NON-FEDERAL REIMBURSABLE AGREEMENT

BETWEEN

DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

AND

CITY OF SAN ANTONIO SAN ANTONIO INTERNATIONAL AIRPORT SAN ANTONIO, TEXAS

WHEREAS, the Federal Aviation Administration (FAA) can furnish directly or by contract, material, supplies, equipment, and services which the City of San Antonio (Sponsor) requires, has funds available for, and has determined should be obtained from the FAA;

WHEREAS, it has been determined that competition with the private sector for provision of such material, supplies, equipment, and services is minimal; the proposed activity will advance the FAA's mission; and the FAA has a unique capability that will be of benefit to the Sponsor while helping to advance the FAA's mission;

WHEREAS, the authority for the FAA to furnish material, supplies, equipment, and services to the Sponsor upon a reimbursable payment basis is found in 49 U.S.C. § 106(1)(6) on such terms and conditions as the Administrator may consider necessary;

NOW THEREFORE, the FAA and the Sponsor mutually agree as follows:

ARTICLE 1. Parties

The Parties to this Agreement are the FAA and City of San Antonio.

ARTICLE 2. Type of Agreement

This Agreement is an "other transaction" authorized under 49 U.S.C. § 106(1) (6). It is not intended to be, nor will it be construed as, a partnership, corporation, joint venture or other business organization.

ARTICLE 3. Scope

The purpose of this Agreement between the FAA and the Sponsor is to support the Sponsor's request for various construction projects that include the relocation and reconstruction of Taxiways, Taxiway Connectors, and construction of fiber optic cable pathways at various airport locations that will impact FAA cabling or facilities. The work plan is to be accomplished in phases.

Using FAA's Airport Improvement Program (AIP) support, the first phase will address the relocation and reconstruction of Taxiway E to maintain compliance with new requirements of Taxiway safety reconfiguration. The new Taxiway will be about 230 feet South West of the current location; the old Taxiway will be demolished. FAA signal and communications cables between the FAA's Airport Traffic Control Tower (ATCT) / Terminal Radar Control (TRACON) complex and the Remote Transmitter Receiver (RTR B) will be impacted and will require new construction and relocation. The cables will also require upgrading to current FAA Standards. The work provides an opportunity for FAA and SAT to introduce cable improvements to the airport's loop cable system. The enhancements will have new duct bank paths, the introduction of fiber optic cable as well as equipment to support fiber optic capabilities in the affected areas. The first phase will also identify and support an FAA initiative to establish and construct a duct bank and fiber optic capability between RTR B and RTR D.

Using FAA's AIP support, the second phase will address the repair and reconstruction of Taxiway R. The Sponsor will construct a new concrete encased duct bank and manhole system from the airport's IT node located adjacent to the Aircraft Rescue Firefighting Facility (ARFF node) to the FAA Instrument Landing System's (ILS) Glide Slope (GS) that serves Runway 13R. Again, the enhancements will have new duct bank paths, the introduction of fiber optic cable as well as equipment to support fiber optic capabilities that will eventually replace the copper wire in the affected areas. The FAA will provide a new 10ft. X 20ft. GS shelter, as government furnished material (GFM) that will support the new Fiber Optics Transmission System (FOTS) equipment racks and the GS electronics racks. The Sponsor will provide the new foundation for the GS shelter and new short cable paths that will be used in future FAA transitions and enhancements.

An airport funded project, the third phase will address an FAA requirement for safety related Taxiway / taxilane connector that needs to be relocated. The modification is being made to meet current safety related Taxiway configuration standards that do not allow for direct access from an apron to the Runway. The new taxilane connector will be constructed about 180 feet North West of the current location and, the old Taxiway connector will be demolished and removed. These construction and demolition activities will take place near Taxiway H and Taxiway S and over existing FAA buried loop cable bank that carry FAA signal cables located within the area of the proposed work. The Sponsor shall coordinate and schedule with FAA the planned work for the new Taxiway connector. The airport and the FAA have coordinated on a design that allows the Sponsor to protect the cables in place, and establish new conduits in proximity of the new taxilane connector to allow for the future expansion of the FAA fiber optic system in this area without impact to the new taxilane connector. The support of the FAA on this project is limited to review of engineering information, oversight, and assurance of the protection of FAA operational facilities and infrastructure.

Using FAA's AIP and SAT airport funds, the fourth phase of safety improvements is for the establishment of the Runway Guard Light safety project at multiple locations at SAT. The installation of new electrical duct bank system and guard lights will be constructed in near proximity to FAA cabling. The FAA and the Sponsor worked to

develop a list of the FAA facilities that will be impacted at determined locations for special precautions can be taken when trenching. The new electrical duct bank will be constructed parallel to Runway 13R – 31L, with new runway guard lights at multiple locations. Similarly a new electrical duct bank will be constructed parallel to Runway 04 – 22 with new runway guard lights at multiple locations. The Sponsor's plans and specifications will incorporate protection of FAA facilities and infrastructure by using current FAA standards that will be followed when trenching or encasement is needed. The support of the FAA on this project is limited to review of engineering information, oversight, and assurance of the protection of FAA operational facilities and infrastructure.

An airport funded project, the fifth and last phase of safety enhancements will be for a project along the northern perimeter road near the intersection of Taxiway N and Taxiway D. The project will reconstruct the perimeter road for improved support and emergency vehicle access in locations with known underground FAA cables. The Sponsor will coordinate with the FAA to encase and protect existing cables in place. The enhancements will have a new duct bank path segment for the introduction of fiber optic. Through design and coordination the project may also include additional conduit in the duct bank for future SAT and/or FAA upgrades. The support of the FAA on this project is limited to review of engineering information, oversight, and assurance of the protection of FAA operational facilities and infrastructure.

Scope of work for Taxiway E (Phase 1)

Departing from the FAA Tower (ATCT/TRACON) complex, a new fiber optic cable and inner-duct to be installed by the Sponsor via the existing duct bank and manhole system to existing manhole ("ALD-21-MH-3"). The new fiber optic cable and inner-duct will continue from the existing manhole ("ALD-21-MH-3") via new Sponsor constructed and installed concrete encased duct bank and new manhole system to RTR-B with connections to the Glide Slope (GS) shelter that serves Runway 04. The establishment of the new concrete encased duct bank(s) allows the airport to construct and establish the new Taxiway E at the new location and later demolish the existing Taxiway E. The Sponsor will remove and dispose offsite all copper conductor cable in the duct bank as identified by FAA from the ATCT/TRACON complex to the terminating manhole ("ALD-21-MH-3"). The area considered for the new duct bank may contain direct buried underground cables that have not been identified and will require locating, identifying, relocating, re splicing, and testing.

FAA Direct Earth Buried (DEB) cables abandoned in place become property of the Sponsor, as identified per Article 3. B. Delineation of Responsibility, Phase 1, "E".

Additionally in phase 1; the FAA has a project to construct, with FAA funds, a new concrete encased duct bank with manholes from RTR B to RTR D, and will install new inner-duct and fiber optic cable. This will allow the FOTS connectivity to RTR D.

Scope of work for Taxiway R (Phase 2)

As part of an airport project, a portion of Taxiway R, is planned to be reconstructed. The reconstruction will provide an opportunity for constructing a new pathway with concrete

encased duct bank and manhole system installed under the Taxiway R, Runway 13L, Taxiways M, S, and J, from the ARFF node to midfield between Runways 13L and 13 R. The new duct bank will then continue to the FAA's GS shelter area that serves Runway 13R. The FAA will install new FOTS equipment in the Airport's ARFF Node and at the new GS shelter. The Sponsor will install new inner-duct and fiber optic cable in the new duct bank and manhole system, from the ARFF Node to the new GS shelter.

At the Runway 13R GS shelter area the Sponsor will construct a new concrete foundation for a new FAA furnished 10 ft. x 20 ft. shelter, prepared for the future relocation of the FAA's GS electronics equipment. The new shelter is funded and procured by the FAA and installed by the Sponsor's contractor. The area considered for the new GS shelter may contain numerous underground cables that will require locating, identifying, and relocating, re splicing, and testing.

Scope of work for Taxiway H (Phase 3)

As part of an airport project, a new taxilane connector at Taxiway H near Taxiway S, the new construction will be about 180 feet Northwest of the current location, and the existing connector will be demolished and cleared. The Sponsor will develop plans and specifications for the accomplishment of work and the FAA will provide coordination and oversight. Prior to construction the project work will be planned, coordinated, and executed with FAA oversight, work is in close proximity of active FAA utility, communications, and signal cables loop or paths (primary and or alternate). The project will provide a split duct encasement for existing cables at new Taxiway location as well as empty conduits that allow for either city or FAA use in the future. FAA cables at the existing Taxiway location are protected in an existing casing and have been potholed for elevation verification.

Scope of work for Runway Guard Lights (Phase 4)

The sponsor in collaboration with the FAA has developed this safety project to install electrical duct bank and runway guard lights (RGL) at multiple locations on the airfield. The Sponsor will develop plans and specifications for the accomplishment of work and the FAA will provide coordination and oversight. The new duct bank will be constructed parallel to Runway 13R – 31L, with new runway guard lights at multiple locations. Similarly a new electrical duct bank will be constructed parallel to Runway 04 – 22 with new runway guard lights at multiple locations. The Sponsor's plans and specifications will incorporate protection of FAA facilities and infrastructure by using current FAA standards as per Article 3, B, 1 and 2, that will be followed when trenching or encasement is needed. The project will install a total of 14 pairs of elevated RGLs and two sets of in pavement RGLs. The new duct bank will cross FAA communication, power, and signal cables. If the depth of FAA cables conflicts with the crossing of the new electrical duct bank a split casing and duct bank following FAA standards will be installed to protect the FAA facilities.

Scope of work for SAT Perimeter Road (Phase 5)

The Sponsor plans to do a full depth reconstruction and realignment of the airport's perimeter road from its current alignment along the north side of the airfield. The FAA communications and power cables cross the perimeter road in multiple locations near the intersection of Taxiways D and N. Prior to construction the project work will be planned, coordinated, and executed with FAA oversight. If the depth of FAA cables conflicts with the demolition or construction of the new perimeter road a split casing and duct bank following FAA standards as per Article 3, B, 1 and 2, will be required to protect the FAA cables. The establishment of 4way concrete encased duct bank will be installed as needed for future expansion of SAT and FAA FOTS to prevent the potential of damage to the new roadway.

This Agreement provides funding for the FAA to establish these services. Therefore, this Agreement is titled:

Relocation of Taxiway E, Connector at Taxiway H, Reconstruction of Taxiway R, and establishment of the initial fiber optic cable service at the San Antonio International Airport (SAT), San Antonio Texas.

A. Delineation of Responsibilities

PHASE 1

I. Segment: ATCT-TRACON to RTR-B in support of Taxiway E relocation

a.	Duct bank with manholes (concrete encased) ATCT to ALD-21-MH-3: Construction ALD-21-MH-3 to RTR-B: Construction, City installed duct RTR-B to GS duct bank ALD-23-MH2: Grounding:	use existing Sponsor Sponsor Sponsor
b.	Inner-duct	
	Provided by:	Sponsor
	Installed by:	Sponsor
c.	Fiber Optic Cable	
	Funded and Provided by:	FAA
	Installed by:	Sponsor
	Tested by:	Sponsor
	Storage (unconditioned)	Sponsor
d.	Abandoned Copper Cable(ATCT TRACON to ALD-21-MH-3)	
	Removal by:	Sponsor
	Disposal by:	Sponsor

Please note: cables in existing duct banks from the ATCT to ALD-21-MH-3 are: 1 ea. 100 pair, 3 ea. 50 pair, 5 ea. 25 pair. From there they transition to Direct Earth Buried (DEB).

e. Abandoned DEB Copper Cable(ALD-21-MH-3 to RTR B); DEB cable within Sponsor Taxiway work limits, and for a distance of 50 feet North of ALD-21-MH-3 is to be removed.

Removal by: Sponsor
Disposal by: Sponsor
Once abandoned in place by FAA the cables belong to the Sponsor

f. FOTS equipment required at ATCT/TRACON

FOTS Equipment funded by:	Sponsor
FOTS Equipment Procured using Sponsor's funds by:	FAA
FOTS Equip Installation by:	FAA
FOTS Equipment Testing by:	FAA
Fiber cable patch panel Specifications by:	FAA
Fiber cable patch panel funded, procured by:	Sponsor
Fiber cable patch panel installed by:	Sponsor
Fiber cable terminations in Patch Panel by:	Sponsor
Fiber cable testing by:	Sponsor

g. FOTS equipment required at RTR-B

FOTS Equipment funded by:	FAA
FOTS Equipment Procured by:	FAA
FOTS Equip Installation by:	FAA
FOTS Equipment Testing by:	FAA
Fiber cable patch panel specifications by:	FAA
Fiber cable patch panel funded, procured by:	Sponsor
Fiber cable patch panel installed by:	Sponsor
Fiber cable terminations in patch panel by:	Sponsor
Fiber cable testing by:	Sponsor
Copper cable provided by:	FAA
Copper cable installation by:	FAA
Copper cable testing by:	FAA
Copper cable termination by:	FAA
Copper cable termination panel:	use existing

copper cuero communen punta.

h. Runway 04 GS Flight Inspection required after completion of Taxiway E relocation

Flight Inspection funded by:

Flight Inspection arranged by:

FAA

Flight Inspection executed by:

FAA

II. FAA F&E initiative segment: RTR B to RTR D (an FAA project)

a. New concrete encased duct bank with manholes by: FAA
 Duct bank concrete encased, 4ea, 4inch PVC by: FAA
 Manholes, with aircraft rated covers spring assist type: FAA
 Grounding by: FAA
 Construction by: FAA

b. Inner-duct

Provided by: FAA Installed by: FAA

c. Fiber optic cable

Funded and provided by: FAA Installed by: FAA

d. RTR D Shelter

FOTS equipment funded by:

FAA
FOTS equipment procured by:

FAA
FOTS equip installation by:

FAA
FOTS equipment testing by:

FAA
Fiber cable patch panel funded, procured, and installed:
FAA
Fiber cable terminations in patch panel by:

FAA
Fiber cable testing by:

FAA

PHASE 2

III. Segment Taxiway R work limit

SAT Fire Station (ARFF) to Runway 13R FAA GS area

a. Extension of FAA copper cable from new MH FAA COM 01 to ARFF A new copper cable extension will be required in order for existing FAA services to access the new ARFF FOTS node. Specifically, a new manhole (MH FAA COM 01) established by the sponsor northwest of existing ALD-12 MH1. The new copper cable extension will extend from the new MH FAA COM 01 to the ARFF FOTS Node. Existing direct buried cable will remain between ALD-12 MH1 and the new MH. New cable in the new duct bank, from the new MH FAA COM 01 to the ARFF FOTS Node via a splice in the new MH FAA COM 01.

Copper cable funded by:

Copper cable procured by:

Copper cable provided by:

Copper cable installation by:

Copper cable splicing in New MH by:

Sponsor

Copper cable termination at ARFF Node by:

FAA

Copper cable test by:

Sponsor

b. Abandoned copper cable Remove abandoned cable within sponsor work limits Removal by: **Sponsor** Sponsor Disposal by: c. New duct bank ARFF to 13R GS Install duct bank 4ea 4 inch PVC concrete encased by: Sponsor Install manholes with aircraft rated covers spring assist by: Sponsor Install grounding: Sponsor d. Inner-duct Provided by: Sponsor Installed by: Sponsor e. Fiber Optic Cable Funded and provided by: **FAA** Installed by: **Sponsor** Storage (unconditioned) by: **Sponsor** Fiber cable pre-install testing by: Sponsor f. FOTS equipment required at ARFF FOTS equipment funded by: Sponsor FOTS equipment using sponsor's funds procured by: **FAA** FOTS equipment installation by: FAA FOTS equipment testing by: **FAA** Fiber cable patch panel specification by FAA Fiber cable patch panel funded, procured by: **Sponsor** Fiber cable patch panel installed by: **Sponsor** Fiber cable terminations in patch panel by: Sponsor Fiber cable post-install testing by: Sponsor FOTS cabinet funded, procured and installed by: Sponsor FOTS cabinet locks funded procured and installed by: **FAA** UPS Funded, Procured and installed by: **FAA** Copper cable termination panel provided by: **Sponsor** Copper cable termination panel installed by: Sponsor Sponsor Copper cable termination by: Copper cable testing by: **Sponsor** g. New (GFM) 13R GS/FOTS shelter New shelter funded and provided by: FAA Location coordinates provided by: FAA Foundation provided by: **Sponsor** New shelter 10ft. x 20ft. offloading by: **Sponsor** Shelter setting, aligning, securing, and grounding by:

Grounding specifications provided by:

FAA

h. FOTS Equipment Required at New GFM 13R GS/FOTS Shelter FOTS equipment funded by: FOTS equipment procured by: **FAA** FOTS equipment installation by: **FAA** FOTS equipment testing by: **FAA** Fiber cable patch panel funded, procured, and installed: **Sponsor** Fiber cable terminations in patch panel by: **Sponsor** Fiber cable post-install testing by: **Sponsor** Copper cable termination panel provided by: **FAA** Copper cable termination panel installed by: **FAA** Copper cable termination by: FAA Copper cable testing by: **FAA**

i. FAA Copper Cable from Sectionalizer to new 13R GS/FOTS Shelter

Duct bank construction By:

Copper cable provided by:

Copper cable installation by:

FAA

Copper cable termination at sectionalizer by:

FAA

Copper cable testing by:

FAA

j. FAA Power Cable from Transformer to new Combined 13R GS/FOTS Shelter

Duct bank construction by:

Power cable provided by:

FAA

Power cable installation by:

FAA

Power cable termination by:

FAA

Power cable testing by:

FAA

k. Existing ARFF node power source will be used to support the FOTS equipment at the ARFF node location.

PHASE 3

IV. Segment Taxiway H Connector work limit

a. Identification of active FAA cable duct bank / Path by: FAA
 Design
 Design Review
 FAA
 Protection of FAA cables by: Sponsor
 Demolition of existing connector by: Sponsor

Coordination and oversight of demolition work at

FAA cable path by: FAA

b. Construct new concrete encased duct bank with manholes Duct bank, 4ea, 4inch PVC concrete encased Sponsor Manholes, with aircraft rated covers spring assist type Sponsor Grounding: Sponsor Construction Sponsor Coordination and oversight of construction of new duct bank at FAA cable path

PHASE 4

V. Segment: Runway Guard Lights work limit

Project design by: **Sponsor** a. Review of design by: FAA Identification of active FAA cable duct bank / Path by: FAA Protection of FAA cables by: **Sponsor** Coordination and oversight of construction of new duct bank at FAA cable path by: **FAA** Split duct conduit around existing cables concrete encased by: Sponsor Duct bank grounding by: Sponsor

PHASE 5

VI. Segment: Perimeter Road work limit

Project design by: **Sponsor** Review of design by: FAA Identification of active FAA cable duct bank / Path by: FAA Protection of FAA cables by: **Sponsor** Oversight of construction of new roadway at FAA cable path by: FAA Split duct conduit around existing cables concrete encased by: Sponsor New Duct bank, 4ea, 4inch PVC concrete encased conduit by: Sponsor Manholes with aircraft rated cover, spring assist type by: **Sponsor**

B. The FAA will perform the following activities:

- 1. Provide all technical assistance necessary to ensure that the Sponsor's project meets FAA rules, regulations, orders, requirements, standards, and specifications.
- 2. Provide all FAA standard drawings, specifications, and directives for use by the Sponsor in execution of the project.

- 3. Meet with the Sponsor as required to, coordinate and discuss project planning and engineering.
- 4. Provide review and construction oversight to the new fiber optic support facilities and infrastructure as described in Article 3 of this agreement.
- 5. Electronically locate and physically mark all FAA power and control cables in the area affected by the Sponsor's construction. The FAA will provide oversight of the Sponsor's excavation of cable to ensure cable integrity.
- 6. Provide Resident Engineering (RE) services during all construction phases of the project necessary to establish or restore service to affected FAA facilities, systems, and equipment. During the construction phase of the project, it is the RE's responsibility to protect the FAA's interests.

In furtherance of this responsibility, the RE will:

- a. Be the FAA's primary point of contact for the Sponsor during these construction phases of the project to ensure that all necessary information is coordinated with the appropriate FAA parties;
- b. Ensure all reasonable efforts are made to minimize the impact to FAA operations and existing facilities;
- c. Notify Sponsor and FAA personnel about and document significant discrepancies between the approved design plans and specifications and the actual on site work performed;
- d. Notify the Sponsor of any failure of the work or materials to conform to the contract, the design plans and specifications, drawings, and of any delays in the schedule;
- e. Keep a construction diary and weekly status reports on the FAA facilities, systems, and equipment affected by the project;
- f. Ensure compliance with all FAA rules, regulations, orders, standards, requirements, and agreements; and
- g. Witness key events in the project such as, but not limited to, the connecting and testing of all FAA power, control field, and fiber optic cables and the exothermic welding of grounding, bonding, and lightning protection connections.

The RE does not have authority to:

- h. Revoke, alter, or waive any requirement of the design plans, specifications, or drawings of the Sponsor's construction project;
- i. Act as the contractor's foreman, or perform any other duties for the contractor;
- j. Enter into or take part in any labor dispute between the Sponsor and its construction contractor; or
- k. Participate in, settle, or otherwise decide contractual matters in dispute between the Sponsor and its construction contractor.

- 7. Review and approve the Sponsor's construction contractor's "as-built"/record drawings for those portions of the project that includes FAA facilities, systems, equipment, and infrastructure.
- 8. Participate with the Sponsor in all Contractor Acceptance Inspection(s) (CAI) and Joint Acceptance Inspections (JAI) involving items affecting FAA facilities for the purpose of identifying any deficiencies requiring correction (also called "exceptions").
- 9. Coordinate and participate in all activities associated with restoration of any and all affected FAA facilities, systems, and equipment.
- 10. Coordinate with the Airport Sponsor in order to ensure that National Environmental Policy Act (NEPA) documentation for the project incorporates associated FAA actions. Also ensure NEPA documentation meets FAA requirements and approvals.
- 11. Complete Environmental Due Diligence Audit (EDDA) documentation for FAA F&E facilities with real property transaction(s) that are associated with this project.
- 12. Arrange flight inspections as required.
- 13. Review all Facility Reference Data File (FRDF) information and documentation to ensure compliance with FAA regulations, rules, orders, requirements, standards, and specifications.
- 14. Perform engineering design reviews of the Sponsor's plans and specifications in support of the construction phase of the project. The FAA will provide two review cycles at 70% and 100% of the Sponsor's design plans and specifications. The 100% design plans and specifications are not final until the FAA has notified the Sponsor in writing that all of the FAA's comments, suggestions, and requirements have been incorporated into the design plans and specifications.
- 15. Provide an electronics Technical Onsite Representative (TOR) and other FAA personnel, as needed, in support of the Agreement. They will perform the necessary checks on FAA facilities, systems, and equipment during all fiber optic connections to electronic equipment during installation(s), tune up(s), checkout(s), optimization(s), and flight inspection activities of the project necessary to commission and reestablish affected FAA facilities, systems, and equipment into the NAS.

- C. The Sponsor will perform the following activities:
 - 1. Provide all funding for this Agreement.
 - 2. Perform all appropriate surveys, engineering design, and construction data for: the construction of the new Taxiway / Connector and demolition of the existing Taxiway / Connector, the construction and installation of the new manhole system to RTR-B, identification of FAA impacted facilities and all associated components, including shelters, hardware, roadways, and infrastructure. The performance of these activities will also include the establishment of new, fiber optic equipment, associated components, hardware, and infrastructure necessary because of the Sponsor's project.
 - 3. Develop the plans and specifications, with FAA's participation and approval, for any changes to FAA facilities, systems, equipment, and their infrastructures necessitated by the Sponsor's project.
 - 4. Provide a full time technical on site representative during all construction phases of the Sponsor's project where FAA facilities, systems, equipment and their infrastructures are affected.
 - 5. Provide a schedule, within 30 days after the effective date of this Agreement and updated monthly (or as soon as changes occur), for the following tasks:
 - a. Construction bid
 - b. Construction award
 - c. Construction start
 - d. Construction planned completion
 - e. Overall Construction sequencing schedule
 - f. Identify date for material or equipment to be supplied by FAA.
 - 6. Ensure that no other activities or projects at the airport, scheduled or otherwise, interfere with the FAA's flight inspections, acceptance testing, or other scheduled activities.
 - 7. Coordinate with the FAA an "extended shutdown" request for FAA equipment impacted by the installation, transition, or testing due to the new fiber optic cable system no less than 45 days prior to the start of construction affecting the FAA facility. A complete construction schedule must accompany the shutdown request.
 - 8. Provide funding for any mandatory upgrades or modifications to any FAA facility impacted by the Sponsor's project. An example of a required modification is safety-related improvements when a facility is "grandfathered" (i.e., allowed to operate under the original design but required to be compliant with current standards).

9. Provide to the FAA in hard-copy format eight (8) sets of 11" x 17", ½ size and three (3) full American National Standards Institute (ANSI) size "D" and one electronic copy (using MicroStation format) of the complete/finalized design drawings and specifications for the FAA's coordination and review at the 70% and 100% design phases. The FAA will have 21 working days to submit comments back to the Sponsor for each review cycle. Within 21 working days of receipt of the FAA's comments, or within such other period as the parties may agree, the Sponsor will provide to the FAA Technical officer a written response to each of the FAA's comments, suggestions, and requirements. The 100% design plans and specifications are not final until the FAA has notified the Sponsor that all of the FAA's comments, suggestions, and requirements have been incorporated into the design plans and specifications. No construction associated with this project may begin prior to receipt of the foregoing FAA design approval. Furthermore, the Sponsor shall advise the FAA immediately of any proposed changes to the "approved" design plans and specifications before and during the projects's construction.

The design drawings and specifications shall be sent to the following addresses:

2 sets each of ½ size drawings, 1 set each of full size drawings and 1 each electronic copy to:

FAA Central Service Area, Technical Officer ATTN: James Withers, Manager, AJW-2C13B Communications Engineering Center Fort Worth 10101 Hillwood Parkway Fort Worth, Texas 76177 (817) 222-4538 james.withers@faa.gov

2 sets each of ½ size drawings, 1 set each of full size drawings and 1 each electronic copy to:

FAA Central Service Area, Technical Officer ATTN: Ricardo E. Salinas, Manager, AJW-C14C Navaids Engineering Center Fort Worth 10101 Hillwood Parkway Fort Worth, Texas 76177 (817) 222-4575 ricardo.e.salinas@faa.gov

1 sets each of ½ size & 1 sets each of full size drawings to:

FAA San Antonio Terminal System Support Center (SSC) ATTN: Dan Davis, Manager, WCU31-SAT 9434 Airport Blvd. San Antonio, Texas 78216 (210) 805-5543 dan.davis@faa.gov

1 sets each of ½ size & 1 sets each of full size drawings to:

FAA Albuquerque Technical Support Center (TSC) ATTN: Eli de Luna, Manager, AJW-C22F 6001 Indian School Road NE Albuquerque, New Mexico 87110 (505) 856-4778 eligio.deluna@faa.gov

- 10. Complete the construction bid, the contract, and award process for the construction phase of the project. The project's scope of work will include but not be limited to all site preparation work (e.g., trenching, grading, filling, foundations removal, demolition) and the installation of all necessary fiber optic related equipment as specified in the delineation of responsibilities in the scope of work.
- 11. Notify the FAA at least 60 calendar days in advance of when FAA RE services are required. FAA RE services will be required for all construction work related to FAA facilities or their infrastructure throughout the project.
- 12. Verify marked cables by non-evasive measures such as hydro trenching at multiple locations in the construction zone to establish cable depth, routing, and location confirmation. Replace all FAA power and control cables that are destroyed or otherwise made unusable by the Sponsor's project for all FAA facilities, systems and equipment. Reestablish and restore any FAA facilities impacted by project activities.
- 13. Install new fiber optic cable system including the inner-duct and duct bank and manhole system for the project. All new fiber optic cabling shall be tested and documented before and after their installation in the presence of the FAA RE per FAA-provided specifications. If it becomes necessary to replace cable, then the Sponsor will replace said cable with new, continuous one-piece cable runs. The Sponsor will not splice any FAA cables, unless feasibly and functionally necessary, and as coordinated with and approved by FAA.
- 14. Provide new mounting pads, base mounting hardware, and all cabling in accordance with FAA-provided specifications for all impacted FAA facilities.
- 15. Repair or replace any FAA facility access roadways or plot disturbed or degraded during construction.
- 16. Install conduit raceways in accordance with FAA-provided specifications.

- 17. Correct all exceptions noted in the CAI and the JAI.
- 18. At the time of the CAI, provide the FAA with all warranty information and documentation for the work done by the Sponsor's contractor on FAA facilities, equipment, and systems. This information shall include equipment or material provided and cable and grounding/lightning protection system testing.
- 19. At the time of the CAI, provide the FAA three (3) sets of redline, "asbuilt"/record drawings, ANSI "D" size (22"X 34") in hard copy format. The Sponsor will also provide the FAA three (3) sets of final "as-built"/record drawings (ANSI "D" size) and one electronic copy (using MicroStation format) upon the project's total completion. The electronic copy shall include all the accompanying library files needed to generate a complete set of drawing. The final "as-built"/record drawings will be delivered no later than 60 days after project completion. The requirement for submitting "as-built"/record drawings to the FAA shall be in accordance with the milestones established in the project's plans and specifications. The Sponsor shall incorporate the "red line" drawing changes approved and provided by the FAA Resident Engineer to create the project's final "as-built"/record drawings. The "as-built"/record drawings will identify the final configuration of each FAA facility and associated equipment, including corresponding site/plot configuration, restricted critical/clearance areas, access roads, and cable routes associated with the project. If the Sponsor does not provide the "as built"/record drawings as required by this Agreement, the FAA will complete the "as-built"/record drawings and bill the Sponsor for the expense.
- 20. Provide any information on hazardous materials or other environmental conditions that may impact the FAA relocated facilities. The Sponsor agrees to remediate, at its sole cost, all identified hazardous substance contamination found to the proposed FAA facility sites prior to construction and modification to the Land Rights Memorandum of Agreement.
- 21. Sponsor must provide land rights and enter into a no-cost land Memorandum of Agreement (MOA) with the FAA for the new or relocated facilities for a 20-year term. This includes, but is not limited to, the new sites and any access roads, cable routes and/or restricted critical areas. The Sponsor must have an all land rights no-cost Memorandum of Agreement, including easements, fully executed between the sponsor and the FAA prior to the commencement of any construction under this Agreement.
- 22. Participate in Flight Inspections (as required) to address systems installed by the Sponsor.
- 23. Develop the plans and specifications, with the FAA's participation and approval, for all changes to FAA facilities, systems, equipment, and their infrastructures necessitated by the Sponsor's project.

24. The Sponsor agrees to remediate, at its sole cost, all petroleum and hazardous substance contamination on any new and relocated proposed FAA facility infrastructure prior to construction, installation, and relocation.

Submit FAA Form 6000-26 *Airport Sponsor Strategic Event Submission Form* no less than 45 days prior to the start of construction that will affect NAS facilities, result in a full or partial Runway closure, or result in a significant Taxiway closure. This form is available on the OE/AAA website. The form, may also be used to notify the FAA of any changes to the project schedule.

A. This agreement is in whole or in part funded with funding from an AIP grant [X] Yes [] No. If Yes, the grant date is: 09-13-2019 and the grant number is: 3-48-0192-092-2019. If the grant information is not available at the time of agreement execution, the Sponsor will provide the grant information to the FAA when it becomes available.

ARTICLE 4. Points of Contact

A. FAA:

- 1. The FAA Central Service Area, Planning and Requirements Group will provide administrative oversight of this Agreement. Miguel Negrete is the Lead Planner and liaison with the Sponsor and can be reached at (817) 222-4619 or via email at miguel.negrete@faa.gov. This liaison is not authorized to make any commitment, or otherwise obligate the FAA, or authorize any changes which affect the estimated cost, period of performance, or other terms and conditions of this Agreement.
- 2. The FAA Central Service Area, Communications Engineering Center Fort Worth will perform the scope of work included in this Agreement. James Withers is the Communications Engineering Center Manager and liaison with the Sponsor and can be reached at (817) 222-4538 or via email at james.withers@faa.gov. This liaison is not authorized to make any commitment, or otherwise obligate the FAA, or authorize any changes which affect the estimated cost, period of performance, or other terms and conditions of this Agreement.
- 3. The FAA Central Service Area, Navigational Aids Engineering Center Fort Worth will perform the scope of work included in this Agreement. Ricardo Salinas is the Navigational Aids Engineering Center Manager and liaison with the Sponsor and can be reached at (817) 222-4575 or via email at ricardo.e.salinas@faa.gov. This liaison is not authorized to make any commitment, or otherwise obligate the FAA, or authorize any changes which affect the estimated cost, period of performance, or other terms and conditions of this Agreement.

4. FAA Contracting Officer: The execution, amendment, and administration of this Agreement must be authorized and accomplished by the Contracting Officer, Brad Logan who can be reached at (817) 222-4395 or via email at brad.logan@faa.gov.

B. Sponsor:

Susan St. Cyr San Antonio International Airport Special Projects Manager 457 Sandau Road San Antonio, Texas 78216 Phone 210-207-3559 susan.stcyr@sanantonio.gov

ARTICLE 5. Non-Interference with Operations

The Sponsor understands and hereby agrees that any relocation, replacement, or modification of any existing or future FAA facility, system, and/or equipment covered by this Agreement during its term or any renewal thereof made necessary by Sponsor improvements, changes, or other actions which in the FAA's opinion interfere with the technical and/or operations characteristics of an FAA facility, system, and/or piece of equipment will be at the expense of the Sponsor, except when such improvements or changes are made at the written request of the FAA. In the event such relocations, replacements, or modifications are necessitated due to causes not attributable to either the Sponsor or the FAA, the parties will determine funding responsibility.

ARTICLE 6. Property Transfer

- A. To the extent that the Sponsor provides any material associated with the Project, and to the extent that performance of the requirements of this Project results in the creation of assets constructed, emplaced, or installed by the Sponsor, all such material (buildings, equipment, systems, components, cable enclosures, etc.) and assets will be transferred to and become the property of the FAA upon project completion. For purposes of this Article 6, "project completion" means that FAA has inspected the specific equipment or construction, and has accepted it as substantially complete and ready for use. The creation of an additional agreement will not be required, unless such other agreement is required by the laws of the state in which the subject property is located. The Sponsor and FAA acknowledge by execution of this agreement the FAA will accept the fundamental responsibilities of ownership by assuming all operations and maintenance requirements for all property transferred to the FAA. The transfer of asset(s) will occur on the date the asset(s) is placed in service. It has been determined the subject transfer(s) to FAA is in the best interest of both the Sponsor and FAA.
- B. In order to ensure that the assets and materials subject to this Article remain fully accounted-for and operational, the Sponsor will provide the FAA any additional documents and publications that will enhance the FAA's ability to manage, maintain

and track the assets being transferred. Examples may include, but are not limited to, operator manuals, maintenance publications, warranties, inspection reports, etc. These documents will be considered required hand-off items upon Project completion.

ARTICLE 7. Estimated Costs

The estimated FAA costs associated with this Agreement are as follows:

SUMMARY OF REIMBURSABLE ITEMS FOR ACCOMPLISHING ALL FIVE PHASES	ESTIMATED COST
Labor	
Phase 1 Taxiway "E" summary	\$313,050.00
Phase 2 Taxiway "R" summary	\$394,250.00
Phase 3 Taxilane "H" summary	\$101,800.00
Phase 4 Light Guards summary	\$56,988.11
Phase 5 Perimeter Road summary	\$57,745.70
Labor Subtotal	\$923,833.81
Labor Overhead	\$ 146,273.69
Total Labor	\$1,070,107.50
Non-Labor	
Phase 1 Taxiway "E" summary	\$118,200.00
Phase 2 Taxiway "R" summary	\$118,200.00
Phase 3 Taxilane "H" summary	\$24,600.00
Phase 4 Light Guards summary	\$9,200.00
Phase 5 Perimeter Road summary	\$9,200.00
Non-Labor Subtotal	\$279,400.00
Non-Labor Overhead	\$ 22,352.00
Total Non-Labor	\$301,752.00
TOTAL ESTIMATED COST	\$1,371,859.50

The following charts depict cost breakdown per project as requested by the FAA's Airport District Office and the Sponsor.

DESCRIPTION OF COSTS FOR PHASE 1, TAXIWAY "E" A PROJECT SUPPORTED WITH AIP FUNDS	ESTIMATED COST
Labor	
Engineering WB4020, WB4050, WB4060, and WB4070	
Technician (TSSC) Support WB4060	\$99,000.00
Engineering Services TOR WB4050	\$72,000.00
Construction Engineering WB4050, WB4060, and WB4070	\$101,450.00
Testing, Cutover, and JAI	\$27,000.00
System Support Center WB4060	\$13,600.00
Labor Subtotal	\$313,050.00
Labor Overhead	\$49,566.25
Total Labor	\$362,616.25
Non-Labor	
Travel WB4020, WB4050, WB4060, WB4070	\$45,200.00
FOTS equipment and material to establish nodes ATCT to RTR B	\$70,000.00
General Supply Material, Misc. Supplies, Document Handling	\$3,000.00
Non-Labor Subtotal	\$118,200.00
Non-Labor Overhead	\$9,456.00
Total Non-Labor	\$127,656.00
TOTAL ESTIMATED COST	\$490,272.25

DESCRIPTION OF COSTS FOR PHASE 2 TAXIWAY "R" A PROJECT SUPPORTED WITH AIP FUNDS	ESTIMATED COST
Labor	
Engineering WB4020, WB4030, WB4050, WB4060, and WB4070	
Technician (TSSC) Support WB4060	\$99,000.00
Engineering Services TOR WB4050	\$153,200.00
Construction Engineering WB4050, WB4060, and WB4070	\$101,450.00
Testing, Cutover, and JAI	\$27,000.00
System Support Center WB4060	\$13,600.00
Labor Subtotal	\$394,250.00
Labor Overhead	\$62,422.92
Total Labor	\$456,672.92
Non-Labor	
Travel WB4020, WB4030, WB4050, WB4060, and WB4070	\$45,200.00
FOTS equipment and material to establish nodes ARFF to GS @ RWY 13R	\$70,000.00
General Supply Material, Misc. Supplies, Document Handling	\$3,000.00
Non-Labor Subtotal	\$118,200.00
Non-Labor Overhead	\$9,456.00
Total Non-Labor	\$127,656.00
TOTAL ESTIMATED COST	\$584,328.92

DESCRIPTION OF COSTS FOR PHASE 3, RELOCATION OF TAXILANE "H" CONNECTOR AN AIRPORT FUNDED PROJECT	ESTIMATED COST
Labor	
Engineering WB4020, WB4050 and WB4060	\$9,000.00
Construction Engineering WB4050	\$92,800.00
Labor Subtotal	\$101,800.00
Labor Overhead	\$16,118.33
Total Labor	\$117,918.33
Non-Labor	
Travel WB4020, WB4050, WB4060, WB4070	\$21,200.00
System Support Center WB4060	\$3,400.00
Non-Labor Subtotal	\$24,600.00
Non-Labor Overhead	\$1,968.00
Total Non-Labor	\$26,568.00
TOTAL ESTIMATED COST	\$144,486.33

DESCRIPTION OF COSTS FOR ESTABLISHMENT OF GUARD LIGHTS A PROJECT SUPPORTED WITH AIP FUNDS	ESTIMATED COST
Labor	
Engineering WB4020, WB4050 and WB4060	\$11,000.00
Construction Engineering WB4050	\$45,000.00
System Support Center WB4060	\$988.11
Labor Subtotal	\$56,988.11
Labor Overhead	\$9,023.12
Total Labor	\$66,011.23
Non-Labor	
Travel WB4020, WB4050, WB4060, WB4070	\$9,200.00
N. I.I. C.I.	ФО 200 00
Non-Labor Subtotal	\$9,200.00
Non-Labor Overhead	\$736.00
Total Non-Labor	\$9,936.00
TOTAL ESTIMATED COST	\$75,947.23

DESCRIPTION OF COSTS FOR PERIMETER ROAD WORK AN AIRPORT FUNDED PROJECT	ESTIMATED COST
Labor	
Engineering WB4020, WB4050 and WB4060	\$11,000.00
Construction Engineering WB4050	\$44,800.00
System Support Center WB4060	\$1,945.70
Labor Subtotal	\$57,745.70
Labor Overhead	\$9,143.07
Total Labor	\$66,888.77
Non-Labor	
Travel WB4020, WB4050, WB4060, WB4070	\$9,200.00
Non-Labor Subtotal	\$9,200.00
Non-Labor Overhead	\$736.00
Total Non-Labor	\$9,936.00
TOTAL ESTIMATED COST	\$76,824.77

ARTICLE 8. Period of Agreement and Effective Date

The effective date of this Agreement is the date of the last signature. This Agreement is considered complete when the final invoice is provided to the Sponsor and a refund is sent or payment is received as provided for in Article 9, Section E of this Agreement. This Agreement will not extend more than five years beyond its effective date.

ARTICLE 9. Reimbursement and Accounting Arrangements

- A. The Sponsor agrees to prepay the entire estimated cost of the Agreement. The Sponsor will send a copy of the executed Agreement and submit full advance payment in the amount stated in Article 7 to the Reimbursable Receipts Team listed in Section C of this Article. The advance payment will be held as a non-interest bearing deposit. Such advance payment by the Sponsor must be received before the FAA incurs any obligation to implement this Agreement. Upon completion of this Agreement, the final costs will be netted against the advance payment and, as appropriate, a refund or final bill will be sent to the sponsor. Per U.S. Treasury guidelines, refunds under \$1.00 will not be processed. Additionally, FAA will not bill the sponsor for amounts less than \$1.00.
- B. The Sponsor certifies that arrangements for sufficient funding have been made to cover the estimated costs of the Agreement.
- C. The Reimbursable Receipts team is identified by the FAA as the billing office for this Agreement. The preferred method of payment for this agreement is via Pay.Gov. The

sponsor can use a check or credit card to provide funding in this manner and receiptprocessing time is typically within 3 working days. Alternatively, the sponsor can mail the payment to the address shown below. When submitting funding by mail, the Sponsor must include a copy of the executed Agreement and the full advance payment. All payments mailed to the FAA must include the Agreement number, Agreement name, Sponsor name, and project location. Payments submitted by mail are subject to receipt-processing delay of up to 10 working days.

FAA payment remittance address using USPS or overnight method is:

Federal Aviation Administration Reimbursable Receipts Team 800 Independence Ave S.W. Attn: Rm 612

Washington D.C. 20591 Telephone: (202) 267-1307

The Sponsor hereby identifies the office to which the FAA will render bills for the project costs incurred as:

Jesus H. Saenz, Jr. San Antonio International Airport Director of Airports 9800 Airport Blvd San Antonio, Texas 78216 Phone 210-207-3444

- D. The FAA will provide a quarterly Statement of Account of costs incurred against the advance payment.
- E. The cost estimates contained in Article 7 are expected to be the maximum costs associated with this Agreement, but may be amended to recover the FAA's actual costs. If during the course of this Agreement actual costs are expected to exceed the estimated costs, the FAA will notify the Sponsor immediately. The FAA will also provide the Sponsor an amendment to the Agreement which includes the FAA's additional costs. The Sponsor agrees to prepay the entire estimated cost of the amendment. The Sponsor will send a copy of the executed amendment to the Agreement to the Reimbursable Receipts Team with the additional advance payment. Work identified in the amendment cannot start until receipt of the additional advance payment. In addition, in the event that a contractor performing work pursuant to the scope of this Agreement brings a claim against the FAA and the FAA incurs additional costs as a result of the claim, the Sponsor agrees to reimburse the FAA for the additional costs incurred whether or not a final bill or a refund has been sent.

ARTICLE 10. Changes and Amendments

Changes and/or amendments to this Agreement will be formalized by a written amendment that will outline in detail the exact nature of the change. Any amendment to this Agreement will be executed in writing and signed by the authorized representative of each party. The parties signing this Agreement and any subsequent amendment(s) represent that each has the authority to execute the same on behalf of their respective organizations. No oral statement by any person will be interpreted as amending or otherwise affecting the terms of the Agreement. Any party to this Agreement may request that it be amended, whereupon the parties will consult to consider such amendments. Amendments with a cost of not to exceed \$50,000.00 may be approved by the Sponsor's point of contact, identified in Article 9C of this agreement. City Council approval may be required for amendments of higher amounts.

ARTICLE 11. Termination

In addition to any other termination rights provided by this Agreement, either party may terminate this Agreement at any time prior to its expiration date, with or without cause, and without incurring any liability or obligation to the terminated party other than payment of amounts due and owing and performance of obligations accrued, in each case on or prior to the termination date, by giving the other party at least thirty (30) days prior written notice of termination. Payment of amounts due and owing may include all costs reimbursable under this Agreement, not previously paid, for the performance of this Agreement before the effective date of the termination; the total cost of terminating and settling contracts entered into by the FAA for the purpose of this Agreement; and any other costs necessary to terminate this Agreement. Upon receipt of a notice of termination, the receiving party will take immediate steps to stop the accrual of any additional obligations which might require payment. All funds due after termination will be netted against the advance payment and, as appropriate, a refund or bill will be issued.

ARTICLE 12. Order of Precedence

If attachments are included in this Agreement and in the event of any inconsistency between the attachments and the terms of this Agreement, the inconsistency will be resolved by giving preference in the following order:

- A. This Agreement
- B. The attachments

ARTICLE 13. Legal Authority

This Agreement is entered into under the authority of 49 U.S.C. § 106(1)(6), which authorizes the Administrator of the FAA to enter into and perform such contracts, leases, cooperative agreements and other transactions as may be necessary to carry out the functions of the Administrator and the Administration on such terms and conditions as the Administrator may consider appropriate. Nothing in this Agreement will be

construed as incorporating by reference or implication any provision of Federal acquisition law or regulation.

ARTICLE 14. Disputes

Where possible, disputes will be resolved by informal discussion between the parties. In the event the parties are unable to resolve any dispute through good faith negotiations, the dispute will be resolved by alternative dispute resolution using a method to be agreed upon by the parties. The outcome of the alternative dispute resolution will be final unless it is timely appealed to the Administrator, whose decision is not subject to further administrative review and, to the extent permitted by law, is final and binding (see 49 U.S.C. § 46110).

ARTICLE 15. Warranties

The FAA makes no express or implied warranties as to any matter arising under this Agreement, or as to the ownership, merchantability, or fitness for a particular purpose of any property, including any equipment, device, or software that may be provided under this Agreement.

ARTICLE 16. Insurance

The Sponsor will arrange by insurance or otherwise for the full protection of itself from and against all liability to third parties arising out of, or related to, its performance of this Agreement. The FAA assumes no liability under this Agreement for any losses arising out of any action or inaction by the Sponsor, its employees, or contractors, or any third party acting on its behalf.

ARTICLE 17. Limitation of Liability

To the extent permitted by law, the Sponsor agrees to indemnify and hold harmless the FAA, its officers, agents and employees from all causes of action, suits or claims arising out of the work performed under this Agreement. However, to the extent that such claim is determined to have arisen from the act or omission by an officer, agent, or employee of the FAA acting within the scope of his or her employment, this hold harmless obligation will not apply and the provisions of the Federal Tort Claims Act, 28 U.S.C. § 2671, et seq., will control. The FAA assumes no liability for any losses arising out of any action or inaction by the Sponsor, its employees, or contractors, or any third party acting on its behalf. In no event will the FAA be liable for claims for consequential, punitive, special and incidental damages, claims for lost profits, or other indirect damages.

ARTICLE 18. Civil Rights Act

The Sponsor will comply with Title VI of the Civil Rights Act of 1964 relating to nondiscrimination in federally assisted programs.

ARTICLE 19. Protection of Information

The parties agree that they will take appropriate measures to identify and protect proprietary, privileged, or otherwise confidential information that may come into their possession as a result of this Agreement.

ARTICLE 20. Security

In the event that the security office determines that the security requirements under FAA Order 1600.72A applies to work under this Agreement, the FAA is responsible for ensuring that security requirements, including compliance with AMS clause 3.14.2.1, Contractor Personnel Suitability Requirements are met.

ARTICLE 21. Entire Agreement

This document is the entire Agreement of the parties, who accept the terms of this Agreement as shown by their signatures below. In the event the parties duly execute any amendment to this Agreement, the terms of such amendment will supersede the terms of this Agreement to the extent of any inconsistency. Each party acknowledges participation in the negotiations and drafting of this Agreement and any amendments thereto, and, accordingly that this Agreement will not be construed more stringently against one party than against the other. If this Agreement is not executed by the Sponsor within 120 calendar days after the FAA transmits it to the Sponsor, the terms contained and set forth in this Agreement shall be null and void. Additionally, the FAA expects this agreement to be funded within 120 days of execution, if funding is not received by that date; the FAA may exercise the right to renegotiate estimated costs.

AGREED:

FEDERAL AVIATION ADMINISTRATION		CITY OF SAN ANTONIO	
SIGNATURE _		SIGNATURE	
NAME		NAME	
TITLE	Contracting Officer	TITLE	
DATE		DATE	