



(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility **65355** | Service: **DTV** | Call **KTTZ-TV** | Channel: **25 (UHF)** |
ID: | Sign:
File **0000026949**
Number:
FRN: **0030587018** | Date **11/20**
Submitted: **/2018**

Applicant Information

Applicant Name, Type, and Contact Information

| Applicant | Address | Phone | Email | Applicant Type |
|---|---|----------------------|---------------------------|----------------|
| TEXAS TECH UNIVERSITY Applicant Doing Business As: TEXAS TECH UNIVERSITY | Ron Trice, Director of Engineering BOX 42161 LUBBOCK, TX 79409 United States | +1 (806) 742-2209 | ron. trice@TTU. edu | Other |

Reimbursement Contact Information

Reimbursement Contact Name and Information

| Applicant | Address | Phone | Email |
|----------------|---------|-------|-------|
| [Confidential] | | | |

Preparer Contact Information

Preparer Contact Name and Information

| Applicant | Address | Phone | Email |
|---|---|-----------------------|--------------------------|
| Alisan Colleen Sweet <i>KTTZ Business Manager</i> <i>KTTZ Texas Tech University</i> <i>Public Media</i> | Alisan Sweet 3406 18th Street Box 42161 Lubbock, TX 79409 United States | +1 (806) 834- 2398 | alisan. sweet@ttu.edu |

**Broadcaster
Information
and
Transition
Plan**

| Question | Response |
|--|---|
| Will the station be sharing equipment with another broadcast television station or stations (e.g., a shared antenna, co-location on a tower, use of the same transmitter room, multiple transmitters feeding a combiner, etc.)? If yes, enter the facility ID's of the other stations and click 'prefill' to download those stations' licensing information. | No |
| Briefly describe transition plan | Purchase transmitter, antenna and transmission line. Current transmitter cannot be retuned to new channel (see attached). Modification to the tower for placement of new antenna. |

Transmitters

| Section | Question | Response |
|------------------------------|---|----------|
| Transmitter Related Expenses | Do you have transmitter related expenses? | Yes |

**Primary
Transmitter**

Existing Transmitter Information

| Section | Question | Response |
|---|--|--------------------------|
| Existing Transmitter Description | Type of change | Purchase New |
| | Use | Primary (Main) |
| | Description of Use | N/A |
| | Ownership | Owned |
| | Owner | N/A |
| | Site | N/A |
| | Is this transmitter currently shared with another station? | No |
| | Is this transmitter currently in operating condition? | Yes |
| Existing Transmitter Manufacturer and Type | Manufacturer | |
| | Model | CD3260P2- CF |
| | Year | 2002 |
| | Type | Inductive Output Tube |
| | IOT Power Type | Two |
| | Power Capacity | 60 kW |

**Primary
Transmitter**

New Transmitter Costs

| Section | Question | Response |
|-----------------|---|--|
| New Transmitter | Use | Primary (Main) |
| | Change Type | Purchase New |
| | Is this a request for upgraded equipment? | Yes |
| | Manufacturer | |
| | Model | ULXTE-30 |
| | Transmitter Type | Solid State |
| | Solid State Cooling | Liquid Cooled |
| | Solid State Power capacity | 19.2 kW |
| | Justification for New Transmitter | The Harris Sigma transmitter is not tunable to Channel 25 as per Harris (Gates Air) see attached. The existing mask filter is channel- specific and must be replaced for the new channel. Upgrade to 30kW Filter. |

**Primary
Transmitter**

Other Transmitter Costs

| Section | Question | Response |
|---------|----------|----------|
|---------|----------|----------|

| | | |
|--|---|--|
| Electrical Service | Service Entrance (3 phases 800A 208V) | No |
| | Switchgear (industrial 800 amp) | No |
| | Transformer (480V) | No |
| | Power | N/A |
| | Rigid Conduit and Wiring | No |
| | Size | N/A |
| | Length | N/A |
| | Other Electrical Service | Yes |
| | Description | Electrician to connect new transmitter and power transformer to existing electrical panel. Run and connect RF filter fan and cooling fan and pumps to existing panels. |
| HVAC Service | Does the replacement transmitter require HVAC Service? | No |
| | Type | N/A |
| | Size | N/A |
| | Other Size | N/A |
| Transmitter Building Addition/Modification or Leasehold Improvement | Does the Transmitter Building require an addition, modification, other leasehold improvement? | No |
| | Size | N/A |
| Channel 14 Costs | Is an RF Consulting Engineer needed? | N/A |
| | Is a channel 14 Mask Filer needed? | N/A |
| | | |

| | | |
|--|--|-----|
| | Is additional field engineering time needed? | N/A |
| | Number of Days | N/A |

Primary
Transmitter

Other Transmitter Cost Not Listed

| Name | Description |
|--------------------|--|
| Simple Site Survey | Propose new equipment layout, provide 2D floor plan for proposed facility with electrical and building modifications |

Antennas

| Section | Question | Response |
|--------------------------|---------------------------------------|----------|
| Antenna Related Expenses | Do you have antenna related expenses? | Yes |

**Primary
Antenna**

Existing Antenna Information

| Section | Question | Response |
|---|--|--------------------|
| Existing Antenna Description | Type of change | Purchase New |
| | Antenna Use | Primary (Main) |
| | Description of Use | N/A |
| | Ownership | Owned |
| | Owner | N/A |
| | Site | N/A |
| | Is the existing antenna shared with another station or stations? | No |
| | Is the existing antenna directional? | Yes |
| | Is antenna in operating condition? | Yes |
| | Is antenna located on or in close proximity to an antenna farm? | No |
| Existing Antenna Manufacturer and Type | Class | Full Power |
| | Mounting | Side Mount |
| | Antenna position in stack | Not in Stack |
| | Polarization | Horizontal |
| | Type | Slotted Coaxial |
| | Number of Stations Supported | N/A |
| | Number of Panels | N/A |
| | Design power capacity in use | N/A |
| | Lower Limit | N/A |
| | Upper Limit | N/A |
| | Other Antenna Type | N/A |
| | ERP: (Effective Radiated Power) | 890.0 kW |
| | | |

| | |
|--------------|-------------------------|
| Manufacturer | |
| Model | TFU- 22DSC-R C170 |
| Year | 2003 |

Primary
Antenna

New Antenna Costs

| Section | Question | Response |
|------------------------------------|--|-----------------|
| New Antenna Description | Use | Primary (Main) |
| | Description of Use | N/A |
| | Change Type | Purchase New |
| | Is this a request for upgraded equipment? | Yes |
| | Ownership | Owned |
| | Owner | N/A |
| | Is antenna shared? | No |
| | Is antenna directional? | Yes |
| | Will antenna be located on or in close proximity to an antenna farm? | No |
| New Antenna Manufacturer and Types | Class | Full Power |
| | Mounting | Top Mount |
| | Antenna position in stack | Not in Stack |
| | Polarization | Elliptical |
| | Type | Slotted Coaxial |
| | Number of Stations Supported | N/A |
| | Number of Panels/Bays | N/A |
| | Lower Limit | N/A |
| | Upper Limit | N/A |
| | Design power capacity in use | N/A |
| | Other Antenna Type | N/A |
| | ERP: (Effective Radiated Power) | 290.0 kW |
| | Manufacturer | |
| | | |

| | |
|-------------------------------|--|
| Model | TFU-18JTH /VP-R 4C170 |
| Year | 2018 |
| Justification for New Antenna | Existing antenna is a Channel 39 signal channel antenna and cannot be re-tuned. The antenna is side mounted. The new antenna needs to be top mounted due to no other space on the tower. |

Primary Antenna

Other Antenna Costs

| Section | Question | Response |
|------------------------------------|---|----------|
| Combiner for Shared Antenna | Do you need a Combiner for a Shared Antenna? | No |
| | Type | |
| | Number of channels supported | N/A |
| | Frequencies of channels supported | N/A |
| | Frequency | N/A |
| | Do you need a combiner output splitter /switcher for dual feed lines? | N/A |
| Elbow Complex | Do you require the separate purchase of the Elbow Complex? | Yes |
| | | |

| | | |
|---------------------------------|---|-------------------------|
| | Broadband or Single Channel? | Single Channel |
| | Feed Line Size | 4 1/16 inches inches |
| Side Mount Brackets | Do you require the separate purchase of side mount brackets for a high power antenna? | No |
| Pattern Scatter Analysis | Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna? | No |
| Sweep Test | Do you require the sweep testing of transmission line and antenna? | Yes |

Primary Antenna

Other Antenna Cost Not Listed

| Name | Description |
|---------------------------|---|
| Bury Mount Adapter | The adapter is needed to mount the new antenna to the tower. This a custom built adapter designed and built buy Dielectric. |

Transmission Line

| Section | Question | Response |
|---------------------------------------|---|----------|
| Transmission Line Related Expenses | Do you have transmission line related expenses? | Yes |

Primary
Transmission Line

Existing Transmission Line

| Section | Question | Response |
|---|--|------------------|
| Existing Transmission Line Description | Type of change | Purchase New |
| | Use | Primary (Main) |
| | Description of Use | N/A |
| | Ownership | Owned |
| | Owner | N/A |
| | Site | N/A |
| | Is the existing transmission line shared with another station or stations? | No |
| | Is Transmission Line in operating condition? | Yes |
| Existing Transmission Line Manufacturer and Type | Manufacturer | |
| | Type | Rigid |
| | Diameter | 6 1/8 inches |
| | Other Diameter | N/A |
| | Segment Length | 20 inches |
| | Other Segment Length | N/A |
| | Number of parallel runs | 1 |
| | Length | 522 feet per run |

Primary
Transmission Line

New Transmission Line

| Section | Question | Response |
|------------------------------------|---|--|
| New Transmission Line Costs | Use | Primary (Main) |
| | Description of Use | N/A |
| | Change Type | Purchase New |
| | Is this a request for upgraded equipment? | No |
| | Type | Rigid |
| | Diameter | 4 1/16 inches |
| | Other Diameter | N/A |
| | Segment Length | 19 1/2 inches |
| | Other Segment Length | N/A |
| | Number of parallel runs | 1 |
| | Length | 700 feet per run |
| | Justification for New Transmission Line | The existing line is 20' sections which is Prohibited on Channel 25. We need to use 19 1/2' or 19 3/4' transmission line sections. |

Primary
Transmission Line

Other Transmission Line Expenses Not Listed

Information not provided.

Tower Equipment And Rigging Costs

| Section | Question | Response |
|--|---|----------|
| Tower Equipment or Rigging Costs Changes | Do you have tower equipment or rigging costs changes? | Yes |

Primary Tower

Existing Tower

| Section | Question | Response |
|---|---|-------------------|
| Existing Tower Description | Type of change | Modify Existing |
| | Tower Use | Primary (Main) |
| | Description of Use | N/A |
| | Ownership | Owned |
| | Is this tower consider Complex? | |
| | Is this tower currently shared with any other stations? | Yes |
| | One or more FM, AM or TV radio broadcaster(s) | Yes |
| | Others Types of Users | Yes |
| | Is tower documented for structural analysis? | No |
| | Is tower compliant with Rev G? | No |
| Existing Tower Structure Registration | Do you have a tower registration number? | Yes |
| | ASR Number | 1047750 |
| Coordinates (NAD83 (North American Datum of 1983)) | Latitude (NAD83) | 33° 34' 55.0" N- |
| | Longitude (NAD83) | 101° 53' 27.0" W- |
| | Overall Structure Height | 817.58 feet |
| | Support Structure Height | 644.02 feet |
| | Ground Elevation Above Mean Sea Level (AMSL) | 3225.03 feet |

| | |
|------------------|--|
| Structure Type | TOWER - Free Standing or Guyed Structure |
| Tower Owner | TEXAS TECH UNIVERSITY |
| Date Constructed | 05/07/1982 |

**FM, AM or TV radio
broadcasters. Facility ID's,
Call Signs and Services of
other broadcast stations with
whom the tower is shared**

| Facility ID | Call Sign | Service |
|-------------|-----------|---------|
| 65354 | KTTZ-FM | FM |
| 65352 | KTXT-FM | FM |

Other Types of Users

| Users |
|---------------|
| TTU BMC |
| S. Plains EMS |

**Primary
Tower**

Tower Modification Costs

| Section | Question | Response |
|-----------------------------|--|--|
| Engineering Study | Please what type of engineering study is required, if any: | Study needed for undocumented /poorly documented tower |
| Tower Reinforcements | Please select whether tower reinforcements are needed: | Major Reinforcements needed |

**Primary
Tower**

Tower Rigging Costs

| Section | Question | Response |
|------------------------------|-----------------------------------|----------|
| Tower Rigging Costs | Complex Tower | Other |
| Helicopter Services Required | Are helicopter services required? | No |

**Primary
Tower**

Other Tower Expenses Not Listed

Information not provided.

**Outside
Professional Services Costs**

| Section | Question | Response |
|---|--|--|
| Outside Project Management Services | Do you require outside project management services? | Yes |
| | Number of Hours | 300 |
| | Explanation | The station has multiple transmitter sites (1 TV with 2 Radio and 1 Radio 180 miles away) and 2 Studio Buildings. They are operating with minimal staff. The station does not have personnel available for managing this project and doing their daily duties. |
| Outside RF consulting Engineering Services | Perform engineering study for new channel assignment and antenna development | Yes |
| | Prepare engineering section of Form FCC Construction Permit Application | Yes |
| | For Auxiliary Facility | No |
| | For Main Facility | Yes |
| | Prepare engineering section of Form FCC License to Cover Application | Yes |
| | For Auxiliary Facility | No |

| | | |
|---|--|-----|
| | For Main Facility | Yes |
| | Prepare request for Special Temporary Authority | Yes |
| | Quantity | 1 |
| | Do you have Distributed Transmission System engineering services? | N/A |
| | Critical Facility | N/A |
| | Terrain-Shielded Facility | N/A |
| Attorney and Other Outside Consulting Services | Prepare and file Form FCC Construction Permit Application | Yes |
| | For Auxiliary Facility | No |
| | For Main Facility | Yes |
| | Prepare and file Form FCC License to Cover Application | Yes |
| | For Auxiliary Facility | No |
| | For Main Facility | Yes |
| | Prepare request for Special Temporary Authority | Yes |
| | Quantity | 1 |
| | NEPA Section 106 environmental review | No |
| | Environmental Assessment | No |
| | ASR Modification | Yes |
| | FAA Consultation (including preparation of FAA Form 7460) | No |
| | Negotiation of Lease and other Matter for Shared Locations | No |
| | Prepare or Review FCC Form 399 for Reimbursement | Yes |
| | Address transition timing and coordination issues w/ other stations and wireless providers | No |

| | | |
|--------------------------------------|---|-----|
| RF Field Engineering Services | Comprehensive coverage verification via field study | Yes |
| | RF exposure measurements | Yes |
| | Additional Field Engineering Service | No |
| | Number of Days | N/A |
| | Justification | N/A |

Outside Professional Services Costs **Other Professional Services Expenses Not Listed**
If services not provided.

Other Expenses

| Section | Question | Response |
|-------------------------------------|--|----------|
| AM Pattern Disturbance | Is an Impact Study needed? | No |
| | Is Remediation needed? | No |
| Facility Expenses | Name | N/A |
| | Other Distributed Transmission System Expenses Not listed | N/A |
| | Name | N/A |
| | Is Notification of a Medical Facility required as a result of DTV broadcasting? | Yes |
| Permit and Filing Costs | Local Zoning | No |
| | Non-zoning permits | No |
| | BLM or NFS Coordination | No |
| | FCC Construction Permit Minor Change | No |
| | FCC License to Cover Application | No |
| | FCC Special Temporary Authority Application | No |
| Other Miscellaneous Expenses | Does this relocation require paying Disposal Costs (for equipment and other waste, net of any salvage value)? | Yes |
| | Does this relocation require Equipment Delivery or Handling Charges not otherwise included in individual item costs? | Yes |
| | Does this relocation require Equipment Storage? | No |
| | Does this relocation require the Development and Airing of an Announcement regarding an upcoming channel change? | Yes |
| | Does this relocation require MVPD Notification of a Channel Change? | Yes |

**Other
Expenses**

Other Expenses Not Listed

| Name | Description |
|------------------------------|--|
| Geotechnical Services | Engineering Analysis of soil at the base of the tower and anchor points. Analysis requested by Tower Engineering Company |

Cost Information

Transmitters

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

| Description | Predetermined Cost Estimate | Estimated Cost | Estimated Cost Justification | Actual Cost | Actual Cost Justification |
|--|-----------------------------|-----------------------|------------------------------|---------------------|---------------------------|
| Primary Transmitter ULXTE-30 | \$704,176.80 | \$522,322.53 | | \$484,283.53 | |
| Simple Site Survey | <i>\$5,176.80</i> | \$5,176.80 | N/A | \$5,176.80 | N/A |
| Other Electrical Service: Electrician to connect new transmitter and power transformer to existing electrical panel. Run and connect RF filter fan and cooling fan and pumps to existing panels. | <i>\$15,000.00</i> | \$15,000.00 | N/A | \$14,190.00 | N/A |
| UHF - Liquid Cooled Solid State Transmitter 14.2 - 20 kW | \$684,000.00 | \$502,145.73 | N/A | \$464,916.73 | N/A |
| Sub-total | \$704,176.80 | \$522,322.53 | N/A | \$484,283.53 | N/A |
| Total for all systems | \$2,334,513.80 | \$1,988,451.53 | N/A | \$873,035.63 | N/A |

Components

| Actual Information | |
|---|---|
| Description | File Name |
| Simple Site Survey | Component Description: Basic site survey invoice from GatesAir, Inc. for KTTZ, Texas Tech University, Lubbock, TX Amount: \$5,176.80 |
| Other Electrical Service: Electrician to connect new transmitter and power transformer to existing electrical panel. Run and connect RF filter fan and cooling fan and pumps to existing panels. | Component Description: Electrician to connect new transmitter/power transformer to existing electrical panel. Run /connect RF filter fan and cooling fan/pumps to existing panels. Amount: \$14,190.00 |

| | | |
|--|-------------------------------|--|
| UHF - Liquid Cooled Solid State Transmitter 14.2 - 20 kW | | |
| | Component Description: | Transmitter installation hardware and equipment |
| | Amount: | \$78,450.70 |
| | | |
| | Component Description: | Transmitter (ULXTE-30) and its components |
| | Amount: | \$322,529.33 |
| | | |
| | Component Description: | Transmitter filter, Motorized Switch, Test Load & inside RF System |
| | Amount: | \$63,936.70 |

Cost Information

Antennas

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

| Description | Predetermined Cost Estimate | Estimated Cost | Estimated Cost Justification | Actual Cost | Actual Cost Justification |
|--|-----------------------------|----------------|------------------------------|--------------|--|
| Primary Antenna TFU-18JTH /VP-R 4C170 | \$403,352.00 | \$305,288.00 | | \$274,759.20 | |
| Bury Mount Adapter | <i>\$97,552.00</i> | \$97,552.00 | N/A | \$87,796.80 | N/A |
| UHF - High Power Top Mount (200-1000 kW), One station antenna , elliptically or circularly polarized | \$289,500.00 | \$192,744.00 | N/A | \$173,469.60 | The new Dielectric antenna matches the directional pattern and horizontal polarization of the existing antenna. KTTZ TV has included the addition of vertical polarization to the new antenna at the station's expense. Please see attached variance document. |

| | | | | | |
|---|----------------|----------------|-----|--------------|-----|
| Sweep test of existing antenna | \$6,730.00 | \$6,400.00 | N/A | \$5,760.00 | N/A |
| Elbow complex, single channel, at antenna input, per 4 1/16. feedline (if needed) | \$9,570.00 | \$8,592.00 | N/A | \$7,732.80 | N/A |
| Sub-total | \$403,352.00 | \$305,288.00 | N/A | \$274,759.20 | N/A |
| Total for all systems | \$2,334,513.80 | \$1,988,451.53 | N/A | \$873,035.63 | N/A |

Components

| Actual Information | |
|--------------------|--|
| Description | File Name |
| Bury Mount Adapter | <p>Component Description: bury mounting adapter - KTTZ bird cage, inv. 45% of total per contract</p> <p>Amount: \$43,898.40</p> <p>Component Description: First installment of 45% of Bury Mount Adapter with bird cage is due.</p> <p>Amount: \$43,898.40</p> |

| | | | | | | | | | |
|---|---|-------------------------------|--|----------------|-------------|-------------------------------|---|----------------|-------------|
| <p>UHF - High Power Top Mount (200-1000 kW), One station antenna , elliptically or circularly polarized</p> | <table> <tr> <td data-bbox="724 98 1043 535">Component Description:</td><td data-bbox="1059 98 1426 535">ANT TFU-18ETT /VP-R 4C170 KTTZ D25 antenna invoice 45% of total, per contract.</td></tr> <tr> <td data-bbox="724 535 1043 580">Amount:</td><td data-bbox="1059 535 1426 580">\$86,734.80</td></tr> <tr> <td data-bbox="724 580 1043 960">Component Description:</td><td data-bbox="1059 580 1426 960">First installment of 45% of High Power Side Mount Antenna (ANT TFU-18JTH /VP-R 4C170 KTTZ D-25) is due.</td></tr> <tr> <td data-bbox="724 960 1043 1005">Amount:</td><td data-bbox="1059 960 1426 1005">\$86,734.80</td></tr> </table> | Component Description: | ANT TFU-18ETT /VP-R 4C170 KTTZ D25 antenna invoice 45% of total, per contract. | Amount: | \$86,734.80 | Component Description: | First installment of 45% of High Power Side Mount Antenna (ANT TFU-18JTH /VP-R 4C170 KTTZ D-25) is due. | Amount: | \$86,734.80 |
| Component Description: | ANT TFU-18ETT /VP-R 4C170 KTTZ D25 antenna invoice 45% of total, per contract. | | | | | | | | |
| Amount: | \$86,734.80 | | | | | | | | |
| Component Description: | First installment of 45% of High Power Side Mount Antenna (ANT TFU-18JTH /VP-R 4C170 KTTZ D-25) is due. | | | | | | | | |
| Amount: | \$86,734.80 | | | | | | | | |
| <p>Sweep test of existing antenna</p> | <table> <tr> <td data-bbox="724 972 1043 1229">Component Description:</td><td data-bbox="1059 972 1426 1229">First installment of 45% of Repack Sweep is due.</td></tr> <tr> <td data-bbox="724 1229 1043 1274">Amount:</td><td data-bbox="1059 1229 1426 1274">\$2,880.00</td></tr> <tr> <td data-bbox="724 1274 1043 1512">Component Description:</td><td data-bbox="1059 1274 1426 1512">repack sweep test; inv. 45% of total per contract</td></tr> <tr> <td data-bbox="724 1512 1043 1556">Amount:</td><td data-bbox="1059 1512 1426 1556">\$2,880.00</td></tr> </table> | Component Description: | First installment of 45% of Repack Sweep is due. | Amount: | \$2,880.00 | Component Description: | repack sweep test; inv. 45% of total per contract | Amount: | \$2,880.00 |
| Component Description: | First installment of 45% of Repack Sweep is due. | | | | | | | | |
| Amount: | \$2,880.00 | | | | | | | | |
| Component Description: | repack sweep test; inv. 45% of total per contract | | | | | | | | |
| Amount: | \$2,880.00 | | | | | | | | |

| | | |
|---|-------------------------------|---|
| Elbow complex, single channel, at antenna input, per 4 1/16. feedline (if needed) | Component Description: | First installment of 45% of Elbow Complex KTTZ Single channel (at antenna input for 4-1/13" 50 ohm) is due. |
| | Amount: | \$3,866.40 |
| | Component Description: | elbow complex KTTZ single channel at antenna input 4-1/13" 50 ohm; inv. 45% of total per contract. |
| | Amount: | \$3,866.40 |

Cost
Information

Transmission Line

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

| Description | Predetermined Cost Estimate | Estimated Cost | Estimated Cost Justification | Actual Cost | Actual Cost Justification |
|--|--------------------------------|-------------------|------------------------------------|--------------|------------------------------|
| Primary Transmission Line | \$99,400.00 | \$86,691.00 | | \$78,021.90 | |
| Rigid Transmission Line - copper, 4 1 /16" | \$99,400.00 | \$86,691.00 | N/A | \$78,021.90 | N/A |
| Sub-total | \$99,400.00 | \$86,691.00 | N/A | \$78,021.90 | N/A |
| Total for all systems | \$2,334,513.80 | \$1,988,451.53 | N/A | \$873,035.63 | N/A |

Components

| Actual Information | | |
|---|-------------------------------|--|
| Description | File Name | |
| Rigid Transmission Line - copper, 4 1/16" | Component Description: | First installment of 45% of Rigid Transmission Line is due. |
| | Amount: | \$39,010.95 |
| | Component Description: | rigid transmission line and T/L 4-50 EIA for the line; inv. 45% of total per contract. |
| | Amount: | \$39,010.95 |

Cost Information

Tower Equipment and Rigging Costs

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

| Description | Predetermined Cost Estimate | Estimated Cost | Estimated Cost Justification | Actual Cost | Actual Cost Justification |
|--|-----------------------------|---------------------|--|---------------|---------------------------|
| Primary Tower TOWER | \$868,300.00 | \$825,000.00 | | \$0.00 | |
| Complex Tower (includes, for example, those with candelabras and/or stacked antennas) | \$421,000.00 | \$400,000.00 | Tower is located in a University parking lot. Access is limited and must be scheduled around school and school events. Extra safety precautions must be taken because of location. | N/A | N/A |
| Major tower reinforcement /modifications | \$421,000.00 | \$400,000.00 | N/A | N/A | N/A |
| Tower mapping for an undocumented /poorly documented tower and preparation of documentation necessary for tower load study | \$26,300.00 | \$25,000.00 | N/A | N/A | N/A |
| Sub-total | \$868,300.00 | \$825,000.00 | N/A | \$0.00 | N/A |

| | | | | | |
|------------------------------|----------------|----------------|-----|--------------|-----|
| Total for all systems | \$2,334,513.80 | \$1,988,451.53 | N/A | \$873,035.63 | N/A |
|------------------------------|----------------|----------------|-----|--------------|-----|

Components

Information not provided.

Cost Information

Outside Professional Services

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

| Description | Predetermined Cost Estimate | Estimated Cost | Estimated Cost Justification | Actual Cost | Actual Cost Justification |
|--|-----------------------------|---------------------|------------------------------|-------------------|---------------------------|
| Outside Professional Services | \$182,835.00 | \$173,250.00 | | \$7,675.00 | |
| RF Exposure Measurements | \$21,050.00 | \$20,000.00 | N/A | \$0.00 | N/A |
| Comprehensive coverage verification via field study, if needed | \$84,200.00 | \$80,000.00 | N/A | N/A | N/A |
| ASR modification (prepare FCC Form 854) | \$2,105.00 | \$2,000.00 | N/A | N/A | N/A |
| Attorney Fees - Prepare and File request for Special Temporary Authorization | \$3,680.00 | \$3,500.00 | N/A | \$475.00 | N/A |
| Attorney Fees - Prepare and File FCC Form 2100 (main), License to Cover Application | \$2,365.00 | \$2,250.00 | N/A | N/A | N/A |
| Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application | \$5,260.00 | \$5,000.00 | N/A | \$450.00 | N/A |

| | | | | | |
|--|----------------|----------------|-----|--------------|-----|
| Prepare request for Special Temporary Authorization | \$2,050.00 | \$1,500.00 | N/A | N/A | N/A |
| Project management of the transition | \$47,400.00 | \$45,000.00 | N/A | N/A | N/A |
| Prepare and or review reimbursement form | \$2,630.00 | \$2,500.00 | N/A | N/A | N/A |
| Perform engineering study for new channel assignment and antenna development | \$7,360.00 | \$7,000.00 | N/A | \$4,500.00 | N/A |
| Prepare engineering section of FCC Form 2100 (main), Construction Permit Application | \$3,155.00 | \$3,000.00 | N/A | \$2,250.00 | N/A |
| Prepare engineering section of FCC Form 2100 (main), License to Cover Application | \$1,580.00 | \$1,500.00 | N/A | N/A | N/A |
| Sub-total | \$182,835.00 | \$173,250.00 | N/A | \$7,675.00 | N/A |
| Total for all systems | \$2,334,513.80 | \$1,988,451.53 | N/A | \$873,035.63 | N/A |

Components

Actual Information
Description

File Name

| | |
|--|---|
| RF Exposure Measurements | <div> <div> Component Description: </div> <div> RF Consulting Engineering including engineering performance study for new channel assignment and antenna development </div> </div> <div> Amount: </div> <div> \$4,500.00 </div> |
| | |
| Comprehensive coverage verification via field study, if needed | Information not provided. |
| ASR modification (prepare FCC Form 854) | Information not provided. |
| Attorney Fees - Prepare and File request for Special Temporary Authorization | <div> <div> Component Description: </div> <div> prepare and file STA to operate KTTZ TV at reduced power until new channel change over. </div> </div> <div> Amount: </div> <div> \$475.00 </div> |
| Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover Application | Information not provided. |

| | |
|--|--|
| Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application | <p>Component Description:</p> <p>Review and completion of legal portion of KTTZ-TV repack modification application.</p> <p>Amount:</p> <p>\$450.00</p> |
| Prepare request for Special Temporary Authorization | Information not provided. |
| Project management of the transition | Information not provided. |
| Prepare and or review reimbursement form | Information not provided. |
| Perform engineering study for new channel assignment and antenna development | <p>Component Description:</p> <p>engineering study for new channel assignment and antenna development: simple system /single channel antenna/line sys and CH25 Interference &coverage area w/ a directional C-170 top mount antenna for first CP; Define TPO of new transmitter</p> <p>Amount:</p> <p>\$4,500.00</p> |
| Prepare engineering section of FCC Form 2100 (main), Construction Permit Application | <p>Component Description:</p> <p>RF Consulting Engineering: Preparation of engineering section of FCC Form 2100, construction permit (CP) application.</p> <p>Amount:</p> <p>\$2,250.00</p> |

Prepare engineering
section of FCC Form 2100
(main), License to Cover
Application

Information not provided.

Cost Information

Other Expenses

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

| Description | Predetermined Cost Estimate | Estimated Cost | Estimated Cost Justification | Actual Cost | Actual Cost Justification |
|---|-----------------------------|--------------------|--|--------------------|---------------------------|
| Other Expenses | \$76,450.00 | \$75,900.00 | | \$28,296.00 | |
| Geotechnical Services | <i>\$8,700.00</i> | \$8,700.00 | Tower Engineering Company in the process of performing an Analysis on the Tower needed a Soil Analysis to determine if the Tower base and anchor points needed modification for the tower to meet the G code with the new antenna and transmission line. | \$8,700.00 | N/A |
| MVPD Notification of Channel Change | <i>\$1,200.00</i> | \$1,200.00 | N/A | \$1,138.00 | N/A |
| Develop and air announcement of upcoming channel change | <i>\$10,000.00</i> | \$10,000.00 | N/A | N/A | N/A |

| | | | | | |
|--|--------------------|----------------|---|--------------|-----|
| Equipment Delivery and Handling Charges | \$18,000.00 | \$18,000.00 | Antenna, Bury Mount and line delivery. | \$16,200.00 | N/A |
| DTV Medical Facility Notification | \$11,550.00 | \$11,000.00 | N/A | \$2,258.00 | N/A |
| Disposal Costs (for equipment and other waste, net of any salvage value) | \$27,000.00 | \$27,000.00 | Removal of CH39 Transmitter and associated equipment after channel shut off | N/A | N/A |
| Sub-total | \$76,450.00 | \$75,900.00 | N/A | \$28,296.00 | N/A |
| Total for all systems | \$2,334,513.80 | \$1,988,451.53 | N/A | \$873,035.63 | N/A |

Components

| Actual Information | |
|-----------------------|---|
| Description | File Name |
| Geotechnical Services | <p>Component Description: Geotechnical investigation, including field operations, laboratory investigation, engineering analysis, and report.</p> <p>Amount: \$8,700.00</p> |

| | |
|--|--|
| MVPD Notification of Channel Change | <p>Component Description:</p> <p>MVPD Notification Services: notification of cable and satellite MVPD Providers of new RF channel and transport stream parameters on repack channel</p> <p>Amount:</p> <p>\$1,138.00</p> |
| Develop and air announcement of upcoming channel change | Information not provided. |
| Equipment Delivery and Handling Charges | <p>Component Description:</p> <p>freight, shipping, and handling; inv. 45% of total per contract</p> <p>Amount:</p> <p>\$8,100.00</p> <p>Component Description:</p> <p>First installment of 45% of Freight, Shipping and Handling is due.</p> <p>Amount:</p> <p>\$8,100.00</p> |
| DTV Medical Facility Notification | <p>Component Description:</p> <p>DTV Notification Service - notification of medical facilities - transmitter medical facility notification per proposal</p> <p>Amount:</p> <p>\$2,258.00</p> |
| Disposal Costs (for equipment and other waste, net of any salvage value) | Information not provided. |

| | | | |
|-------------------------|------------------------------|------------------------------------|-----------------------|
| Cost Information | Grand Total | | |
| | | Predetermined Cost Estimate | Estimated Cost |
| | | | Actual Cost |
| | Total for all systems | \$2,334,513.80 | \$1,988,451.53 |
| | | | \$873,035.63 |

| | | |
|-----------------------------|--|-----------------|
| Reimbursement Status | Question | Response |
| | The facility has ceased operating on its pre-auction channel. | No |
| | Construction of final facilities or all necessary modifications are complete. | No |
| | All receipts for reimbursement have been submitted no further costs are expected to be incurred. Note this will lock the Form 399 from further editing and begin close-out procedures with the Fund Administrator. | No |

| Certification | Section | Question | Response |
|---------------|---|---|----------|
| | Submission of Estimated Expenses Statements | <p>WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT.</p> | |
| | | <ol style="list-style-type: none"> 1. The Authorized Person signing below certifies that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity. 2. The above-named entity acknowledges that all certifications and attached documentation are considered material representations. 3. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount. | |

4. The above-named entity certifies that the equipment and services paid for with money from the TV Broadcaster Relocation Fund are necessary to change channels (broadcasters) or to continue to carry the signal of a broadcaster that changes channels (MVPD).
5. The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
6. The above-named entity certifies that it will maintain and provide to the Commission detailed records, including receipts, of all costs eligible for reimbursement actually incurred.
7. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.

| | |
|---|--|
| <p>8. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a pre-requisite for obtaining the payments herein requested.</p> | |
| <p>I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.</p> | <p>Alisan C Sweet <i>KTTZ</i> <i>Business Manager</i></p> <p>11/20/2018</p> |

Attachments