

## Attachment A-Scope of Work Details

RFP-002-2022

Repairs to Mountain Top Transmitter Building  
Replacement of Engineer's Office and Storage Building

## Contractor Requirements:

1. This document provides details of repairs to the Main Transmitter building, replacement of the exterior security fence and demolition and replacement of the Engineer's Office and Storage Building. Before mobilization, contractor will review the site and proposed work with owner to identify any omissions or modifications needed to the scope of work.
2. The facility must remain in operation during construction activities. Contractor will coordinate with owner to minimize interruptions to the operations and maintain access to the facility
3. Contractor will provide to owner a work schedule to inform owner which areas of the building will be under construction.
4. Contractor will provide, prior to mobilizing and starting work, a work plan to show where they plan to stage materials and equipment including offices, toilets, and security fence if planned.
5. Contractor will be responsible for all permits, inspections, and reviews required by the Virgin Island Agencies and Departments
6. Contractor will maintain and clean, neat and safe work area.
7. Disposal of debris, vegetation and materials will be the contractor's responsibility.

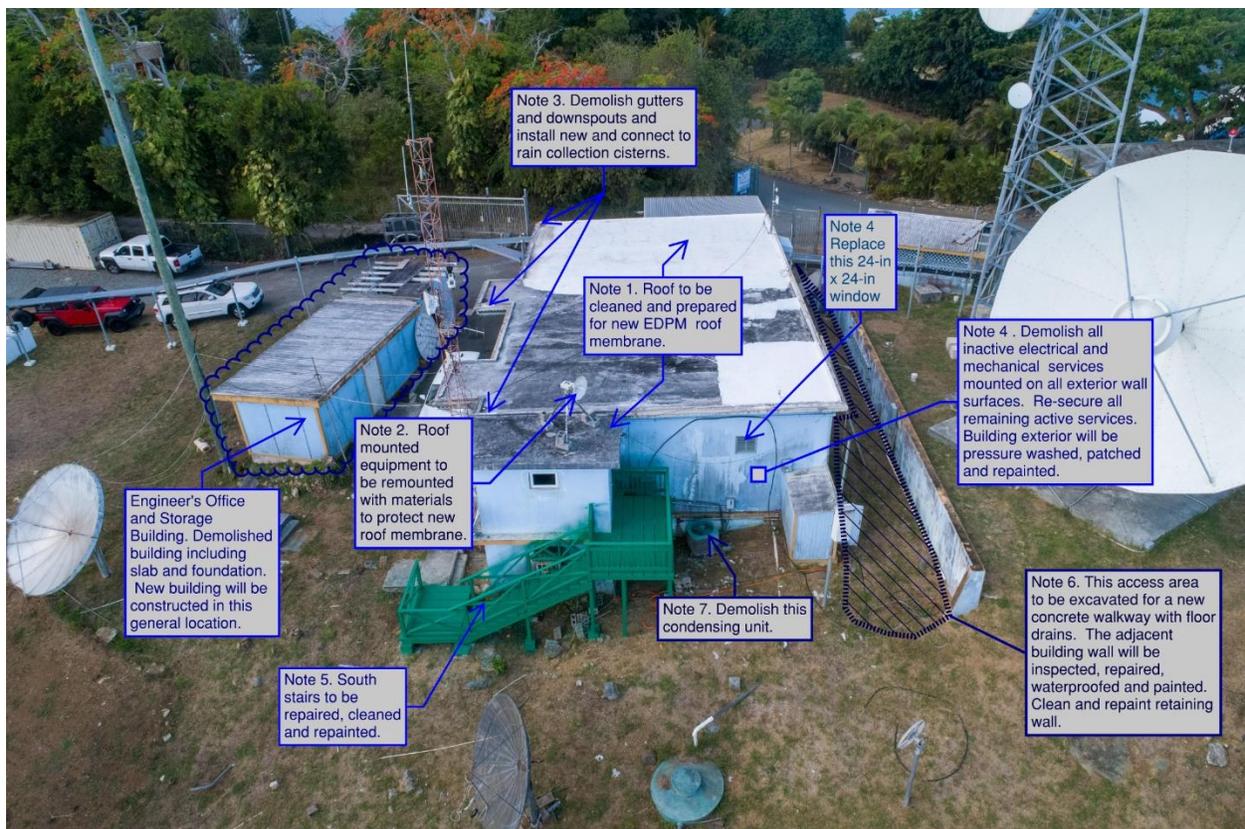


Figure 1 South Elevation

## Main Building Exterior

- Note 1.** Demolish and replace roof waterproofing on concrete roof with new, 100 mil TPO or EDPM material.
- Demolish and remove existing roof membrane and coatings down to existing concrete deck.
  - Demolish and properly dispose of all inactive and abandoned electrical and mechanical services and devices at the direction and approval of the owner.
  - Repair roof cracks and defects with filler material recommended by manufacturer of proposed roof waterproofing material.
  - Provide 1,650 SF of new roof waterproofing material. Carlisle Fleeceback TPO 100 mil (white) or Carlisle Fleeceback EPDM 100 mil (white) or similar to be provided and installed following manufacturer's installation instructions. Roof material and installation shall meet IBC minimum design wind speed requirements provided with this request for proposal. Contractor will provide 15-year warranty for new roof system.
  - Contractor will provide details of selected material as well as Contractor's previous projects to owner for approval before ordering material.
  - Contractor will prevent any work materials from entering the cistern or water collection system. Contractor will be required, at completion of roof work, to clean and flush roof surface to remove all traces of work material and prevent introduction of contamination into cisterns.
- Note 2.** Any roof mounted equipment in place is to be removed, reset, and secured by the contractor as needed for roof material installation. Contractor will provide materials and methods, recommended by roof manufacturer, to withstand IBC minimum design wind speeds and for protection of the roof material. Contractor will demolish and dispose of inactive and abandoned electrical and mechanical devices as directed by the owner.
- Note 3.** Rain collection system – Gutters and downspouts will be demolished and replaced with new PVC. Downspouts to be 4-in (minimum) PVC rated for high-wind and debris exposure. Downspouts shall be securely fastened to resist forces from high-speed wind.
- Contractor will pump out the two, 5,500-gallon cisterns to remove sludge and debris and dispose of properly. Contractor will inspect cisterns for cracks and other damage and repair as needed with epoxy injection or similar method. Review proposed repair method with owner before ordering materials. See Figure 2 for cistern locations
  - Once repairs are completed, cistern interiors will be sealed coated with an NSF certified sealant to minimize leaking. Contractor will fill cisterns to 50% minimum with potable water and monitor for leakage.
  - Contractor will estimate leakage by measuring water level, over a 5-day period, and deducted estimate water usage to provide owner an estimated leak rate.

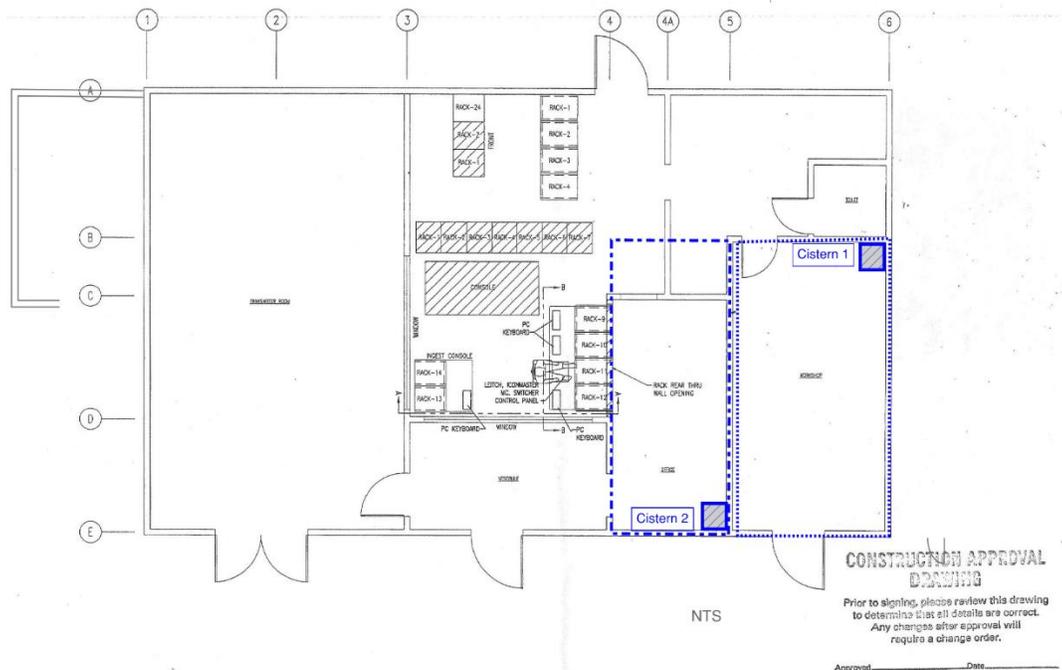


Figure 2 Cisterns

**Note 4.** Building exterior walls- Contractor will demolish and remove all inactive and abandoned electrical and mechanical services as directed by the owner. Remaining conduit, cables, tubing, equipment mounts, and similar surface mounted devices will be re-secured to prevent movement due to high-speed wind.

- Exterior walls will be pressure washed. Cracks and wall defects will be filled with masonry grout or other filler compatible with paint to be furnished.
- Walls will be primed and painted with two coats of exterior paint. Owner will approve paint type and color.
- Provide and install a silane/siloxane sealant over the entire exterior wall.
- Replace the 24-in x 24-in glass, operating window in the bathroom of the south wall. Window must be impact resistant for hurricane wind locations as required by IBC. Consultant with owner before ordering replacement.

**Note 5.** Stairs (see Figure 1). Inspect and repair stairs to restore loose treads, balusters, and handrails. Stairs to be pressure washed, primed and two coats of paint applied. Treads surface to have anti-skid paint additive (Tread-Tex or similar material) to provide traction. Contractor will provide details of the paint and color to be used, for approval of owner, before ordering material.

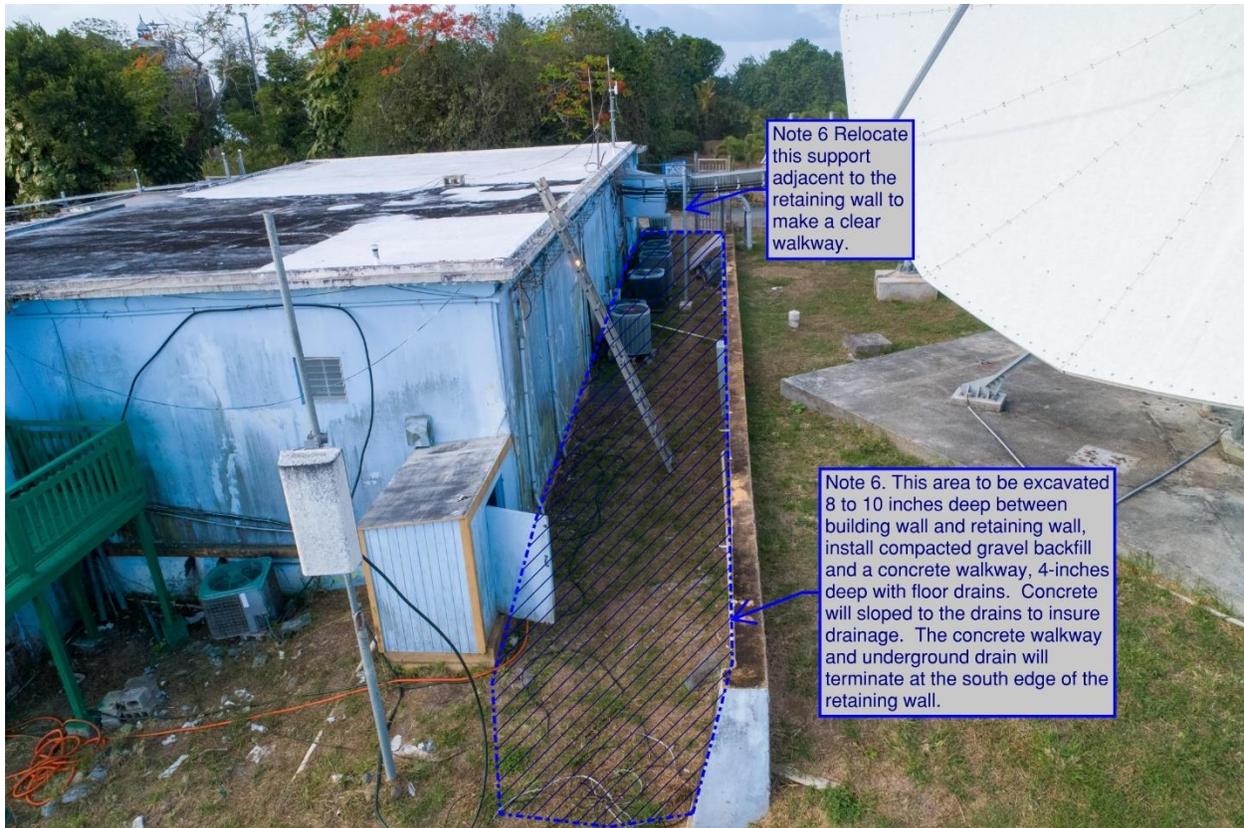


Figure 3 Access Walkway

**Note 6.** Drainage and Access walkway. Provide a concrete drainage and walkway for access area. See Figure 3.

- Access area (75ft x 9ft) to be excavated 10 to 12 inches. East exterior building wall to have 16-inches of waterproofing installed from base of building slab to prevent water intrusion into building.
- Provide and apply, on exterior and along base of east exterior wall, a waterproofing membrane or surface coating to prevent water infiltration into interior areas of breakroom and equipment rack area. Membrane to extend up 12-inches above surface of new walkway. Provide and install, between wall membrane and walkway interface a ½-inch felt expansion joint filler.
- Provide and install a 4-inch drainpipe with provision for floor drains every 10 ft along walkway. A continuous drain trench may be installed in lieu of pipe and individual drains. Main drain will terminate 24-inches past south edge of retaining wall.
- Provide and install 6 to 8 inches of compacted gravel base.
- Provide and install 4-inch concrete walkway, between building exterior wall and retain wall, with flush drains connected to drainpipe or with continuous drain trench, described above, installed per manufacturer's instructions. Concrete surface to be sloped to drain locations for free draining and have a brushed surface for traction. Walkway will terminate at south edge of retaining wall. Surface of walkway will be a

minimum of 2-inches but not more than 4-inches below threshold of main building access door on east exterior wall.

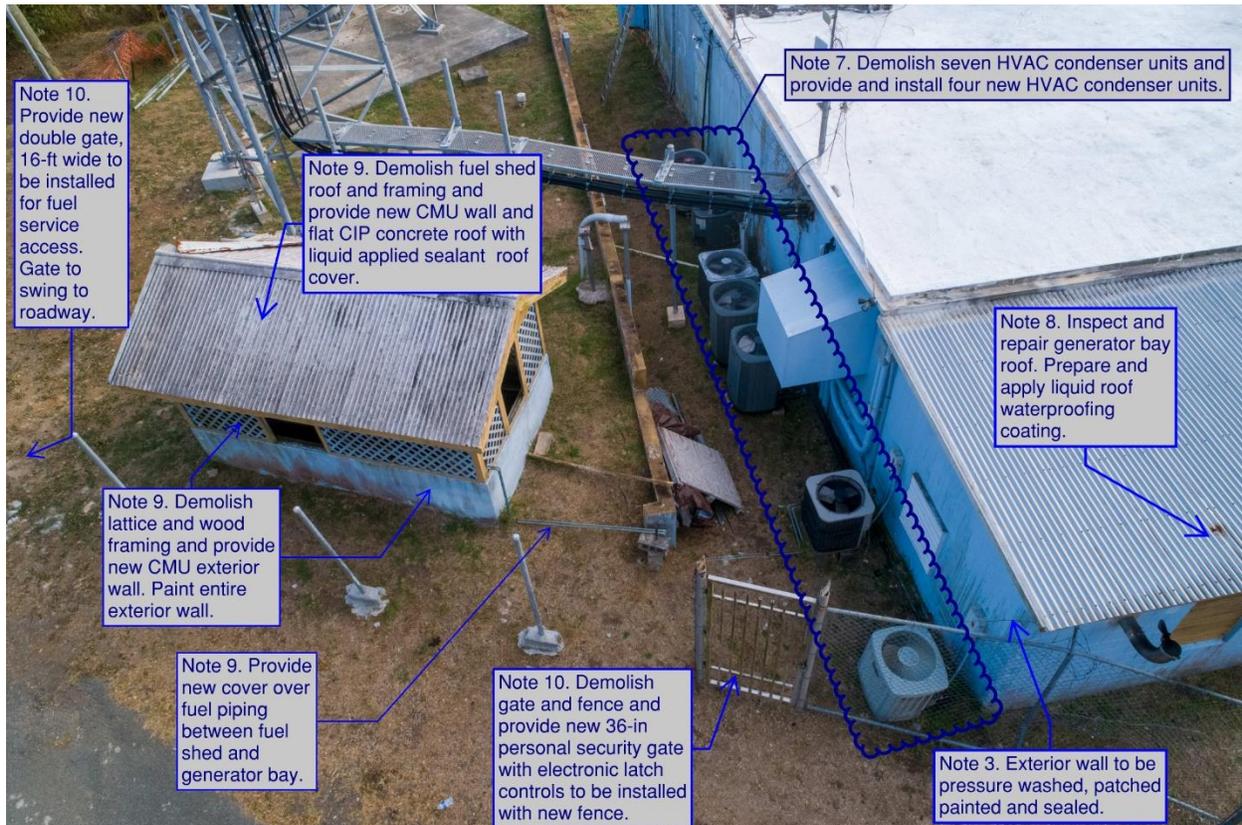


Figure 4 Northeast Exterior Work

- Note 7.** Air Conditioning Condensers (see Figure 1 and Figure 4) - Contractor will demolish all air conditioning condensing units. Demolishing includes removal and proper disposal of refrigerant.
- For units not replaced contractor will terminate, remove, and dispose of associated electrical, tubing, and mounting hardware. Owner will consult with Contractor and direct removal or reconfiguration of interior cooling system equipment.
  - Provide and install four (4) new condensing units, wall-mounted with galvanized mounts to include new electrical disconnects, evacuation of system, providing new refrigerant, leak checking and verifying operation. BTU ratings listed below are approximate. Contractor will verify condensing unit capacity and confirm with owner before ordering new units.
    - Two 10-ton units for transformer room
    - One 5-ton unit for control room and kitchen area
    - One 4.5-ton unit for master control room rack cooling
  - Contractor will relocate and install an additional fifth condensing, 3-ton unit, for a third-party equipment rack, provided by the owner, in addition to the four units listed above.

- Contractor will clean and service indoor fan coil units and verify the new condensing units and indoor coil units work nominally and efficiently.
- Contractor will wall-mount all installed condensing units to withstand IBC wind speeds
- Contractor will provide hurricane debris cages to protect condensing units from flying debris. Contractor can provide a custom fabricated cages which provides the required protection. Cages will be painted, galvanized or similar protection to prevent rust and provide a pleasing appearance. Cages will be constructed and installed to provide complete access to the condensing units to allow maintenance, servicing, and not impede operation of the system.
- Contractor will coordinate replacement of the air conditioning units with the walkway construction to maintain continuous A/C cooling to the facility. Consult with owner before deenergizing any unit.

**Note 8.** Corrugated metal roof over generator bay. (See Figure 4) Contractor to inspect 180 sf of corrugated metal roof for and repair any loose or missing fasteners. Contractor will repair or replace any damaged metal panels.

- Contractor will pressure wash, prepare roof, and provide a liquid roof sealant over roof. Carlisle X-Tenda acrylic coating (white) or similar product to be use. Contractor will provide details of selected material as well as Contractor's previous projects to owner for approval before ordering material.

## Generator Fuel Shed

**Note 9.** Demolish and replace existing metal panel roof and lattice walls. (See Figure 4)

- Demolish existing roof, framing and studs down to existing concrete wall.
- Provide and install a new CMU or CIP concrete columns to extend existing walls to provide support for a new CIP concrete roof. New construction to meet IBC wind load requirements. Contractor will provide six CMU filled or CIP concrete column supports for the roof rated for the minimum wind loads. The voids between the columns will be filled with open, decorative screen CMU blocks for ventilation and protection of the fuel tank from windblown debris. Contractor will suggest a CMU material to be selected and approved by owner. Contractor will confirm required clearances and roof design and construction with VI Building Codes Department and VI Fire Department.
- Provide and install a new 4-inch, CIP, concrete roof slab with steel wire reinforcement. Roof to have minimum of 1/12 slope to drain rainwater. Roof height to be designed to provide minimum of 7-ft clearance above floor of shelter. Roof to be installed and reinforced to withstand IBC wind speeds.
- Contractor will pressure wash and prepare roof and provide a liquid roof sealant over CIP concrete roof. Carlisle X-Tenda acrylic coating (white) or similar product to be use. Contractor will provide details of selected material as well as Contractor's previous projects to owner for approval before ordering material.

- Pressure-wash existing exterior wall, prime and provide two coats of exterior paint for the entire exterior of the structure.
- Shelter shall have a doorway with a heavy-steel, open-grate door/gate with latch to withstand IBC wind and wind-born debris hazards.
- Generator fuel lines will be replaced and rerouted between fuel shed and generator shed. Replacement fuel lines, in area of the excavation and installation of the access walkway, will be enclosed in a PVC or concrete shroud or pipe to prevent fuel lines embedment in concrete. Pipe enclosure/cover will extend from generator room to fuel shed. Cover to prevent damage during execution of work and exposure to high-wind debris. Contractor will take measures to expedite fuel line replacement or take measures to maintain fuel supply to generator while lines are being replaced.



Figure 5 Security Fence

## Security Fence

**Note 10.** Security Fence. Demolish and provide new security fence system. Contractor will be responsible for verifying that new security fence will meet VI Building Codes and IBC wind load requirements for the location. Contractor must provide documentation from WMA of proper disposal of all building demolition waste. For the purpose of bidding, the following details will be used.

- Demolish and dispose of 800 LF of existing fence, gates, post and post footings, bracing and debris.
- Provide 800-LF of 8-ft, #9-gauge, 1-3/4 mesh, galvanized steel, chain link fence material
- Provide 75 each 6-5/8-inch x 10-ft, schedule 40, galvanized steel posts with caps, set in concrete footers (approximately 24-in deep) with top, middle and bottom bracing and barbwire holders for three runs of barbwire.
- Provide 12 each 8-inch schedule 40, galvanized steel posts, with barbwire holders, set in concrete footers for corner and gate openings
- Provide 2,400 lf of barbwire for three runs above fence material in holders supplied with posts
- Provide one 8-ft x 20-ft rolling gate, #9 galvanized steel chain link fence with gate operator and two, outdoor push-button code operators and 8 wireless remotes. Owner will direct contractor to electrical supply from prime/standby power source. Gate power operator will have an option for manual operation if drive becomes inoperative.
- Provide one 8-ft x 16-ft double swing gate, #9 galvanized steel chain link fence and barbwire. Gate to have manual latch with lock hasp. Provide concrete reinforced ground anchor for center drop-rod latch to hold gate secure during high winds.
- Provide one 8-ft x 12-ft double swing gate, #9 galvanized steel chain link fence and barbwire. Gate to have manual latch with lock hasp. Provide concrete reinforced ground anchor for center drop-rod latch to hold gate secure during high winds
- Provide one 8-ft x 36-inch personnel access swing gate with outdoor push-button code latch operator and key latch for manual operation.

## Building Interior

1. Demolish 1,100 SF of ceiling tile and ceiling insulation and ceiling suspension system frame.
2. Provide and install 1,100 sf of ceiling suspension system and moisture and mold resistant 2x2 acoustical ceiling tile.
3. Provide and install 1,100 SF of R10 unfaced, semi-rigid, rockwool, acoustical ceiling batt insulation.
4. Demolish and replace four 2x2 drop ceiling light fixtures with LED fixtures.

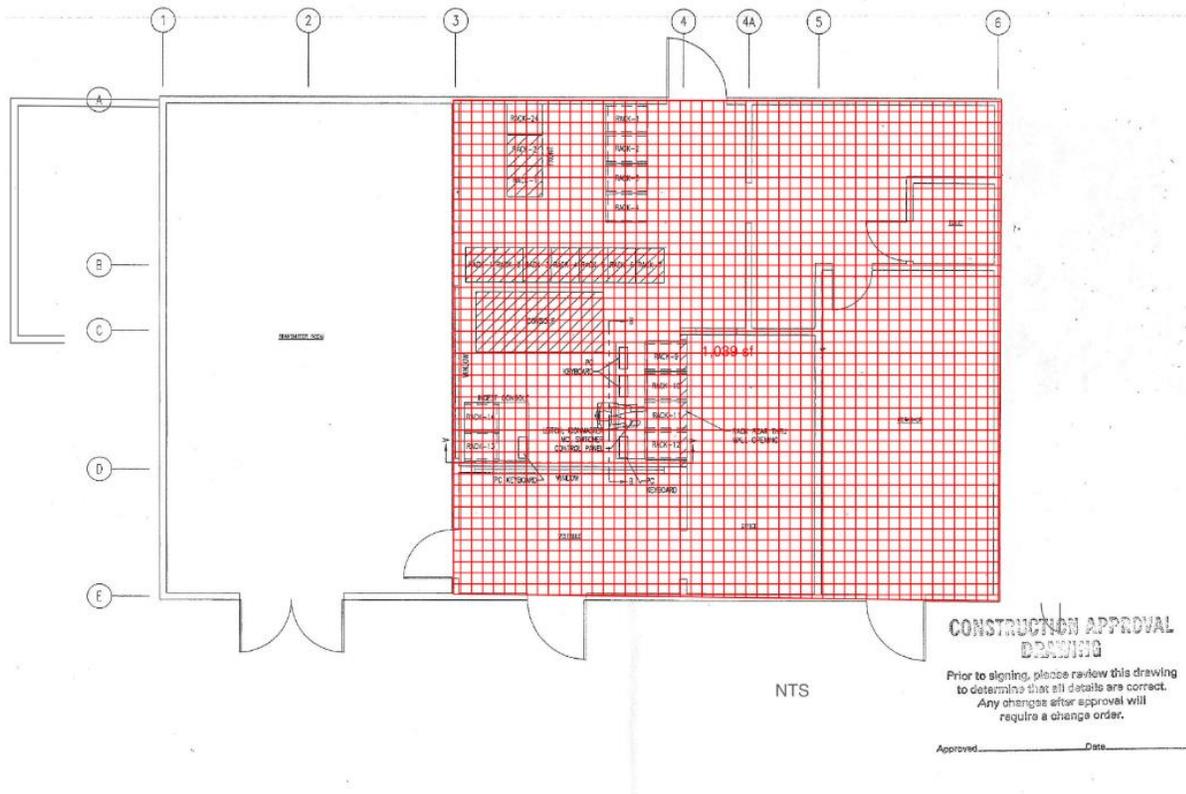


Figure 6 Ceiling Tile Replacement

5. Contractor will work with owner's mold remediation contractor to remediate and treat mold where it is identified in ceiling interstitial space, HVAC system and interior locations.
6. Remove and replace 850 sf of damaged interior ¼-in wood paneling, ½-in gypsum wallboard and 3/8-in plywood in locations shown in Figure 7.

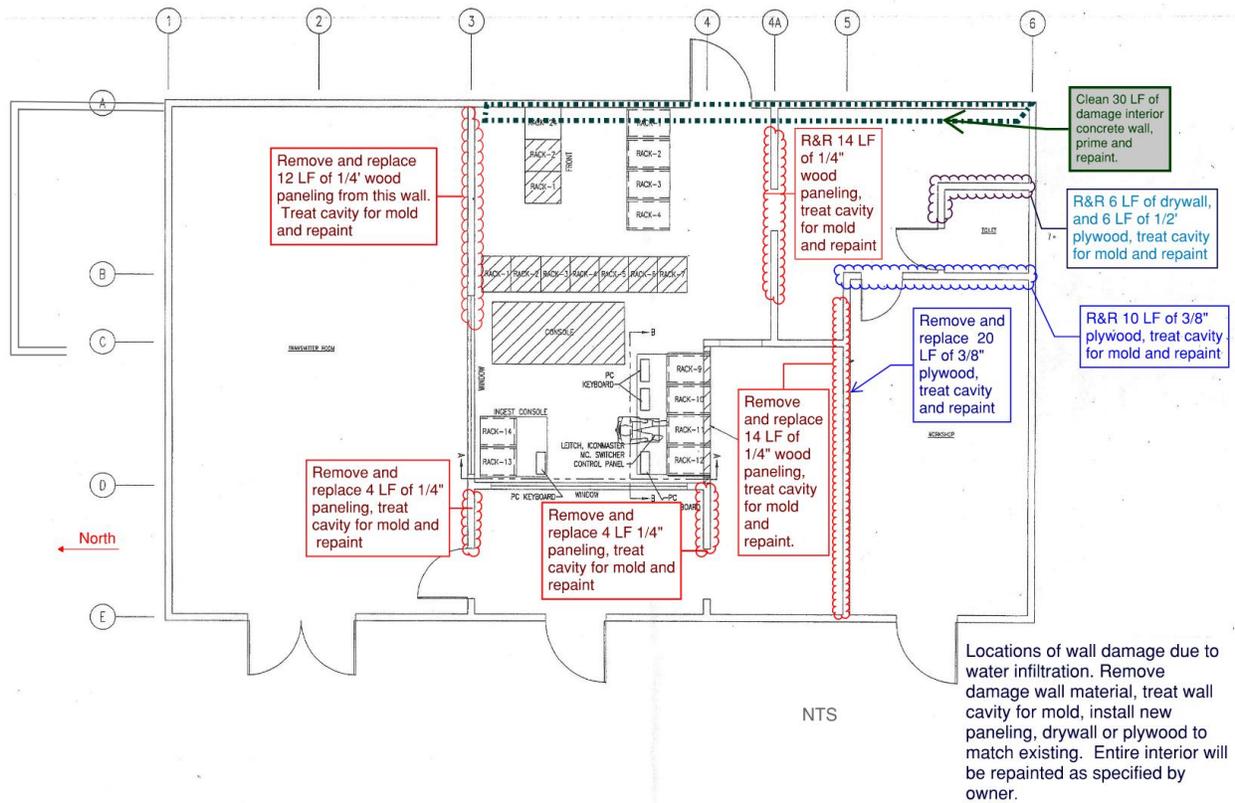


Figure 7 Water damage walls

7. Clean concrete, east interior wall to remove loose and blistered paint in equipment rack room and break room. Repair and fill cracks, prime and paint entire wall.
8. Replace two (2) existing 30-in x 80-in doors with 36-in x 80-in doors show on Figure 8. Frame, trim and paint as directed by owner.
9. Remodel two (2) existing 30-in x 80-in doorways with 36-in x80-in doorways show on Figure 8. Frame, trim and paint as directed by owner.
10. Remove kitchen base cabinets in break room to access exterior wall for removal of damage wall paint and repainting. See Figure 9
11. Provide and apply interior wall paint to all interior walls. Consult with owner for paint color.



*Figure 9 Break Room*

## **Engineer's Office and Storage Building**

Contractor will demolish and dispose of existing Engineer's office and storage building including foundation.

Contractor will have architectural plans developed by a locally licensed Architectural Engineering (A/E) firm, for approval of owner, to rebuild a 365 SF, one-story building. Building to be constructed with CIP concrete or reinforced CMU or a combination. For the purposes of bidding, the new building will be based on the following.

### **Demolition**

1. Contractor will demolish entire existing structure including foundation
2. Contractor will be responsible for transportation and disposal of all materials and confirm disposal with USVI Waste Management Authority of all building demolition waste. Contractor must provide documentation from WMA of proper disposal of all building demolition waste.

### **Building Details**

1. Building to comply with VI Building Codes and 2022 IBC code including wind load requirements for location. Contractor will arrange for local A/E to develop construction drawings.
2. Foundation and slab on grade with steel reinforcement. Floor surface to be a minimum of 6-inches above adjacent grade to prevent rain run-off into building.
3. Building total interior space of 365 SF
4. 11-ft floor to ceiling height
5. Four-inch CIP flat roof with steel reinforcement. Roof will have a TPO or EPDM roof covering. Carlisle Fleeceback TPO 100 mil (white) or Carlisle Fleeceback EPDM 100 mil (white), or similar, to be provided and installed following manufacturer's installation instructions.
6. Roof gutters and PVC downspouts connected to rain collection system.
7. CIP or reinforced CMU exterior walls. Interior wall will be light-gauge, structural steel studs.
8. Three spaces, 125 SF Office 1, 80 SF Office 2 and 160 SF storage room.
9. Interior walls between offices and storage room will be light-gauge, steel-stud wall from floor to underside of concrete roof.
10. Office 1 to have 36-in steel door, and three, single-hung, impact resistant aluminum windows, 3-ft x 5-ft
11. Office 1 to have drop ceiling with noise absorbing ceiling tile Sonex Harmoni Acoustic Ceiling white tile or similar with R10 unfaced rockwool batt ceiling insulation. Owner will approve contractor's product before ordering.
12. Office 1 to have furring strips and ½ plywood sheets mounted on concrete walls and plywood mounted to steel framed walls between offices and storage room with Sonex Noise Absorbing Foam Panels (white) or similar. Owner will approve contractor's product before ordering.
13. Office 1 to have anti-static flooring.

14. Office 2 to have 36-in steel door, and one, single-hung, impact resistant aluminum windows, 3-ft x 5-ft
15. Office 2 to have VCT floor tile and 2x2 acoustical tile ceiling with R10 unfaced rockwool batt insulation.
16. Office 2 to have furring strips and 1/2-in plywood sheets mounted on wall with 1/2" interior drywall painted to color selected by owner.
17. Building to have 100-amp electric service connected to primary system of transmitter building.
18. Offices will have minimum of 8 outlets and light circuits
19. Offices to have split 10,000BTU AC inverter wall mounted system with separate dedicated thermostats.
20. Storage to have 10,000 BTU humidity control system.
21. Storage interior will be stucco and painted.
22. Storage to have 48-inch steel, double door
23. Exterior to be primed and painted with two coats of exterior paint to match transmitter building
24. Building to have LED light fixtures as indicated. One light in each space will have emergency backup to illuminate in case of power outage.
25. Offices to have phone and Ethernet connections to main transmitter building. Owner to provide connection points.
26. Provide access port, through exterior wall and adject to existing outside cable tray for routing cables into building. Port to be water and wind resistant.

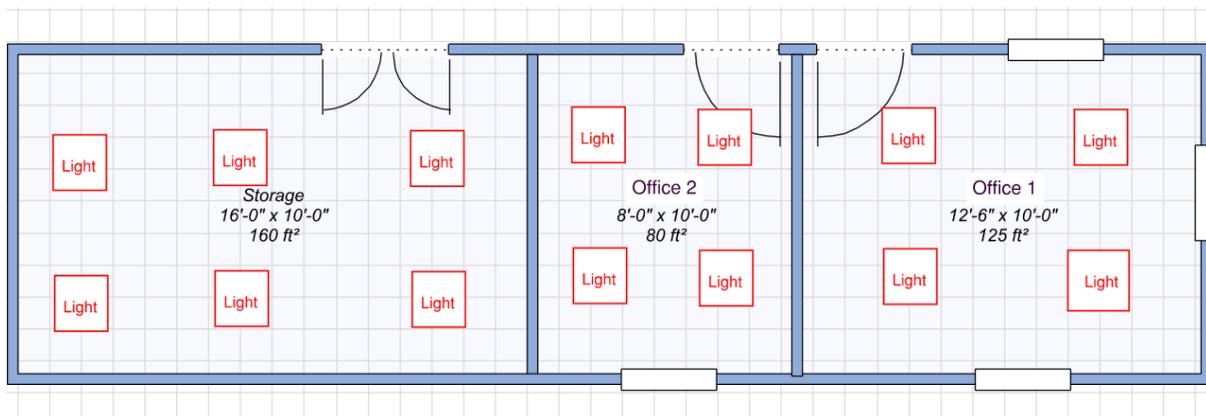


Figure 10 Engineer's Office and Storage Building Layout