of power for the new installation. Power for the new HVAC can be taken from the source that feeds the present chillers.

The station uses fiber for the primary STL and microwave as the backup. ASI and IP feeds will be available for the new transmitter.

There is plenty of room to add a new transmitter, filter and pump units. A new 3-port patch panel can be added and plumbed to the new 8-3/16" line in a similar fashion to the existing. The contractor may use 4-1/16" line for the plumbing inside then, after the patch panel, transition to 6-1/8", transform to 75 ohms, transition to 8-3/16" then up the tower. It has not been possible to verify exactly where the legacy transition to 75 ohms occurs. The line leaves the patch panel at 4-1/16" at 50 ohms, it transitions to 6-1/8" then transitions to 8-3/16". After each transition there is a short piece of line. Either one of these could be a 50 to 75-ohm transformer, but it probably occurs in the 8-3/16" section. The new run can be done however the manufacturer deems proper. The line elbows out into the common hallway and elbows again to the outside wall. The legacy dummy load can easily be plumbed into the new patch panel. There is room on the outside wall right next to the existing line for another feed-through for the second line. There is an 8-3/16" cut-out ready to go. There was an 8-3/16" line there previously so the path is clear all the way to and up the tower.

The legacy system has two huge chillers, which the licensee decided to replace. One is approximately 25 tons; the other is approximately 15 tons. When the old transmitter and chillers-cooling system is removed, there would be nothing left to cool the transmitter room, so two new 10 ton[7] air conditioners will be needed (main and backup). The 25-ton chiller unit is mounted above the 15-ton unit. If the 25-ton chiller can be made to work alone to cool the old transmitter until it can be taken off the air, it will allow for the removal of the 15-ton chiller to provide space for a new HVAC system and transmitter heat exchangers for the new transmitter. If more space is needed, there is room on the pad to the west of the entrance. Power for this equipment can be obtained from the original chiller power box.

The transition can be done in three phases as suggested below. The height figures shown below are approximate as of 11/08/2018 until verified by the tower owner, American Tower Company.

## Phase One

**All high-power stations with antennas on the tower must be off the air during the hours that the crew is on the tower during Phase One.**

- All appropriate tower reinforcement should have been completed.

[7] Estimate subject to final design by an HVAC engineer.

- A new interim channel 31 antenna will be side mounted on the tower at approximately 1750'AGL.
- The existing 8-3/16" line is disconnected from the top mount channel 31 antenna and plumbed into the interim channel 31 antenna using a new elbow complex.
- The interim antenna and line will be swept.
- From this point on, the interim antenna and legacy 8-3/16" line will be used while transmitting on channel 31 with the legacy channel 31 transmitter.
- Remove existing channel 31 top mounted antenna.
- Install new channel 24 top mounted antenna and elbow complex.
- Install new 8-3/16" line from new elbow complex down to the 1100' level.

**All high-power stations with antennas on the tower may resume normal operation.**

- Concurrent with the above, the following can be initiated.
- Install new channel 24 transmitter and filter.
- Install new heat exchanger.
- Install new 3-port 4-1/16" patch panel.
- Connect new transmitter/filter to new patch panel.
- Move legacy dummy load to new patch panel.
- Provide ASI feed to new transmitter
- Test new transmitter into dummy load.

## Phase Two

**All high-power stations with antennas on the tower may continue normal operation, subject to any Personal RF Safety Monitor indication.**

- Complete the installation of new 8-3/16" line into the transmitter building.
- Connect new 8-3/16" line to the new patch panel with the appropriate reducers and impedance transformer.
- Sweep the new channel 24 antenna and line.
- **On 10/19/2019 put the new channel 24 transmitter on the air**.

## Phase Three

**All high-power stations with antennas on the tower must be off the air during the hours that the crew is on the tower during Phase three.**

- Remove interim antenna from the tower.
- Remove the legacy feedline used for this antenna down to the 1100-foot level.

**All high-power stations with antennas on the tower can resume normal operation, subject to any Personal RF Safety Monitor indication.**

- Complete the removal of the legacy 8-3/16" line.
- Complete the new HVAC installation.
- At this point all the legacy channel 31 transmission equipment can be removed.

# Exhibit D- Transmitter Room Layout

**See attached file: WSRE Specs – TRANSMITTER ROOM.pdf**

# Exhibit E- Transmitter RF Flow

**See attached file: WSRE Specs – RF FLOW.pdf**

# Exhibit F – WSRE Pictures

**WSRE Specs – PICTURES.zip**

Approx. 19 MB

Link to WSRE pics:

https://www.dropbox.com/sh/bigdo64ul2yvx66/AAAAUpezNb-7-bobYWBnDWxIa?dl=0

# BID FORM

New Digital TV Broadcast Transmission Equipment & Services

The District Board of Trustees, Pensacola State College, WSRE, Pensacola, FL

| BIDDER | BID ITEM | PURPOSE | DESCRIPTION | REFERENCE PRICE | BID PRICE |
|---|---|---|---|---|---|
| TRANSMITTER | Transmitter - Upgrade | Purchase | Higher Power | | |
| TRANSMITTER | Transmitter - Baseline | FCC Information | Lower Power | | |
| **BIDDER** | **BID ITEM** | **PURPOSE** | **DESCRIPTION** | **REFERENCE PRICE** | **BID PRICE** |
| ANTENNAS | Enter the **Total** of all five (5) RERENCE PRICES for the "Purchase" items (immediately below) here → | | | | |
| ANTENNAS | Primary Antenna - Upgrade | Purchase | Added V-pol | | |
| ANTENNAS | Interim Antenna | Purchase | Side Mount | | |
| ANTENNAS | Primary Transmission Line - Upgrade | Purchase | New Line - complete | | |
| ANTENNAS | Interim Transmission Line - Upgrade | Purchase | Use Existing Primary | | |
| ANTENNAS | Tower Rigging, Antenna and Line installation | Purchase | Antennas & Lines | | |
| ANTENNAS | Primary Antenna - Baseline | FCC Information | H-pol only | | |
| ANTENNAS | Primary Transmission Line - Baseline | FCC Information | Replace Elbows | | |
| ANTENNAS | Primary Transmission Line - Out-of-Pocket | FCC Information | New Line above ~1,750' | | |
| ANTENNAS | Interim Transmission Line - Baseline | FCC Information | New Line | | |
| | Tower reinforcement/modifications | Not Included | Share with WMPV[8] | | |

Refer to "FCC Cost Breakdowns" in this document for further explanations of the PURPOSE, shown above.

The BID PRICE above will be used to establish the lowest responsive cost. See SUMMARY, Contract Awards, in this document.

The REFERENCE PRICE above will be used to establish the FCC reimbursable amounts.

[8] Collocated repack station in Phase 5. See "Time is of the Essence".

# BID EVALUATION FACTORS

## Transmitters

The Station will consider the following factors when evaluating the bids received for the new TV transmitter. The ratings will be based on the relative differences between all the transmitters offered in this bid process.

- Price: The total **BID PRICE** for everything, including equipment, materials and labor. A lower price will receive more points.
- Warranty: Length of time and specific features. A better warranty will receive more points.
- Efficiency: An arbitrary factor calculated by dividing the rated RF output power after the mask filter (watts) by the Total Power Consumption of the transmitter system, including and cooling pumps and heat exchangers (watts). A higher number will receive more points.
- Rated Power after Filter in ATSC-1 mode. Higher power will receive more points.
- Rated Power after Filter in ATSC-3 mode. Higher power will receive more points.
- Similar Products: Length of Time continuously manufacturing, selling and supporting solid-state, liquid-cooled ATSC-1 TV transmitters with rated power output greater than 20 kW. Longer times will receive more points.
- Latent heat: The total amount of heat radiated into the room from all equipment provided by the transmitter indoor system provided by the Transmitter Contractor, including but not limited to the mask filter and cooling pumps

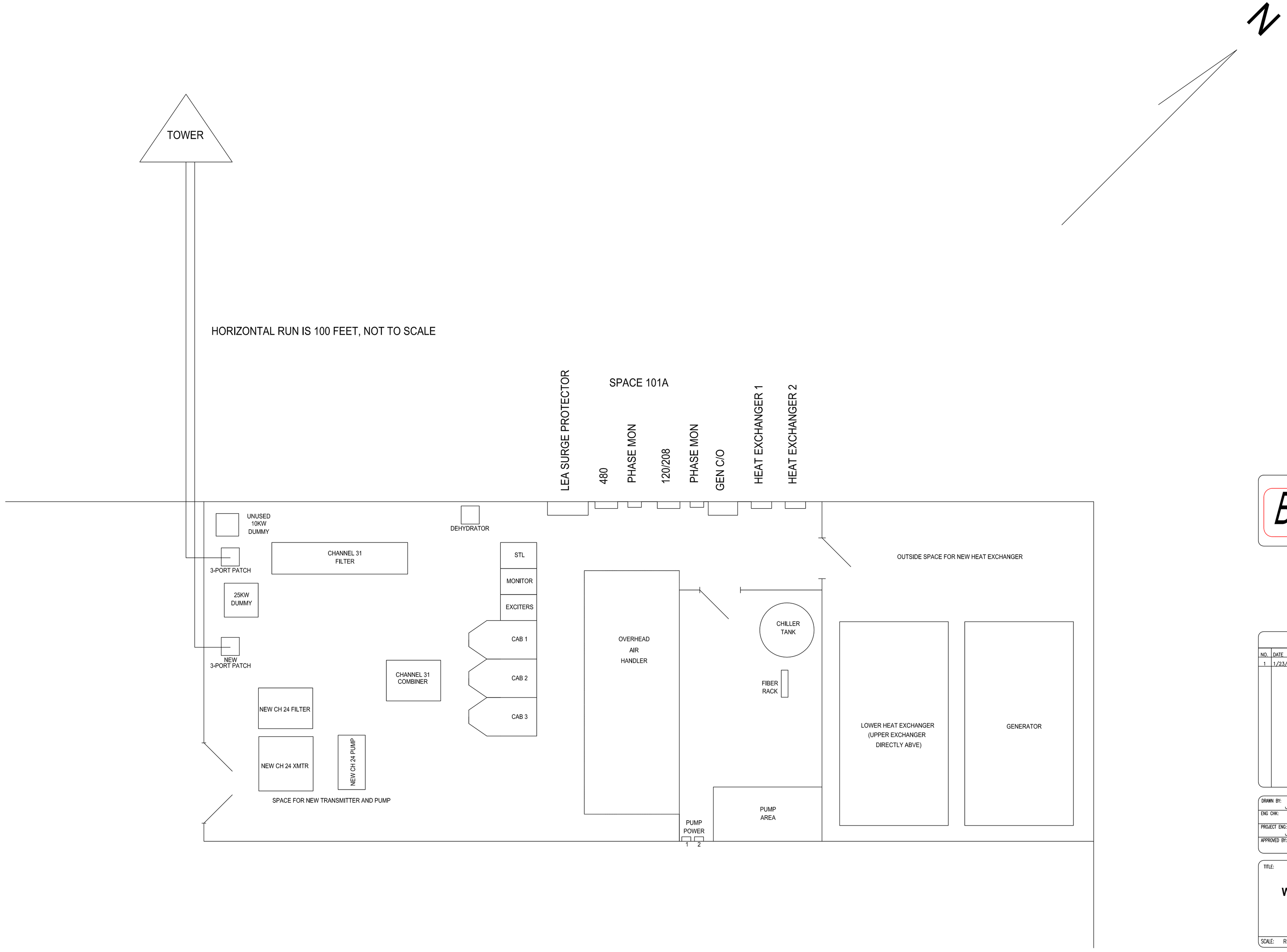
## Antennas, Lines and Tower Work

***Qualifications / ATC Approval*** - The WSRE antenna is mounted on the top of a candelabra arbor on a tower owned by American Tower Company (ATC).

- The tower crew for this project must be approved by ATC.
- The apparent successful Antennas bidder must provide written proof of ATC approval prior to being awarded a contract.
- Such proof must be submitted with the Antennas bid.

The Station will consider the following factors when evaluating the bids received for the new Antennas (TV transmitting antennas, transmission lines and tower rigging associated with the removal and installation of antennas and transmission line systems). The Station will consider the experience of subcontractors in evaluating a Bidder's evaluation factors, but the subcontractor must be named and may not be substituted without written approval of the College. The ratings will be based on the relative differences between all the Antennas project offerings received in this bid process.

- Price: The total **BID PRICE** for everything, including equipment, materials and labor. A lower price will receive more points.
- Warranty: Length of time and specific features. A better warranty will receive more points.
- Similar Products: Length of Time continuously manufacturing, selling, supporting, and testing UHF TV transmitting antennas with rated power greater than 20 kW. Longer times will receive more points.
- Similar Tower Experience: Length of Time continuously in the business of installing high power TV antenna systems on candelabra-type towers greater than 1,000 feet tall. Longer times will receive more points.




Borgi LLC

REVISIONS

| NO. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| 1 | 1/23/2018 | FIRST DRAFT | BORGI |

DRAWN BY: JIM BORGIOLI
DATE: 1/23/2018
ENG CHK:
PROJECT ENG: JIM BORGIOLI
APPROVED BY:

TITLE:

**WSRE XMTR ROOM FLOOR PLAN**

SCALE: RELATIVE SHEET 1 OF 1

ABBREVIATED DWG NO.: WSRE XMTR ROOM

TO CH 31 ANTENNA

TRANSITION FROM 6-1/6" TO 8-3/16"

6-1/8" 50 OHM TO 75 OHM XFMR

TRANSITION FROM 4" TO 6-1/8"

3-PORT 4" PATCH ANTENNA

LOAD

TRANSMITTER

TRANSITION FROM 6-1/8" TO 4"

CHANNEL 31 FILTER

TRANSITION FROM 4" TO 6-1/8"

ELBOW TO OUTSIDE WALL

**

8-3/16"

INSIDE WALL OF XMTR ROOM

**

6-1/8"

** IT IS UNCLEAR WHETHER THE 50 TO 75 OHM IMPEDANCE TRANSFORMATION OCCURS AT THE 6-1/8" SECTION OR THE 8-3/16" SECTION.

4"

TOP OF 3-PORT 50 OHM PATCH PANEL

TO CH 24ANTENNA

** IT IS UNCLEAR WHETHER THE 50 TO 75 OHM IMPEDANCE TRANSFORMATION OCCURS AT THE 6-1/8" SECTION OR THE 8-3/16" SECTION.

TRANSITION FROM 6-1/6" TO 8-3/16" **

6-1/8" 50 OHM TO 75 OHM XFMR**

TRANSITION FROM 4" TO 6-1/8"

3-PORT 4" PATCH ANTENNA

LOAD

TRANSMITTER

NEW FILTER

LINE SIZE TBD

PROBABLY 4"

NEW XMTR

3-1/8" RIGID

HARRIS CABINET 1

4" RIGID

HARRIS CABINET 2

3-1/8" RIGID

COMBINER

HARRIS CABINET 3

3-1/8" RIGID

Borgi LLC

REVISIONS

| NO. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| 1 | 1/23/2018 | FIRST DRAFT | BORGI |

DRAWN BY: JIM BORGIOLI DATE: 1/23/2018

ENG CHK:

PROJECT ENG: JIM BORGIOLI

APPROVED BY:

TITLE:

**WSRE RF FLOW**

SCALE: N/A SHEET 1 OF 1

ABBREVIATED DWG NO.: WSRE RF FLOW