

Date: September 4, 2024
To: Honorable Chairman Oliver G. Gilbert, III
and Members, Board of County Commissioners

Agenda Item No. 8(P)(3)

From: Daniella Levine Cava
Mayor



Resolution No. R-761-24

Subject: Recommendation to Ratify Actions Related to Miami-Dade Aviation Department pursuant to Section 2-285(3) of the Code of Miami-Dade County for Motorola Receiver Site with Integrated Distribution Antenna System at Miami International Airport

Summary

This contract was established for the acquisition, maintenance, and support of a new Ultra High Frequency (UHF) Radio Site with an integrated antenna system to deliver required levels of radio signal coverage to an area of approximately four million square feet within Miami International Airport (MIA) for the Miami-Dade Aviation Department (MDAD). This item seeks to ratify the expedited purchase of additional equipment, products, and services critical in the relocation of MIA's microwave antenna's path to the Rental Car Center (RCC). The existing microwave antenna's path provides frequencies and interconnectivity for the Miami-Dade Fire Rescue (MDFR) and Police Departments (MDPD) to maintain critical communications with the County Administrative Building (CAB) located at 111 NW 1st Street. The imminent construction of the MIA Employee Parking Garage at the Park 6 location will block transmissions. Relocating the microwave antenna's path to the RCC site allows for better connectivity between MIA and downtown due to higher antenna installation height and supports future telecommunications expansion, if required.

The additional expenditure includes the cost of new radios at the CAB to RCC link sites, dark fiber required between the MIA and RCC site, new batteries, new racks, new modules, and other software and hardware needed for the system to ensure uninterrupted Police and Fire communications with the CAB. Pursuant to Section 2-285(3) of the Code of Miami-Dade County (Code), the County Mayor may amend contracts provided that the cumulative value of the amendment does not exceed twenty (20) percent of the original contract amount, and the amendment is submitted to the Board for ratification within one hundred eighty (180) days.

Recommendation

It is recommended that the Board of County Commissioners (Board) ratify Supplemental Agreement No. 1 with Motorola Solutions, Inc., to *Contract No. SS-10134, Motorola Receiver Site with Integrated Distribution Antenna System at Miami International Airport*, in the amount of \$950,250. Approval of this Supplemental Agreement (attached) is being requested pursuant to Section 2-285(3) of the Code to ratify the purchase of additional equipment, products, and services not contemplated in the original agreement, which are critical to uninterrupted life and safety communications.

Background

This contract was awarded by the Board on July 6, 2023, through Resolution No. R-643-23 for a five-year term with two, five-year renewal options. This contract was established to upgrade the existing Motorola UHF system to address challenges with radio signal coverage inside MIA's terminal facilities.

The relocation of the MIA microwave antenna's path was originally planned to be completed under *Contract No. BW9745-3/25, Motorola Master Agreement*. However, following the establishment of this contract, MDAD determined that the scope and breadth provided the capacity to effectuate the expedited purchase of additional equipment, products, and services necessary to relocate MIA

microwave antenna's path to the RCC. Moreover, the existing antenna being relocated, and all related equipment, are proprietary to Motorola.

In accordance with Article 55, *Contract No. SS-10134* was amended on December 4, 2023 via Supplemental Agreement No. 1 to include the provision of new radios at the CAB to RCC link sites, dark fiber required between the MIA and RCC site, new batteries, new racks, new modules, and other software and hardware needed for the system to operate properly and ensure MDFR and MDPD uninterrupted life and safety communications with the CAB.

Scope

Miami International Airport is located within District 6, which is represented by Commissioner Kevin Marino Cabrera; however, the impact of this item is countywide in nature.

Fiscal Impact/Funding Source

The contract is in the initial five-year term, which expires on July 23, 2028, and has a current cumulative allocation of \$8,747,783. The additional expenditure of \$950,250 needed for equipment, products, and services in the Supplemental Agreement was approved under the Mayor's delegated authority and is funded through MDAD Proprietary Funds.

Track Record/Monitor

Natalya Vasilyeva of the Strategic Procurement Department (SPD) is the Procurement Contracting Manager.

Delegated Authority

If this item is approved, the County Mayor or County Mayor's designee will have the authority to exercise all provisions of the contract, including any cancellation, renewals, or extensions, pursuant to Section 2-8.1 of the Code and Implementing Order 3-38.

Awarded Vendor

Vendor	Principal Address	Local Address	Principal
Motorola Solutions, Inc.	500 West Monroe Street Chicago, IL	None	Gregory Q. Brown

Due Diligence

Pursuant to Resolution No. R-187-12, due diligence was conducted in accordance with SPD's Procurement Guidelines to determine contractor responsibility, including verifying corporate status and review of performance and compliance issues through various vendor responsibility lists and a keyword internet search. The lists referenced include convicted vendors, debarred vendors, delinquent contractors, suspended vendors, and federal excluded parties. There were no adverse findings relating to contractor responsibility.

Applicability of Ordinances and Contract Measures

- The two percent User Access Program does not apply.
- The Small Business Enterprise Selection Factor and Local Preference did not apply.
- The Living Wage Ordinance does not apply.

Attachment



Jimmy Morales
Chief Operations Officer

Miami-Dade County, FL

Supplemental Agreement No. 1 to Contract No. SS-10134

SUPPLEMENTAL AGREEMENT NO. 1

**OFFICIAL FILE COPY
CLERK OF THE BOARD
OF COUNTY COMMISSIONERS
MIAMI-DADE COUNTY, FLORIDA**

Contract Number: SS-10134

Contract Title: Motorola Receiver Site with Integrated Distributed Antenna System at Miami International Airport

Contractor: Motorola Solutions, Inc.
500 W Monroe Street
Chicago, IL 60661

In accordance with the above referenced Contract, this Supplemental Agreement, when properly executed, shall become part of the Contract, effective upon execution.

WHEREAS, the County desires to purchase additional equipment, products, and/or services available from the Contractor in accordance with Article 55, Additional Equipment, Products or Services, of the subject Contract;

WHEREAS, the Contractor has agreed to provide such additional equipment, products, and/or services in accordance with Appendix E, RCC to CAB Microwave, attached hereto;

Now therefore, the parties agree to the following:

1. Appendix E, RCC to CAB Microwave, attached hereto, shall be incorporated into the subject Contract.
2. Payment obligations related to Appendix E, RCC to CAB Microwave shall be completed in accordance with Section 3, Pricing & Payment Milestones.
3. The following language shall be incorporated to the Contract as Article 52, Performance and Payment Bond Requirements:

Performance and Payment Bond Requirements

Contractor shall duly execute and deliver to the County a Performance and Payment Bond in an amount that represents 100% of the total contract price (minus the Optional Years to Renew for Maintenance - Years 6 through 15). The Performance and Payment Bond Form supplied by the County shall be the only acceptable form for these bonds, please refer to Attachment No. 1. No other form will be accepted. The completed form shall be delivered to the County within the time frame agreed by the Contractor and County Department after formal notice of award. If the Contractor fails to deliver the payment and performance bond within this specified time, including granted extensions, the County shall declare the Contractor in default of the contractual terms and conditions, and the Contractor shall surrender its offer guaranty/bid bond, and the County shall not accept any offer from that Contractor for a twelve (12) month period following such default.

The following specifications shall apply to any bond provided:

Miami-Dade County, FL

Supplemental Agreement No. 1 to Contract No. SS-10134

- A. All bonds shall be written through surety insurers authorized to do business in the State of Florida as surety, with the following qualifications as to management and financial strength according to the latest edition of Best's Insurance Guide, published by A.M. Best Company, Oldwick, New Jersey:

Bond Amount	Best Rating
500,001 to 1,500,000	B V
1,500,001 to 2,500,000	A VI
2,500,001 to 5,000,000	A VII
5,000,001 to 10,000,000	A VIII
Over 10,000,000	A IX

- B. On contract amounts of \$500,000.00 or less, the bond provisions of Section 287.0935, Florida Statutes (2007) shall be in effect and surety companies not otherwise qualifying with this paragraph may optionally qualify by:

1. The surety company is licensed to do business in the State of Florida;
2. The surety company holds a certificate of authority authorizing it to write surety bonds in this state;
3. Providing evidence that the surety has twice the minimum surplus and capital required by the Florida Insurance Code at the time the solicitation is issued;
4. Certifying that the surety is otherwise in compliance with the Florida Insurance Code; and
5. Providing a copy of the currently valid Certificate of Authority issued by the United States Department of the Treasury under SS. 31 USC 9304-9308.

Surety insurers shall be listed in the latest Circular 570 of the U.S. Department of the Treasury entitled "Surety Companies Acceptable on Federal Bonds", published annually. The bond amount shall not exceed the underwriting limitations as shown in this circular.

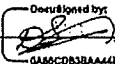
- C. For contracts in excess of \$500,000 the provisions of Section B will be adhered to plus the company must have been listed for at least three consecutive years or holding a valid Certificate of Authority of at least 1.5 million dollars and on the Treasury List.
- D. Surety bonds guaranteed through U.S. Government Small Business Administration or Contractors Training and Development Inc. will also be acceptable.
- E. In lieu of a bond, an irrevocable letter of credit or a cash bond in the form of a certified cashier's check made out to the Board of County Commissioners will be acceptable. All interest will accrue to Miami-Dade County during the life of this contract and/or as long as the funds are being held by Miami-Dade County.
- F. The attorney-in-fact or other officer who signs a contract bond for a surety company must file with such bond a certified copy of power of attorney authorizing the officer to do so. The contract bond must be counter signed by the surety's resident Florida agent.

All terms, covenants, and conditions of the original Contract and any Supplemental Agreements issued thereto shall remain in full force and effect, except to the extent herein amended.

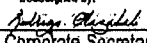
IN WITNESS WHEREOF, County and Contractor have caused this Supplemental Agreement No. 1 to County Contract No. SS-10134 for Motorola Receiver Site with Integrated Distributed Antenna System at Miami International Airport.

Miami-Dade County, FL

Supplemental Agreement No. 1 to Contract No. SS-10134

Contractor
By: 
Name: Danny Sanchez

Title: MSSSI VP & DIRECTOR, FLORIDA
Date: 07 November 2023 | 11:34:30 AM EST

Attest: 
Corporate Secretary/Notary
Rodrigo Olazabal
Corporate Seal/Notary



Miami-Dade County
By: 
for

Name: Daniella Levine Cava

Title: Mayor

Date: 12-4-23

Juan Fernandez-Barquin,
Clerk of the Court and Comptroller

Attested by: 
Deputy Clerk: Olga Valverde - e18183

Approved as to form
and legal sufficiency



APPENDIX E

RCC TO CAB

MICROWAVE

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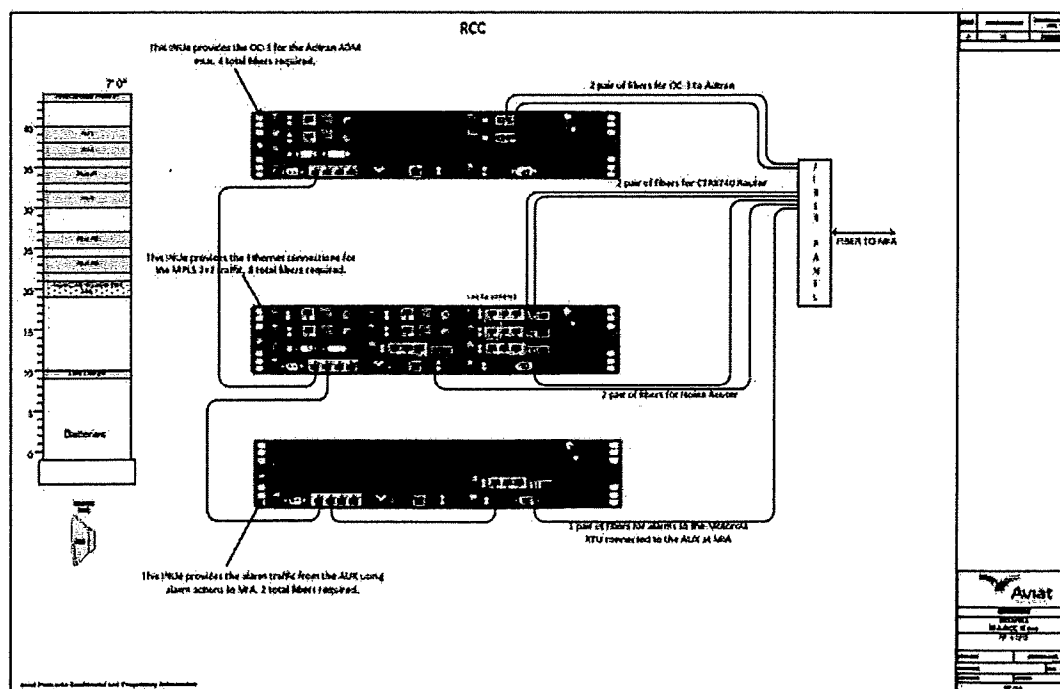
SECTION 1

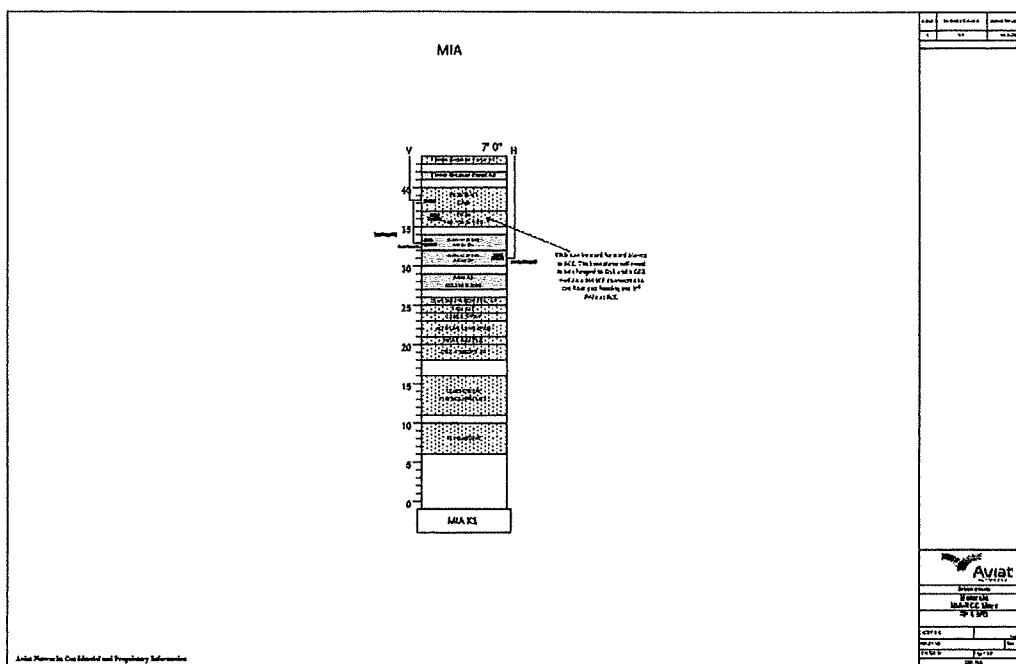
SYSTEM SUMMARY

1.1 OVERVIEW

This scope of work covers the relocation of the Microwave link that goes from MIA (Miami International Airport) to the Stephen P Clark Center (SPCC), also known as the County Administration Building (CAB). The existing path from CAB to MIA will be blocked by a new building with construction starting mid-2024. This will involve moving the Microwave equipment from its current location at the Flamingo Garage to the RCC (Rental Car Center) site. The new Eclipse IRU600v4 radios for the Microwave will be installed at the RCC and there will be fiber connections back to MIA where the routers, P25 radios and alarm management will remain. A total of 7 pairs of single mode (SM) fiber terminated via a fiber demarcation point are required for OC-3 and Ethernet transport between RCC and MIA as shown below. The fiber should be terminated with LC UPC or SC UPC. Industry standard LC UPC and SC UPC connectors are identified by a blue boot. If for some reason LC APC or SC APC are used for this termination, usually identified by a green boot then that should be communicated to the Engineering team so appropriate fiber jumpers can be ordered. The type of connector used at the bulkhead should be identified during the site survey. The frequency coordination requires that new Commscope antennas be installed at RCC and CAB to support the alternative route. The proposed system will include an indoor solution with IRU600v4 radios and the Eclipse Packet Node. The microwave hops are 1ea, OC-3 MHSB link for the Adtran traffic and a 2+2 MHSB L1LA link. Each radio hop will provide up to 155 Mbps of airlink capacity using fixed 128QAM. All coordinated frequencies are planned to be in the L6Ghz band using 30Mhz channels.

See the diagram below showing the scope for the RCC & MIA sites:

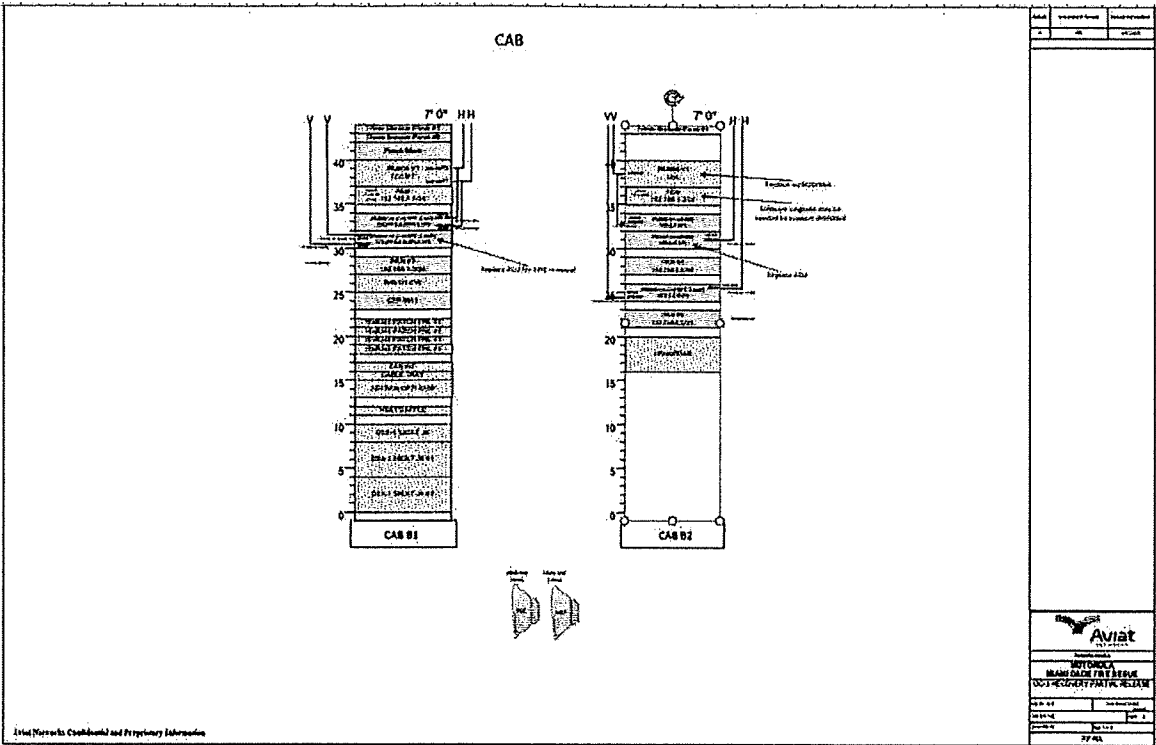




The CAB site will require a new IRU600v4, replacing the existing IRU600v1 that is currently carrying OC-3 traffic. Also, the IRU600v4 in IRU position 3 will require a new ACU for the new lower 6GHz license. The existing INUe will require a software upgrade to support RAC70 and IRU600v4 equipment. Another project requirement is removing the XPIC link between CAB-TCC.

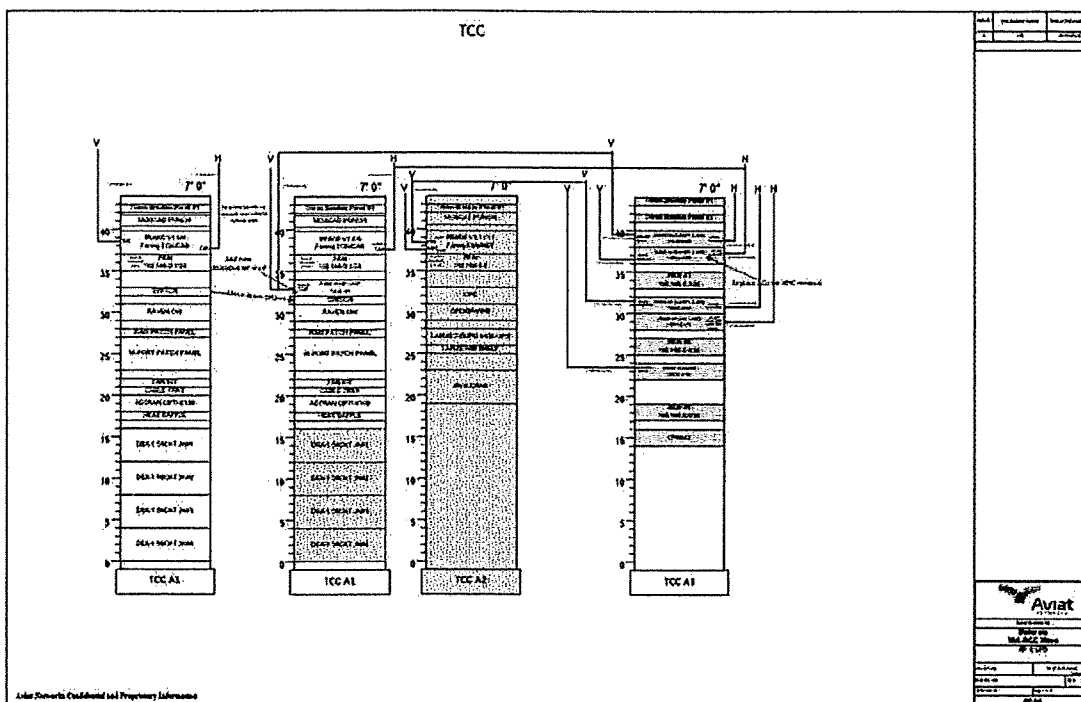
To meet the requirement for 3ea, 6GHz microwave channels for CAB-RCC and XPIC removal some frequency reallocation of CAB-TCC and TCC-TGK is required. At CAB-TCC, the IRU600 in position 3 of the first rack will require a new ACU for the new 6GHz frequency allocation. Also, a new Commscope antenna is required at CAB facing MET to reduce interference that may occur due to the frequency reallocation.

See the diagram below showing the scope for the CAB site:



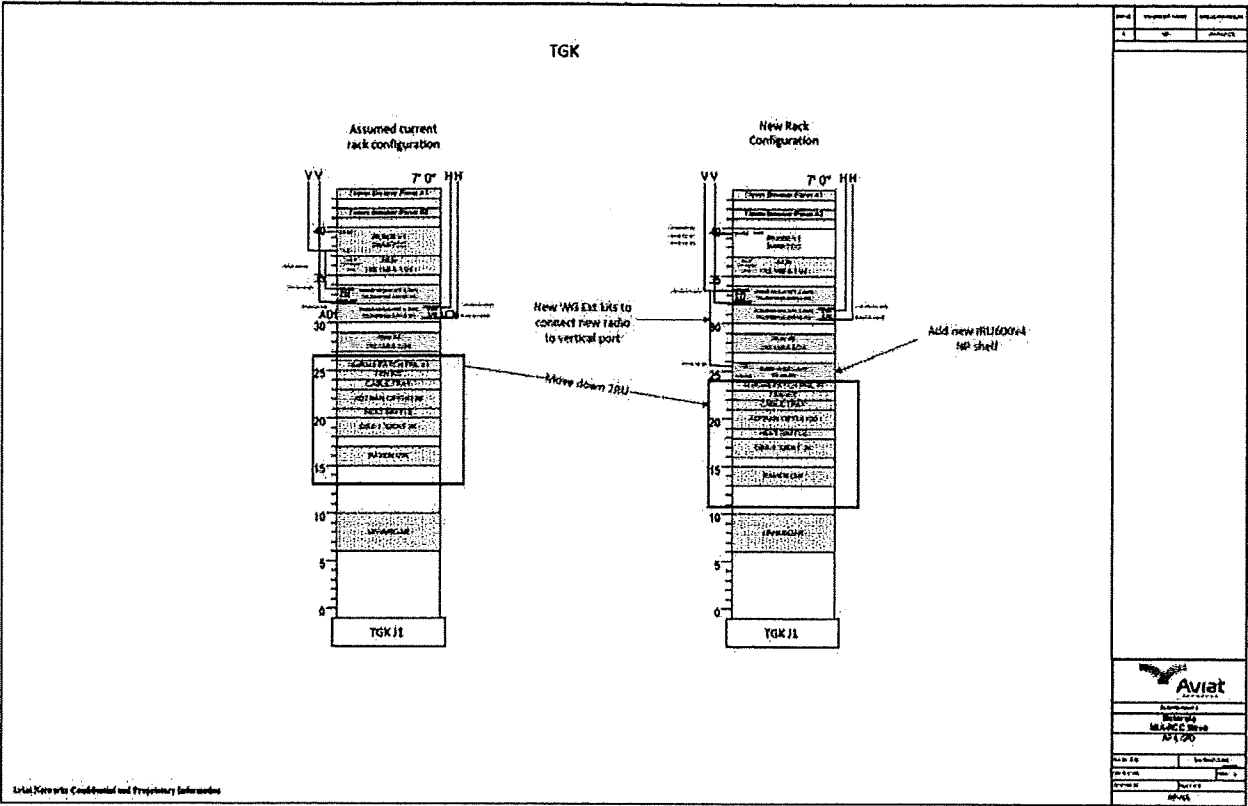
At TCC, a new ACU is required for the XPIC removal facing CAB. Also, a new IRU600v4 NP radio will be required for a new frequency allocation of the OC-3 radio facing TGK. Since this is a manufactured discontinued IRU600v1 and the IRU600v4 ACU will not fit in the IRU600v1 chassis, the IRU600v4 chassis will need to be installed in the rack and new waveguide extension kits will be required to connect the radios together using the ACU expansion ports. Also, some equipment within the rack will need to move down 1RU to make room for the new IRU600v4. Software upgrade of the existing INUe may be required to support the IRU600v4 and RAC70 modules.

See the diagram below showing the scope for the TCC site:

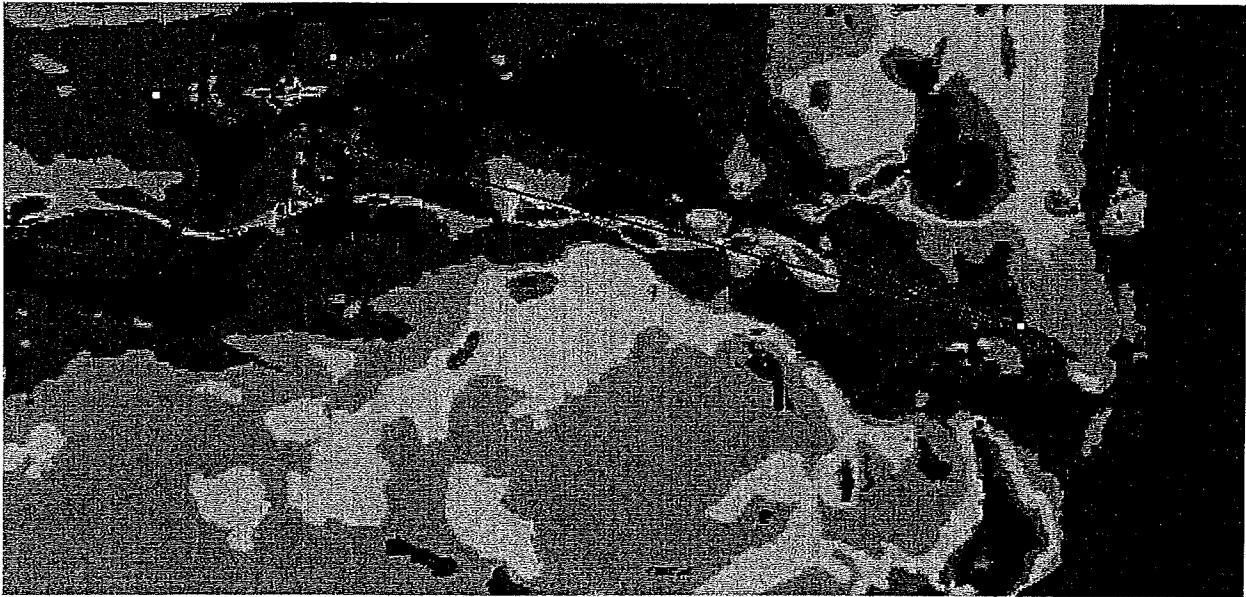


Lastly, TKG, will get a new IRU600v4 NP radio for the new frequency allocation of the OC-3 radio. Since this is a manufactured discontinued IRU600v1 and the IRU600v4 ACU will not fit in the IRU600v1 chassis, the IRU600v4 chassis will need to be installed in the rack and new waveguide extension kits will be required to connect the radios together using the ACU expansion ports. Also, some equipment within the rack will need to move down 2RU to make room for the new IRU600v4. Software upgrade of the existing INUe may be required to support the IRU600v4 and RAC70 modules.

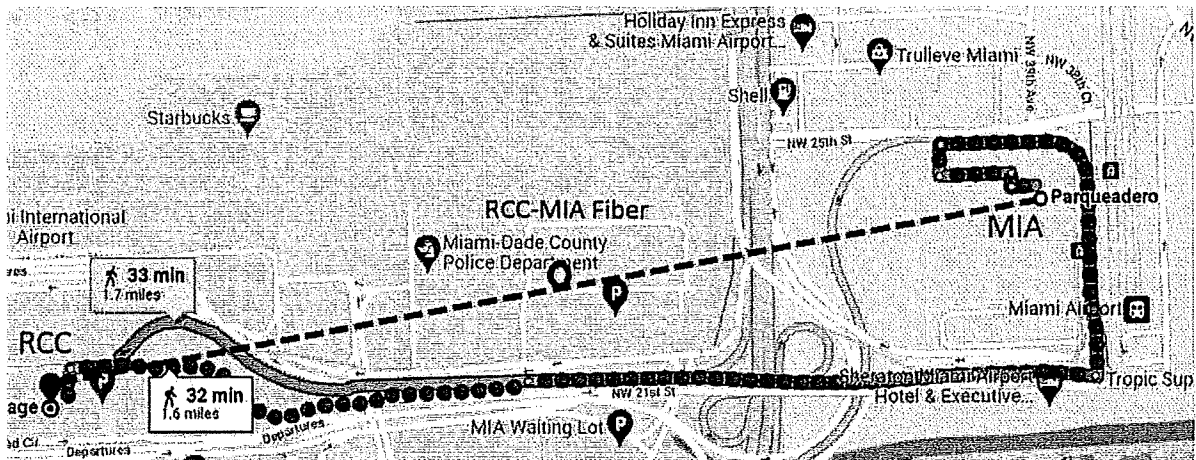
See the diagram below showing the scope for the TGK site:



The network for the MIA to RCC topology is shown below:



CAB to MIA Microwave



1.1.1 Microwave Path Calculations

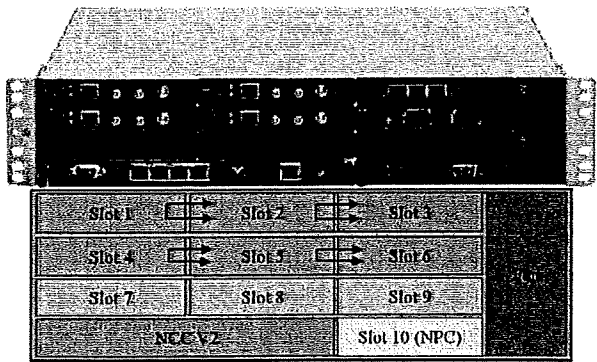
Preliminary Path Loss and Fade Margin Calculations are provided as part of the documentation for this scope of work. The Vigants 1975 reliability models have been used. The new OC-3 radio and 2+2 MHSB paths meet or exceed 99.9999% annual 2-way reliability or better objective at RX threshold of BER=10-6 and flat fade margin of at least 35dB. The path calculations are based on the data provided and radio guaranteed specifications.

Preliminary Path Profiles are generated using "National Elevation Dataset (NED) 10m" Terrain Database and "National Land Cover Database (NLCD)", provided for reference. 98ft high trees assumed at evergreen forest /area. New antenna centerlines are derived based on the path clearance criteria: a) 100%F1@ K=1.33 b) grazing of F1@ k=.5 for main path, and 60%F1 @ K=1.33 for diversity path where applicable. Fixed height of 20ft is added for future growth. Please refer to the preliminary Path Calculations and Profiles for details.

The system design and associated RF frequency plan as proposed is preliminary, subject to path survey verification, frequency coordination / FCC licensing and path engineering results.

1.2 AVIAT ECLIPSE PACKET NODE (INUE)

The proposed Eclipse INUe's will be equipped with a combination of RAC70, DAC GEv3, AUX modules. Below is a description of the different types of interface modules used in this network design.



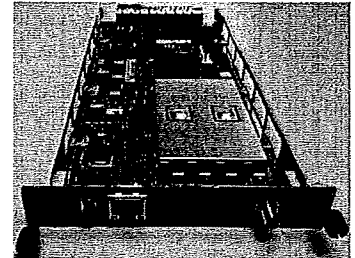
CAB to MIA Microwave

1.2.1 RAC 70

This new generation radio access card delivers the latest technology for modems to Gigabit Ethernet transport.

Packet Plane for nodal networking with 5 Gbit/s of packet handling capacity

- GigE port for direct front-panel connection to DAC GE switch
- Channel bandwidths: 3.75 to 60 MHz ANSI
- Cards can be paired to provide fully redundant 1+1 hot-standby and diversity operation
- Offers QPSK to 4096 QAM (with/without ACM)

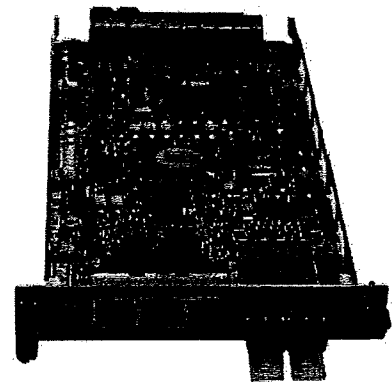


1.2.2 DAC GEv3

The DAC GEv3 provides a Gigabit Ethernet interface and advanced packet processing for the Eclipse platform. It includes a 5 Gbit/s Packet Plane that inter-operates with INUe backplane to provide unmatched flexibility to support hybrid mixed-mode TDM+IP or all-IP transport.

The DAC GE delivers Quality of Service (QoS) controls and performance monitoring capabilities and will also support advanced data networking features such as internal link aggregation (802.3ad), Rapid Spanning Tree Protocol (802.1w), and VLAN support.

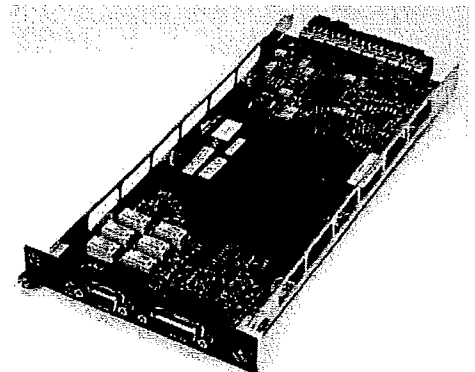
- Programmable 5 Gbit/s switching fabric
- IPv4 and IPv6 packet handling
- 1+1 redundancy via a stacking switch
- Supports L1 and L2 link aggregation.
- Traffic Policing
- Service OAM
- Supports jumbo frame size up to 9600 bytes, the largest such frame support available.
- 3x1000 Base-T and two SFP ports for optical or electrical 1000Base-LX



1.2.3 AUX

The AUX plug-in card provides user-configurable auxiliary data channels along with alarm input & output (I/O) options. The alarm I/O provides up to 6 TTL input alarms or up to 4 Form C relay outputs with 2 TTL input alarms.

- Three auxiliary data channels are provided on a DB-15 connector
- Each data channel is individually programmable for synchronous 64 kbps TIA/EIA-422 / V.11 or serial 19.2 kbps TIA/EIA-562 (compatible with RS-232 / V.24)
- Alarm inputs are programmable for alarm active if the input is high or low
- Output relays are programmable to be energized or de-energized on receipt of an alarm event.

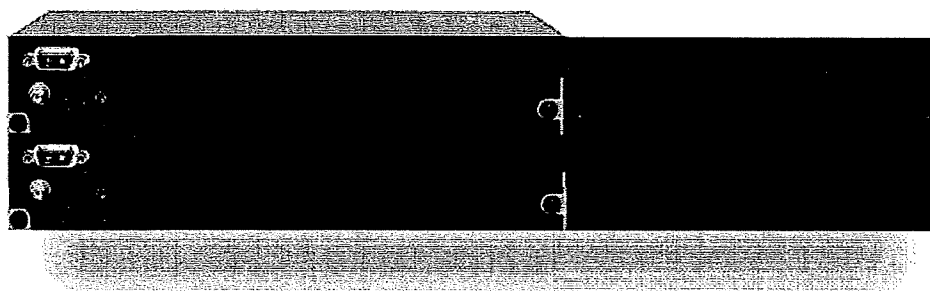


- Alarms can be mapped from any internal radio alarm to any relay output, and multiple alarms can be mapped to a common output.

1.2.4 Eclipse IRU600v4

Aviat Eclipse IRU600v4 radios deliver best-in-class output transmit power across multiple frequencies, making it a highly attractive and competitive platform that builds on Aviat Networks' ongoing radio innovation leadership. Increased power provides the flexibility to adjust for increased availability, throughput, and/or distance. This performance translates directly into reduced antenna sizes, thereby driving down equipment CAPEX and the OPEX contribution of tower leasing and maintenance.

The IRU600 is available in three power output levels; Standard Power (S.P.), High Power (H.P.), and Extra High Power (EHP). The IRU600v4 radios will be mounted in the racks along with Aviat's Eclipse INUe. An elliptical waveguide will be installed between the IRU600v4 ACU and the antenna(s).



Eclipse IRU600 (EHP version shown)

1.2.5 Antenna Systems

Microwave antennas form an essential part of modern mobile communication networks. A new Commscope antenna system is proposed for each site. The 6 GHz microwave radio links will utilize the 6 ft, USX6-6V dual polarized antenna.

1.2.6 DC Power Systems

A new DC power plant is being quoted using the Eltek Flatpack S series rectifiers and C&D battery system. The Eltek Flatpack S-Intrepid system has a max 80A distribution in a 1RU, 19" rack space. It's recommended that 2ea, 240VAC drops be provided per rectifier. This will allow the rectifier modules to deliver 37A each. If 2ea, 120VAC drops are used the rectifier modules will only deliver 20A each. Below are pictures of the Eltek Flatpack S-Intrepid.

- Eltek Flatpack S
- 48V Negative Polarity Output Voltage
- 100-250VAC
- 19" rack mount
- Dual AC Input
- Up to 3ea 1800 Watt rectifier modules

- Each rectifier module delivers 37A @ 240VAC and 20A @ 240VAC
- Qty 2 position shared load breaker positions & 2 Battery Breakers



1.2.7 DC

Power

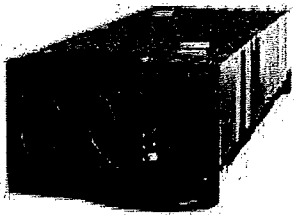


Figure 1 - Flatpack S Rectifier

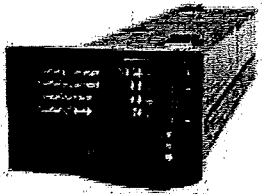
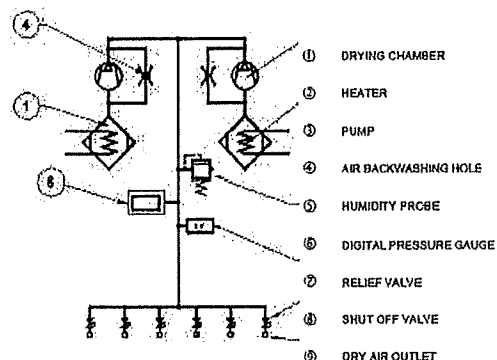
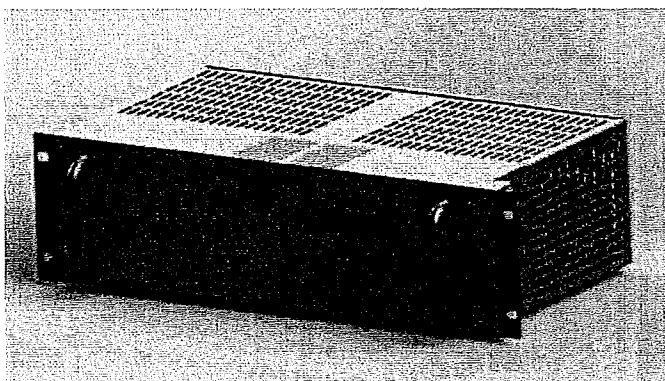


Figure 2 - Smartpack S Controller

Calculations for RCC

COMMUNICATIONS EQPT	EQPT POWER CONSUMPTION (Amps) @ 48VDC:	Brkr/Fuse Size (Amps)	RCC	
			QTY	AMP
INUe and NTU				
INUe e/w 2RU Fan card, NCC and NPC	0.44	20.00	3	1.32
Aux	0.02		2	0.04
DAC 155 (all versions), DAC GEv2	0.08		2	0.17
DAC GE3	0.27		5	1.35
RAC70	0.29		6	1.74
IRU600v4 SP/HP (Max)				
IRU600 SP/HP L6/U6/FCC 7 GHz 1+0 RPTR, 2+0, MHS, MHS-SD, FD	2.58		3	7.75
STATION LOAD (AMPS)				12.37
RECHARGE TIME (HOURS)				24
BATTERY RESERVE (HOURS)				8
AMPERE-HOUR MULTIPLIER				8.0
TEMPERATURE CORRECTION FACTOR				1.00
TEMPERATURE (F)				77
BATTERY PLANT SIZE (Minimum AMP-HRS)				99
SELECT BATTERY SIZE				125
STATION LOAD + RECHARGING CURRENT				17.58
Rectifier Module Output Current and Input Voltage Range				20A 120VAC
Rectifier Module Current Capacity				20
CHARGER SYSTEM SIZE (RATED AMPS @ 48V DC)				20
WATTS TO BTU/HR (Indoor eqpt including charger)				2,433
WATTS TO BTU/HR (Indoor equipment only)				2,026
Max AC Current @ 120V (Amps)				9
Max AC Current @ 240V (Amps)				4

1.2.8 Dehydrator For Elliptical Waveguide

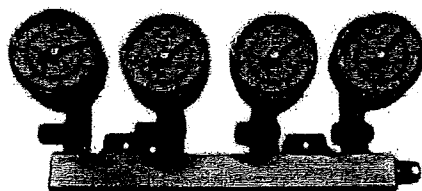


1.2.9 Lab 4.50 Dehydrator

- Output pressure: 1.5 to 8.7 psig
- Local Alarms: low pressure, high pressure, high humidity, power and system failures
- Designed for continuous run so no need for excessive runtime alarm
- SNMP and HTTP browser support and digital flowmeter front display
- Includes wall, floor or 19" rack mounting options

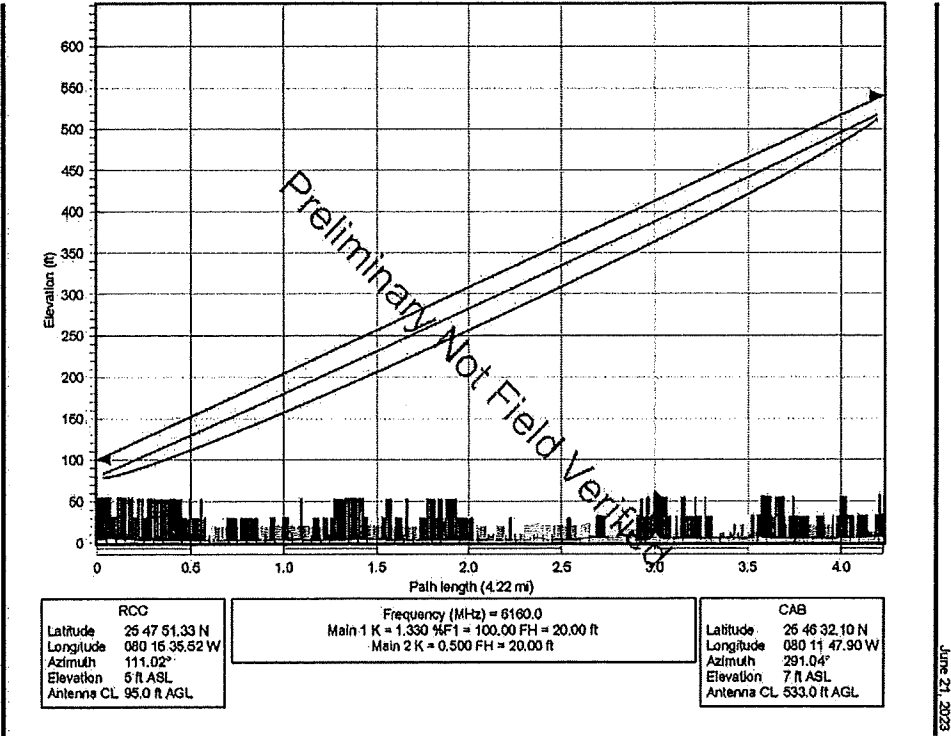
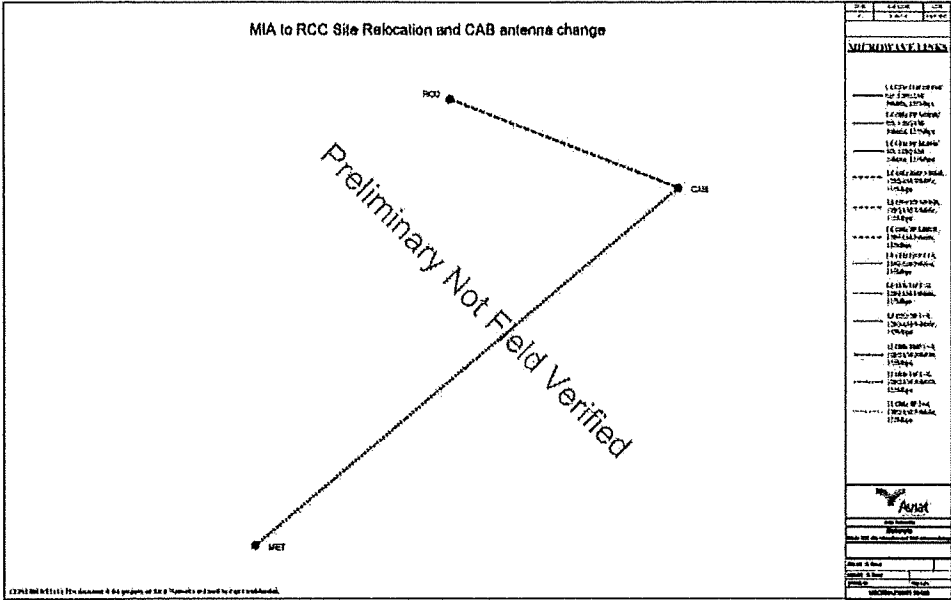
1.2.10 Pressure Gauges Manifold

- 2, 4 & 6 port and gauge options
- 3/8" push-on fittings
- Pressure range each: 0-36 psig
- Operating temperature range: 32°F to 104°F
- Weight: 6.6lbs depending on option
- Wall mount



1.3 PATH PROFILES AND CALCULATION

Path Profiles and Calculation are included on the pages that follow.



CAB to MIA Microwave

June 21, 2023

Transmission details (RCC-CAB_6G_30M_128Q_2+0_SP.pl5)

	RCC	CAB
Latitude	25 47 51.33 N	25 46 32.10 N
Longitude	080 15 35.52 W	080 11 47.90 W
True azimuth (°)	111.02	291.04
Vertical angle (°)	1.11	-1.15
Elevation (ft)	5.26	7.46
Tower height (ft)	95.00	533.00
Tower type	building mount	
Antenna model	USX6-6W (TR)	USX6-6W (TR)
Antenna file name	rpe 7373	rpe 7373
Antenna gain (dBi)	38.80	38.80
Antenna height (ft)	95.00	533.00
Orientation loss (dB)	0.00	0.00
TX line model	EW63	EW63
TX line unit loss (dB/100 ft)	1.44	1.44
TX line length (ft)	120.00	120.00
TX line loss (dB)	1.72	1.72
Connector loss (dB)	0.27	0.27
TX switch loss (dB)	0.50	0.50
Other TX loss (dB)	0.00	5.00
RX filter loss (dB)	0.50	0.50
Frequency (MHz)	6160.00	
Polarization	Vertical	
Path length (mi)	4.22	
Free space loss (dB)	124.90	
Atmospheric absorption loss (dB)	0.06	
Net path loss (dB)	57.35	57.35
Configuration	2+0	2+0
Radio model	I6V4SL6_30M128Q155R70	I6V4SL6_30M128Q155R70
Radio file name	I4sl630m155_r70	I4sl630m155_r70
TX power (dBm)	29.00	29.00
Emission designator	30M0D7W	30M0D7W
EIRP (dBm)	60.31	60.31
TX channel assignments	I3 6004.50V I5 6063.80V	h3 6266.54V h5 6315.84V
RX threshold criteria	1E-6 BER	1E-6 BER

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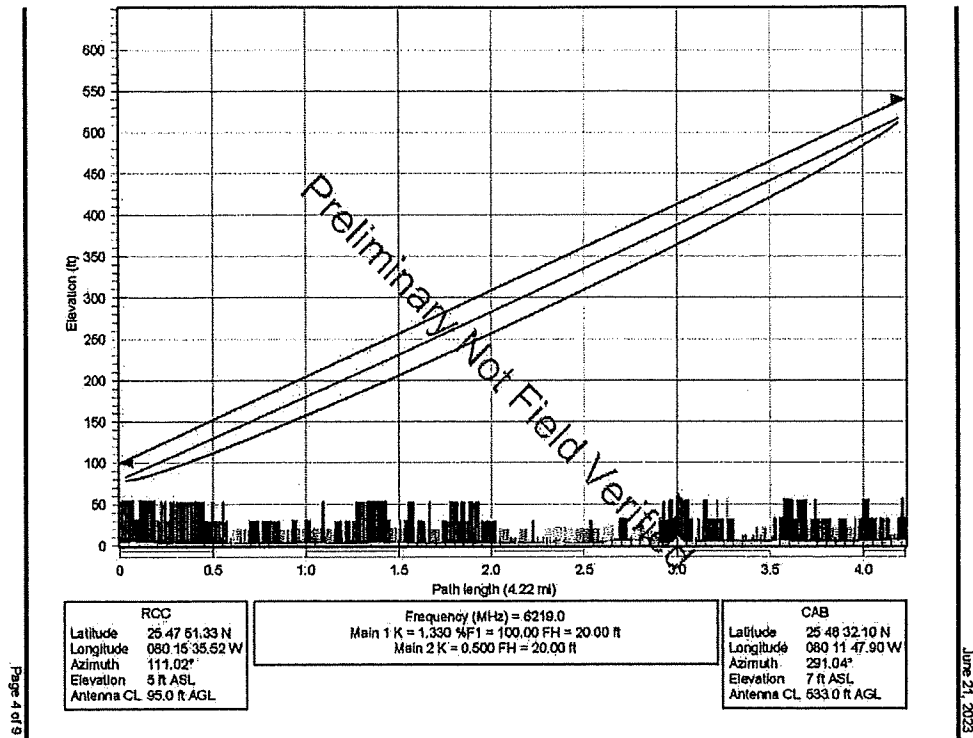
June 21, 2023

	RCC	CAB
RX threshold level (dBm)	-73.75	-73.75
Receive signal (dBm)	-28.35	-28.35
Thermal fade margin (dB)	45.40	45.40
Dispersive fade margin (dB)	60.00	60.00
Dispersive fade occurrence factor	4.00	
Effective fade margin (dB)	44.83	44.83
Climatic factor	2.50	
Terrain roughness (ft)	20.00	
C factor	8.23	
Average annual temperature (°F)	74.68	
Fade occurrence factor (Po)	9.540E-003	
Effective frequency spacing (MHz)	59.30	59.30
FD improvement factor	200.00	200.00
Worst month multipath availability (%)	100.00000	100.00000
Worst month multipath unavailability (sec)	0.00	0.00
Annual multipath availability (%)	100.00000	100.00000
Annual multipath unavailability (sec)	0.02	0.02
Annual 2 way multipath availability (%)	100.00000	
Annual 2 way multipath unavailability (sec)	0.04	
Polarization	Vertical	
Rain region	Miami, Florida	
Rain rate (mm/hr)	970.36	
Flat fade margin - rain (dB)	45.40	
Rain attenuation (dB)	45.40	
Annual rain availability (%)	100.00000	
Annual rain unavailability (min)	0.01	
Annual rain + multipath availability (%)	100.00000	
Annual rain + multipath unavailability (min)	0.01	

Multipath fading method - Vigants - Barnett
Rain fading method - Crane

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CAB to MIA Microwave



Motorola Solutions Confidential Restricted

MDC021

System Summary 1-14

June 21, 2023

Transmission details (RCC-CAB_6G_30M_128Q_OC3_MHSB_SP.pl5)

	RCC	CAB
Latitude	25 47 51.33 N	25 46 32.10 N
Longitude	080 15 35.52 W	080 11 47.90 W
True azimuth (°)	111.02	291.04
Vertical angle (°)	1.11	-1.15
Elevation (ft)	5.26	7.46
Tower height (ft)	95.00	533.00
Tower type	building mount	
Antenna model	USX6-6W (TR)	USX6-6W (TR)
Antenna file name	rpe 7373	rpe 7373
Antenna gain (dBi)	38.80	38.80
Antenna height (ft)	95.00	533.00
Orientation loss (dB)	0.00	0.00
TX line model	EW63	EW63
TX line unit loss (dB/100 ft)	1.44	1.44
TX line length (ft)	120.00	120.00
TX line loss (dB)	1.72	1.72
Connector loss (dB)	0.27	0.27
TX switch loss (dB)	0.40	0.40
Other TX loss (dB)	5.00	5.00
RX filter loss (dB)	1.00	1.00
Frequency (MHz)	62.19.00	
Polarization	Horizontal	
Path length (mi)	4.22	
Free space loss (dB)	124.99	
Atmospheric absorption loss (dB)	0.06	
Net path loss (dB)	57.83	57.83
Configuration	MHSB	MHSB
Radio model	I6V4SL6_30M128Q158R70_OC3	I6V4SL6_30M128Q158R70_OC3
Radio file name	I4sl630m158_oc3	I4sl630m158_oc3
TX power (dBm)	29.00	29.00
Emission designator	30M0D7W	30M0D7W
EIRP (dBm)	60.41	60.41
TX channel assignments	I6 6093.45H	h6 6345.49H
RX threshold criteria	1E-6 BER	1E-6 BER
RX threshold level (dBm)	-73.00	-73.00

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CAB to MIA Microwave



Motorola Solutions Confidential Restricted

MDC022

System Summary 1-15

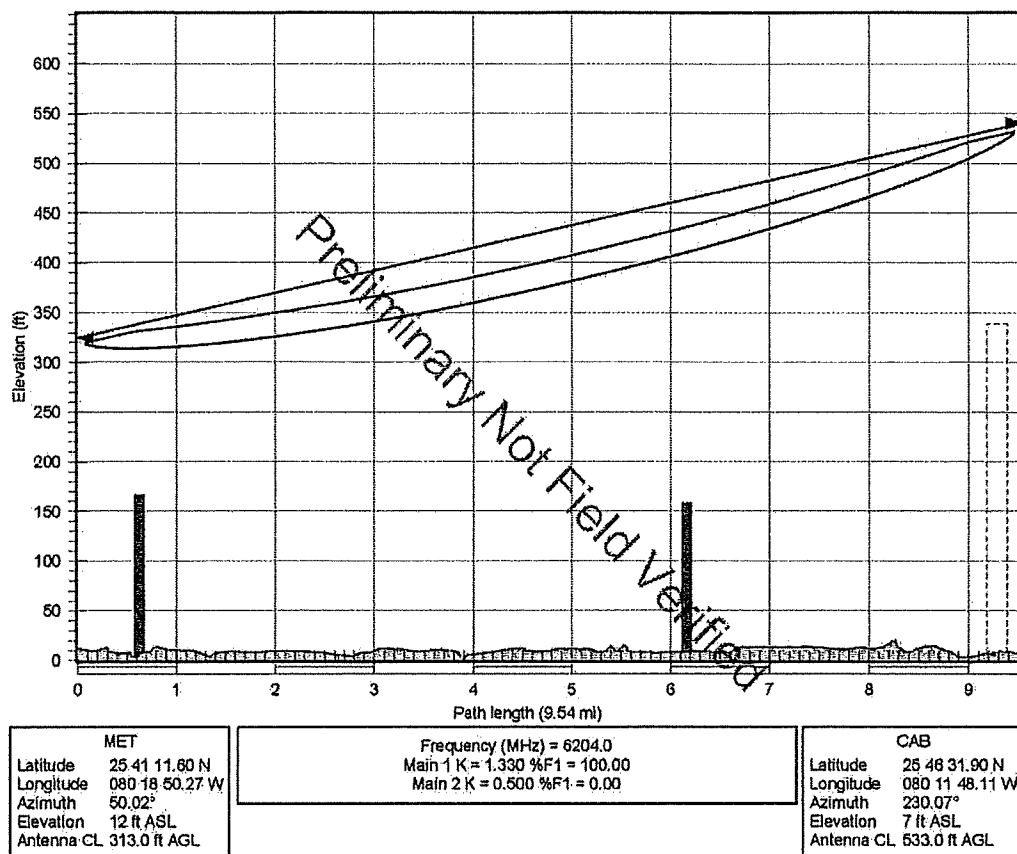
June 21, 2023

	RCC	CAB
Receive signal (dBm)	-28.83	-28.83
Thermal fade margin (dB)	44.17	44.17
Dispersive fade margin (dB)	60.00	60.00
Dispersive fade occurrence factor	4.00	
Effective fade margin (dB)	43.73	43.73
Climatic factor	2.50	
Terrain roughness (ft)	20.00	
C factor	8.23	
Average annual temperature (°F)	74.68	
Fade occurrence factor (Po)	9.631E-003	
Worst month multipath availability (%)	99.99996	99.99996
Worst month multipath unavailability (sec)	1.07	1.07
Annual multipath availability (%)	99.99998	99.99998
Annual multipath unavailability (sec)	4.80	4.80
Annual 2 way multipath availability (%)	99.99997	
Annual 2 way multipath unavailability (sec)	9.60	
Polarization	Horizontal	
Rain region	Miami, Florida	
Rain rate (mm/hr)	619.38	
Flat fade margin - rain (dB)	44.17	
Rain attenuation (dB)	44.17	
Annual rain availability (%)	99.99999	
Annual rain unavailability (min)	0.08	
Annual rain + multipath availability (%)	99.99996	
Annual rain + multipath unavailability (min)	0.24	

Multipath fading method - Vigants - Barnett
Rain fading method - Crane

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June 21, 2023

CAB to MIA Microwave



Motorola Solutions Confidential Restricted

MDC024

System Summary 1-17

June 21, 2023

Transmission details (MET-CAB (MPLS - Pos. 1) with Interference.pl5)

	MET	CAB
Latitude	25 41 11.60 N	25 46 31.90 N
Longitude	080 18 50.27 W	080 11 48.11 W
True azimuth (°)	50.02	230.07
Vertical angle (°)	0.19	-0.30
Elevation (ft)	11.66	7.26
Tower height (ft)	313.00	533.00
Tower type	roof mount	building mount
Antenna model	USX6-6W (TR)	USX6-6W (TR)
Antenna file name	rpe 7373	rpe 7373
Antenna gain (dBi)	38.80	38.80
Antenna height (ft)	313.00	533.00
Orientation loss (dB)	0.00	0.00
TX line model	EW63	EW63
TX line unit loss (dB/100 ft)	1.43	1.43
TX line length (ft)	50.00	175.00
TX line loss (dB)	0.72	2.51
Connector loss (dB)	0.54	0.54
Miscellaneous loss (dB)	0.50	0.50
Frequency (MHz)	6204.00	6204.00
Polarization	Horizontal	Horizontal
Path length (mi)	9.34	9.34
Free space loss (dB)	132.04	132.04
Atmospheric absorption loss (dB)	0.13	0.13
Net path loss (dB)	59.88	59.88
Configuration	2+0	2+0
Radio model	I6V4EHL6_30M128Q155R70	I6V4EHL6_30M128Q155R70
Radio file name	I4el630m155_r70	I4el630m155_r70
TX power (dBm)	37.00	37.00
Emission designator	30M0D7W	30M0D7W
EIRP (dBm)	74.04	72.25
TX channel assignments	6063.80H 6093.45V	6315.84H 6345.49V
RX threshold criteria	1E-6 BER	1E-6 BER
RX threshold level (dBm)	-72.50	-70.40
Receive signal (dBm)	-22.88	-22.88

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CAB to MIA Microwave



Motorola Solutions Confidential Restricted

MDC025

System Summary 1-18

June 21, 2023

	MET	CAB
Thermal fade margin (dB)	49.62	47.52
Dispersive fade margin (dB)	60.00	60.00
Dispersive fade occurrence factor	4.00	
Effective fade margin (dB)	48.27	46.64
Climatic factor	2.50	
Terrain roughness (ft)	20.00	
C factor	8.23	
Average annual temperature (°F)	74.72	
Fade occurrence factor (Po)	1.107E-001	
Worst month multipath availability (%)	99.99983	99.99976
Worst month multipath unavailability (sec)	4.34	6.31
Annual multipath availability (%)	99.99994	99.99991
Annual multipath unavailability (sec)	19.45	28.30
Annual 2 way multipath availability (%)	99.99985	
Annual 2 way multipath unavailability (sec)	47.76	

Multipath fading method - Vigants - Barnett

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CAB to MIA Microwave



Motorola Solutions Confidential Restricted

MDC026

System Summary 1-19

SECTION 2

STATEMENT OF WORK

2.1 PROFESSIONAL INTEGRATION SERVICES

Motorola Solutions has provided this scope for the equipment and services required for a microwave hop from CAB to the rental car center at the airport. This quote includes new the dish at the CAB and RCC site.

- The fiber transport from the existing MIA site to the RCC location is the responsibility of the County.
- Motorola will provide project management and engineering services.
- The path calculations and digitized path profiles performed yield a design that meets or exceeds the parameter of 99.999% reliability for all microwave paths.
- The path studies completed during the design phase of this project were calculated using the best tools and environmental data available. However, these path studies are limited by being only a mathematical prediction based on specific assumptions and cannot account for every environmental anomaly that may affect path performance, such as unexpected tree growth and unaccounted terrain formations. To ensure the reliability of these proposed microwave links, a field path study will be performed. The microwave design is not finalized until these field path studies are completed following contract execution, and the results of the field studies may necessitate additional equipment, such as longer cable runs or additional Links in between sites. Furthermore, the process of frequency coordination/licensing may result in certain design changes such as replacing regular dishes with high performance dishes. The County will be responsible for additional costs beyond this proposed design. The results of the preliminary path calculations are based on the information provided and the considerations presented below.
- The following considerations and assumptions are incorporated into the path calculations:
 - An actual path survey must be conducted to verify the geographical coordinates and site elevations, path clearances, building obstructions, etc.
 - All the calculations are generic in nature and cannot be used for final engineering purposes. An actual field path survey must be conducted to verify the following:
 - ♦ Geographical coordinates and site elevations, path clearances, etc.
 - ♦ Tower heights, establish placement of various types of antennas, lights, guys, etc. Antenna heights used in the study are all assumptions and cannot be used for final engineering design.
 - Verify cable line lengths.
 - Establish facts which may affect the design of the microwave system.

Motorola Solutions will proceed with the new microwave installation and testing once the sites are ready for installation. Motorola Solutions will install and test the microwave system equipment as follows.

- Install microwave antennas at path-calculated centerlines.
- Install cable runs, hangers and ground kits per the manufacturer's specification.
- Perform antenna alignment.
- Install and configure microwave radio equipment.
- Connect power to installed microwave equipment from distribution panel.



- Connect equipment rack ground to internal grounding system.
- Connect radio antenna port to the installed cable.

Once the microwave equipment is installed and operational, field-testing will commence to ensure that the performance of the microwave equipment meets the required specifications.

2.2 SITE DEVELOPMENT AT MIAMI AIRPORT RCC SITE

Existing Rooftop at the Airport Rental Car Center and equipment room is in an IT room of the rental car center.

Site Scope Summary

- Engineering services for site drawings and regulatory approvals – Included.
- Site acquisition services – Not included.
- Zoning Services – Not included.
- Existing tower to be used for antennas – 80 ' Rooftop.

Motorola Responsibilities:

Site Engineering

- Prepare site construction drawings, showing the layout of various new and existing site components.
- Conduct site walks to collect pertinent information from the sites (e.g., location of Telco, power, existing facilities, etc.).
- Prepare a lease exhibit, sketch of the site to communicate to the property owner the proposed lease space, and planned development at the particular site location.
- Prepare record drawings of the site showing the as-built information.
- Perform National Environmental Policy Act (NEPA) Threshold Screening, including limited literature and records search and brief reporting, as necessary to identify sensitive natural and cultural features referenced in 47 Code of Federal Regulations (CFR) Chapter 1, subsection 1.1307 that may be potentially impacted by the proposed construction activity. This does not include the additional field investigations to document site conditions if it is determined that the proposed communication facility "may have a significant environmental impact" and thus require additional documentation, submittals, or work. Perform a cultural resource study, as needed to identify sensitive historical and archaeological monuments that might be impacted by propose construction.
- Provide a structural engineering analysis for antenna support structure, if necessary, to support the proposed the proposed equipment loads.
- Perform structural mapping, analysis, and design to antenna support structure for the proposed equipment and antenna loads. No obtrusive investigations have been included.
- Perform an ground radar penetration of the penthouse wall and floors below the penthouse down to the RCC equipment radio room to determine structural steel and tension cable within the structure of the walls and floors.
- Design mount to support proposed dish on the wall of the Penthouse on top of the RCC facility..
- Preparation, submission and tracking of application for local permit fees (electrical, building etc.) and procurement of information necessary for filing.

Site Preparation

- Provide one-time mobilization costs for the construction crews. Any remobilization due to interruptions/delays that are out of Motorola's control will result in additional costs.
- Supply and install 8-foot high chain-link fencing with a ten-foot wide gate around the shelter compound (not to exceed 15 linear feet).

Existing Facility Improvement Work

- Supply and install 24-inch-wide cable runway (up to 19 linear feet) inside the existing room.

Miscellaneous Work

- Fabrication of the microwave mount for the RCC Penthouse
- Installation of the fence in the RCC equipment room with a gate to secure the microwave and microwave DC plant in the equipment room.
- Cable tray installation between the two walls of the RCC equipment room with all thread and mounts supported into the ceiling above and the cable tray to be mounted at 8'2" off the finished equipment room floor.
- Access and Transportation of mount, cable tray and fencing to the top parking deck of the RCC facility.
- Fabricate and Install a new microwave Dish Mount with backing plates through the sidewall of the penthouse roof with entry port cored through the wall to support a six-foot dish and waveguide through the wall.
- Ground Penetration Radar of the wall and floors for the installation of the microwave waveguide from the RCC Penthouse roof to the IT Network room and coring of wall and floors between the two locations.

County Responsibilities:

- As applicable, coordinate, prepare, submit, and pay for all required permits and inspections for the work that is the County's responsibility.
- Review and approve site design drawings within 14 calendar days of submission by Motorola or its subcontractor(s). Should a re-submission be required, the County shall review and approve the re-submitted plans within 14 calendar days from the date of submittal.
- Pay for the usage costs of power, leased lines and generator fueling both during the construction/installation effort and on an on-going basis.
- Pay for application fees, taxes and recurring payments for lease/ownership of the property.
- Provide personnel to observe construction progress and testing of site equipment according to the schedule provided by Motorola.
- Provide property deed or lease agreement, and boundary survey, along with existing as-built drawings of the site and site components to Motorola for conducting site engineering.
- Provide a right of entry letter from the site owner for Motorola to conduct field investigations.
- Arrange for space on the structure for installation of new antennas at the proposed heights on designated existing antenna-mounting structures.
- Pay for any upgrade of the antenna support structure necessary to accommodate the new antennas.
- Provide space, HVAC, backup power (generator), outlets, grounding, surge suppression, lighting, fire suppression and cabling facilities for the equipment room per Motorola's R56 specifications. Ceiling and cable tray heights in the equipment rooms should be such as to accommodate 7-1/2-foot equipment racks, and the ceiling should be 9 feet or greater.



- If required, remove or relocate any existing facilities, equipment, and utilities to create space for new site facilities and equipment.
- If required, provide any physical improvements (walls, roofing, flooring, painting, etc.) necessary to house the equipment in the existing room.
- Provide electrical circuits for the new equipment that are supported by the existing RCC generator provided electrical panels with breakers wired to dedicated outlets above the proposed equipment locations.
- Upgrade the existing grounding and transient voltage suppression systems to Motorola's current R56 Standards, and supply a single point system ground, of ten (10) ohms or less, to be used on all fixed equipment supplied under this scope of work. Supply a grounding tie point within ten (10) feet of the-Motorola-supplied equipment.
- County will be responsible for power for the new microwave equipment and flashing of the roof membrane if required and the new power circuits will be pulled from an existing generator supported panel. Miami-Dade will also be responsible for the fiber run between the current Core ITD equipment room at the airport in the Flamingo Parking area and equipment room of the RCC.

Assumptions:

- No prevailing wage, certified payroll, mandatory union workers or mandatory minority workers are required for this work
- All work is assumed to be done during normal business hours as dictated by time zone (Monday thru Friday, 7:30 a.m. to 5:00 p.m.).
- A maximum of 30 days will be required for obtaining approved building permits from time of submission.
- If extremely harsh or difficult weather conditions delay the site work for more than a week, Motorola will seek excusable delays rather than risk job site safety.
- Existing facility has a grounding system with a ground resistance of 10 ohms or less.
- Extensive documentation (balloon tests, photo simulations, expert testimony etc.) to support zoning effort for existing structures is not required.
- Alarming at existing sites will be limited to new component installations and will have to be discussed and agreed to on a site-by-site basis.
- The site will have adequate room for installation of proposed equipment, based on applicable codes and Motorola's R56 standards.
- The existing utility service and backup power facilities (UPS, generators) have sufficient extra capacity to support the proposed new equipment load.
- The floor can support the proposed new loading. Physical or structural improvements to the existing room will not be required.
- Motorola assume all towers are climbable and antennas can be installed without the need of cranes or lifts; if after the site survey it is determined that a crane or lift is required, this will address as a change of scope with a change order to the County to cover the additional cost

2.3 SITE DEVELOPMENT AT CAB

Site Scope Summary

- Engineering services for site drawings and regulatory approvals – Included.
- Site acquisition services – Not included.
- Zoning Services – Not included.



Motorola Solutions Responsibilities:**Site Engineering**

- Install a new microwave Mount with backing plates through the side wall of the penthouse roof with entry port cored through the wall to support a six-foot dish and waveguide through the wall
- Prepare site construction drawings, showing the layout of various new and existing site components.
- Conduct site walks to collect pertinent information from the sites (e.g., location of Telco, power, existing facilities, etc.).
- Prepare a lease exhibit and sketch of the site to communicate to the property owner the proposed lease space and planned development at the particular site location.
- Prepare record drawings of the site showing the as-built information.
- Perform National Environmental Policy Act (NEPA) Threshold Screening, including limited literature and records search and brief reporting, as necessary to identify sensitive natural and cultural features referenced in 47 Code of Federal Regulations (CFR) Chapter 1, subsection 1.1307 that may be potentially impacted by the proposed construction activity. This does not include the additional field investigations to document site conditions if it is determined that the proposed communication facility "may have a significant environmental impact" and thus require additional documentation, submittals, or work. Perform a cultural resource study, as needed to identify sensitive historical and archaeological monuments that might be impacted by proposed construction.
- Provide a structural engineering analysis for antenna support structure, if necessary, to support the proposed the proposed equipment loads.
- Design antenna support platform to support proposed antennas and dishes.
- Preparation, submission and tracking of application for local permit fees (zoning, electrical, building etc.) and procurement of information necessary for filing.

Site Preparation

- Provide one-time mobilization costs for the construction crews. Any remobilization due to interruptions/delays that are out of Motorola Solutions' control will result in additional costs.

2.4 ASSUMPTIONS

Motorola Solutions has made several assumptions in preparing this quote, which are noted below. We will need to verify all assumptions or seek alternate solutions in the case of invalid assumptions.

- All existing sites or equipment locations will have sufficient space available for the system described.
- All existing sites or equipment locations will have adequate electrical/generator power and circuits, surge suppression, and site grounding to support the requirements of the system described.
- The County shall make any necessary site improvements to meet R56 standards.
- Any site/equipment-location upgrades or modifications will be the responsibility of the County.
- Site connectivity will be the responsibility of the County.
- The County shall provide a dedicated delivery point, such as a warehouse, for receipt, inventory, and storage of equipment prior to delivery to the sites.



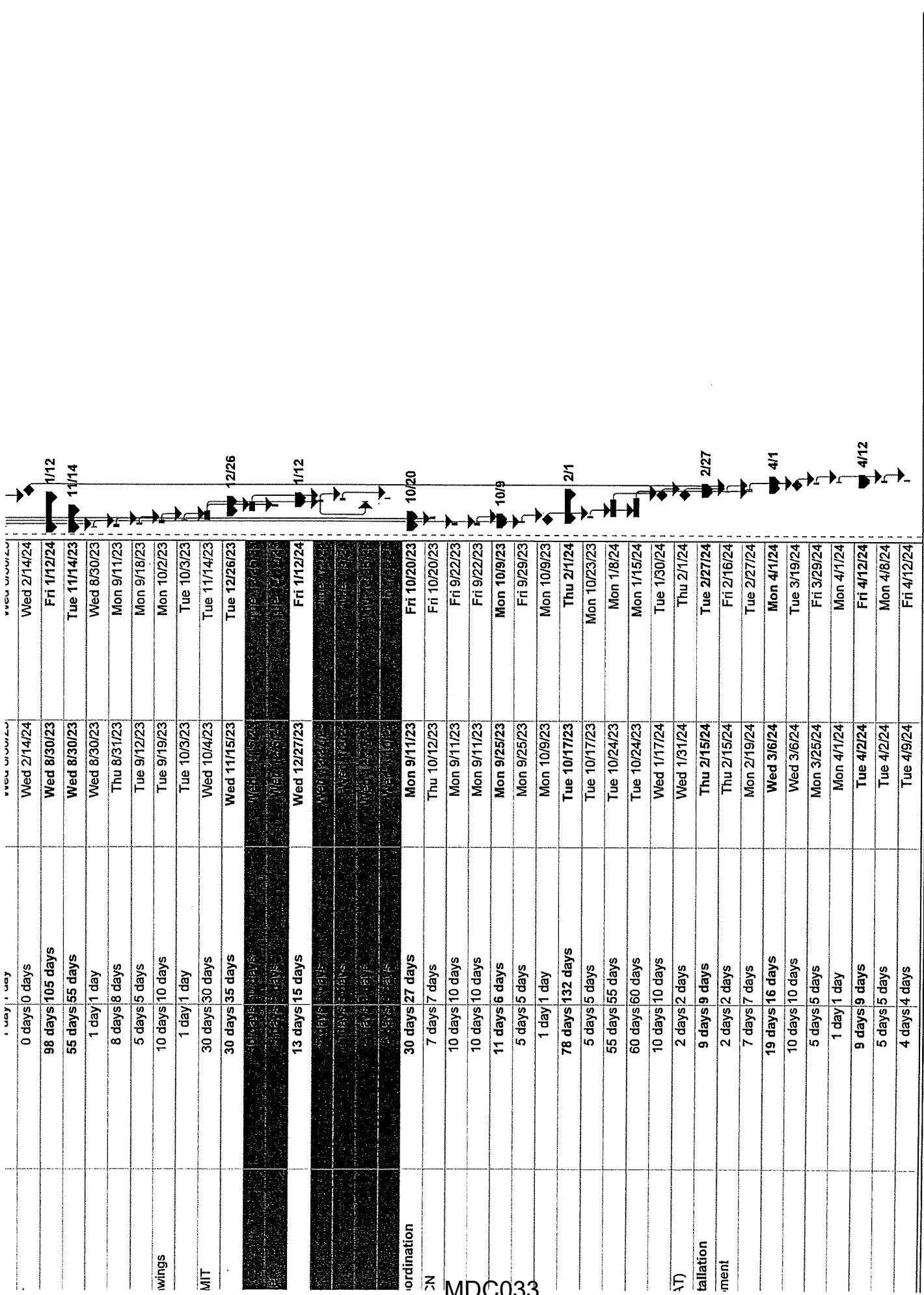
- ITD may wish to keep in operation some of the 6 GHz equipment currently deployed in the path between Flamingo Garage and the SPCC building. If necessary, Motorola will proceed with the removal and disposal of the decommissioned equipment

2.5 HIGH LEVEL RESPONSIBILITY MATRIX SUMMARY

#	Task	Responsible Party
1.	Project Management	Motorola Solutions / Aviat
2.	Design	Motorola Solutions / Aviat
3.	A&E Drawing for Antennas Installation	Motorola Solutions / Aviat
4.	Path Surveys & Frequency Coordination	Motorola Solutions / Aviat
5.	Electrical Work and provide adequate building ground to Room 42409	ITD
6.	a. Transmission line Conduit Installation. b. Roof penetration is required to support (4) runs of waveguide (conduit) from Room #42409 to elevator room on the roof. All Roof/Wall penetrations.	ITD
7.	Install, Connectorize and Test Dark fiber	ITD
8.	Install cable tray and interior fence	Motorola Solutions / Aviat
9.	Antenna/Line/DC Plant/FNE Installation	Motorola Solutions / Aviat
10.	Optimization and Testing	Motorola Solutions / Aviat
11.	Cutover Planning	Motorola Solutions and ITD
12.	Documentation	Motorola Solutions / Aviat

2.6 PROJECT SCHEDULE

A sample project schedule is included on the page that follows.



MDC033

SECTION 3

PRICING & PAYMENT MILESTONES

Description	Price
Architectural, Engineering & Permitting Services	\$88,334
Site Development Services - Fabrication & Physical Installation	\$177,598
Construction Management	\$47,021
Project Management	\$35,460
System Integration Services	\$128,094
Microwave Equipment	\$386,778
Warranty	\$10,362
Sub-Total 1	\$873,647
Performance & Payment Bonds for MDAD Receiver and MDFR Distributed Antenna System ¹	\$40,877
Performance & Payment Bonds for RCC to CAB Microwave Link ¹	\$5,147
Sub-Total 2	\$919,671
Discount	(\$56,786)
Total (System Price)	\$862,885
10% Contingency Allowance (10% of Sub-Total 1)	\$87,365
Total	\$950,250

Payment Schedule

Payment Milestones as a % of Sub-Total 1 with Discount Applied	\$816,861
25% due upon Delivery of Preliminary Paper Path Study & Contract Design Review	\$204,215
60% due upon Shipment of Equipment *	\$490,117
10% due upon Installation of Equipment *	\$81,686
5% due upon Final Acceptance	\$40,843

¹ Payment for Performance and Payment Bonds shall be invoiced upon execution of Supplemental Agreement.

* Motorola reserves the right to invoice for partial shipments and installation of equipment. The value of the equipment shipped / services performed will be determined by the value shipped / services performed as a percentage of the total milestone value. Unless otherwise specified, contract discounts are based upon all items proposed and overall system package. For invoicing purposes only, discounts will be applied proportionately to the FNE and Subscriber equipment values to total contract price.



ATTACHMENT No. 1 SURETY PAYMENT BOND, SURETY PERFORMANCE BOND

SURETY PAYMENT BOND

By this Bond, We _____, as Principal, whose principal business address is _____, as Contractor under the contract dated _____, 20 ____, between Principal and Miami-Dade County for the construction of Project: Motorola Receiver Site with Integrated Distributed Antenna System at Miami International Airport, Contract No. SS-10134 (herein after referred to as "Contract") the terms of which Contract are incorporated by reference in its entirety into this Bond and _____, a corporation, whose principal business address is _____ as Surety, are bound to Miami-Dade County (hereinafter referred to as "County") in the sum of _____ (U.S. dollars) \$_____,¹ for payment of which we bind ourselves, our heirs, personal representatives, successors, and assigns, jointly and severally.

THE CONDITION OF THIS BOND is that if Principal:

1. Promptly makes payments to all claimants, as defined in Section 255.05(1), Florida Statutes, supplying Principal with labor, materials, or supplies, used directly or indirectly by Principal in the prosecution of the Work provided for in the Contract; provided, however, that any action instituted by such claimant under this paragraph for payment must be in accordance with notice and time limitation provisions in Section 255.05(2), Florida Statutes; and
2. Pays County all losses, damages, expenses, costs and attorney's fees, including appellate proceedings, that County sustains because of a failure by Principal to make any such payments;

then this bond is void; otherwise it remains in full force.

A claimant shall have a right of action against the Principal and the Surety for the amount due it. Such action shall not involve the County in any expense.

A claimant, except a laborer, who is not in privity with the Principal and who has not received payment for its labor, materials, or supplies shall, within 45 days after beginning to furnish labor, materials, or supplies for the prosecution of the work, furnish the Principal with a notice that it intends to look to the bond for protection. A claimant who is not in privity with the Principal and who has not received payment for its labor, materials, or supplies shall, within 90 days after performance of the labor or after complete delivery of the materials or supplies, deliver to the Principal and to the Surety written notice of the performance of the labor or delivery of the materials or supplies and of the nonpayment.

No action for labor, materials or supplies may be instituted against the Principal or the Surety unless both notices have been given. No action shall be instituted against the Principal or the Surety on the bond after one (1) year from the performance of the labor or completion of delivery of the materials or supplies. A claimant may not waive in advance its right to bring an action under the bond against the surety.

Any changes in or under the Contract Documents and compliance or non-compliance with any formalities connected with the Contract or the changes does not affect Surety's obligation under this Bond.

SURETY PAYMENT BOND (Cont'd)

IN WITNESS WHEREOF, the above bounden parties have caused this Bond to be executed by their appropriate officials as of the _____ day of _____, 20____.

(CONTRACTOR)

(Contractor Name)

BY:

(President) (Managing Partner or Joint
Venturer)

COUNTERSIGNED BY RESIDENT
FLORIDA AGENT OF SURETY:

SURETY: _____

(Copy of Agent's current Identification Card
as issued by State of Florida Insurance Commissioner
must be attached)

By: _____
Attorney-in-Fact

(CORPORATE SEAL)

(Power of Attorney must be attached)

¹ Surety Payment Bond must be equivalent to one hundred percent (100%) of the Contract price.

SURETY PERFORMANCE BOND

By this Bond, We _____, as Principal, whose principal business address is _____, as Contractor under the contract dated _____, 20 ____, between Principal and Miami-Dade County for the construction of Installation of Pre-Conditioned Motorola Receiver Site with Integrated Distributed Antenna System at Miami International Airport, Contract No. SS-10134 (herein after referred to as "Contract") the terms of which Contract are incorporated by reference in its entirety into this Bond and _____, a corporation, whose principal business address is _____ as Surety, are bound to Miami-Dade County (hereinafter referred to as "County") in the sum of _____ (U.S. dollars) \$_____,¹ for payment of which we bind ourselves, our heirs, personal representatives, successors, and assigns, jointly and severally.

THE CONDITION OF THIS BOND is that if Principal:

1. Performs all the work under the Contract, including but not limited to guarantees, warranties and the curing of latent defects, said Contract being made a part of this bond by reference, and in the times and in the manner prescribed in the Contract, including any and all damages for delay; and
2. Pays County all losses, damages, including damages for delay, expenses, costs and attorney's fees, including appellate proceedings, that County sustains because of a default by Principal under the Contract, including but not limited to a failure to honor all guarantees and warranties or to cure latent defects in its work or materials within the time period provided in Section 95.11(3)(c), Florida Statutes; and
3. Performs the guarantee of all work and materials furnished under the contract for the time specified in the Contract, including all warranties and curing all latent defects within the time period provided in Section 95.11(3)(c), Florida Statutes;

then this bond is void; otherwise it remains in full force.

Surety specifically assumes liability for any and all delay damages arising from Principal's default of the Contract, as well as all latent defects uncovered in the work of the Principal after final acceptance of the work by the County.

Any changes in or under the Contract Documents and compliance or noncompliance with any formalities connected with the Contract or the changes does not affect Surety's obligation under this Bond.

This Bond shall remain in full force and effect for such period or periods of time after the date of acceptance by the County of the Contract work as are provided for in the Contract by which Principal guarantees to repair or replace any or all work performed or materials and equipment furnished, which were not performed or furnished according to the terms of the Contract. If no specific periods of warranty are stated in the Contract for any particular item or work, material or equipment, the warranty shall be deemed to be a period of one (1) year from the date of final acceptance by the County; provided however, that this limitation does not apply to suits seeking damages for latent defects in materials or workmanship, such actions being subject to the limitations found in Section 95.11(2)(b), Florida Statutes.

SURETY PERFORMANCE BOND (Cont'd)

IN WITNESS WHEREOF, the above bounden parties have caused this Bond to be executed by their appropriate officials as of the _____ day of _____, 20 __.

CONTRACTOR

(Contractor Name)

BY:

(President) (Managing Partner or Joint Venturer)

(SEAL)

COUNTERSIGNED BY RESIDENT
FLORIDA AGENT OF SURETY:

SURETY:

(Copy of Agent's current
Identification Card as issued by
State of Florida Insurance Commissioner must be attached) By:

Attorney-in-Fact

(CORPORATE SEAL)

(Power of Attorney must be attached)

¹ Performance Bond must be equivalent to one hundred percent (100%) of the Contract price.



MEMORANDUM

(Revised)

TO: Honorable Chairman Oliver G. Gilbert, III
and Members, Board of County Commissioners

DATE: September 4, 2024

FROM: 
Gen Bonzon-Keenan
County Attorney

SUBJECT: Agenda Item No. 8(P)(3)

Please note any items checked.

- ☐ "3-Day Rule" for committees applicable if raised
- ☐ 6 weeks required between first reading and public hearing
- ☐ 4 weeks notification to municipal officials required prior to public hearing
- ☐ Decreases revenues or increases expenditures without balancing budget
- ☐ Budget required
- ☐ Statement of fiscal impact required
- ☐ Statement of social equity required
- ☐ Ordinance creating a new board requires detailed County Mayor's report for public hearing
- ☐ No committee review
- ☐ Applicable legislation requires more than a majority vote (i.e., 2/3's present ____, 2/3 membership ____, 3/5's ____, unanimous ____, CDMP 7 vote requirement per 2-116.1(3)(h) or (4)(c) ____, CDMP 2/3 vote requirement per 2-116.1(3)(h) or (4)(c) ____, or CDMP 9 vote requirement per 2-116.1(4)(c)(2) ____ to approve
- ☒ Current information regarding funding source, index code and available balance, and available capacity (if debt is contemplated) required

Approved _____ Mayor
Veto _____
Override _____

Agenda Item No. 8(P)(3)
9-4-24

RESOLUTION NO. R-761-24

RESOLUTION RATIFYING SUPPLEMENTAL AGREEMENT NO. 1 TO THE MIAMI-DADE AVIATION DEPARTMENT'S CONTRACT NO. SS-10134 FOR MOTOROLA RECEIVER SITE WITH INTEGRATED DISTRIBUTION ANTENNA SYSTEM AT MIAMI INTERNATIONAL AIRPORT PURSUANT TO SECTION 2-285(3) OF THE CODE OF MIAMI-DADE COUNTY, FLORIDA; AND AUTHORIZING THE COUNTY MAYOR OR COUNTY MAYOR'S DESIGNEE TO EXERCISE ALL PROVISIONS OF THE CONTRACT, INCLUDING ANY CANCELLATION, RENEWALS, OR EXTENSIONS, PURSUANT TO SECTION 2-8.1 OF THE COUNTY CODE AND IMPLEMENTING ORDER 3-38

WHEREAS, this Board desires to accomplish the purposes outlined in the accompanying memorandum, a copy of which is incorporated by reference,

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF MIAMI-DADE COUNTY, FLORIDA, that this Board ratifies Supplemental Agreement No. 1 to the Miami-Dade Aviation Department's Contract No. SS-10134 for Motorola Receiver Site with Integrated Distribution Antenna System at Miami International Airport pursuant to section 2-285(3) of the Code of Miami-Dade County, Florida; and authorizes the County Mayor or County Mayor's designee to exercise all provisions of the contract, including any cancellation, renewals, or extensions pursuant to section 2-8.1 of the County Code and Implementing Order 3-38. A copy of the contract is on file with and available upon request from the Strategic Procurement Department.

The foregoing resolution was offered by Commissioner **Eileen Higgins** , who moved its adoption. The motion was seconded by Commissioner **Raquel A. Regalado** and upon being put to a vote, the vote was as follows:

Oliver G. Gilbert, III, Chairman	aye		
Anthony Rodríguez, Vice Chairman	aye		
Marleine Bastien	aye	Juan Carlos Bermudez	aye
Kevin Marino Cabrera	aye	Sen. René García	aye
Roberto J. Gonzalez	aye	Keon Hardemon	aye
Danielle Cohen Higgins	aye	Eileen Higgins	aye
Kionne L. McGhee	aye	Raquel A. Regalado	aye
Micky Steinberg	aye		

The Chairperson thereupon declared this resolution duly passed and adopted this 4th day of September, 2024. This resolution shall become effective upon the earlier of (1) 10 days after the date of its adoption unless vetoed by the County Mayor, and if vetoed, shall become effective only upon an override by this Board, or (2) approval by the County Mayor of this resolution and the filing of this approval with the Clerk of the Board.



MIAMI-DADE COUNTY, FLORIDA
BY ITS BOARD OF
COUNTY COMMISSIONERS

JUAN FERNANDEZ-BARQUIN, CLERK

By: Basia Pruna
Deputy Clerk

Approved by County Attorney as
to form and legal sufficiency.

DMM

David M. Murray