



# TAIT COMMUNICATIONS' PROPOSAL TO THE CITY OF RIVERSIDE FIRE DEPARTMENT, RIVERSIDE, CALIFORNIA



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TAIT PROPOSAL TO CITY OF  
RIVERSIDE FIRE DEPARTMENT

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# **SECTION 2**

## **RADIO SYSTEM UPGRADE**

### **QS2 to AS-IP Upgrade**

### **with Site Add-On**

**TAIT PROPOSAL TO CITY OF  
RIVERSIDE FIRE DEPARTMENT**

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## **PROJECT BRIEF**

### **QS2 to AS-IP Upgrade with Site Add-On**

### **City of Riverside Fire Department Riverside, California**

○ Issue v2.0 ○ May 2023



## CONTACT INFORMATION

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## PREFACE

### Project Details

Project number	C4C 111073
Customer	City of Riverside FD, CA
Project description	QS2 to AS-IP Upgrade
Business Development Manager	William Mullins
Sales Engineer	Elliott McNeese
Project Manager	Jim Boucher

### Purpose

This document provides a high-level overview of the process to upgrade from QS2 top AS-IP. This Project Brief defines also defines the scope of this project from both Tait and City of Riverside Fire Department's (the customer) perspective.

### Scope

This document is intended to clarify the requirements of the proposed system to ensure that the supplier, Tait and City of Riverside Fire Department have the same understanding and have reached agreement on the requirements of the proposed system upgrade.

### Publication Record

Author	Elliott McNeese
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### Document Status

Issue	Date	Signature	Comment
1.0	03 January 2023	Elliott McNeese	Initial Draft
2.0	22 May 2023	Elliott McNeese	Updated Site Configuration Information Added Link Budget Information Added Coverage Maps

# 1. BACKGROUND

The City of Riverside, California Fire Department has an existing six site, four-channel QS2 simulcast analog radio communications system. Two of the six sites are transmit and receive, with the remaining four sites operating as receive only.

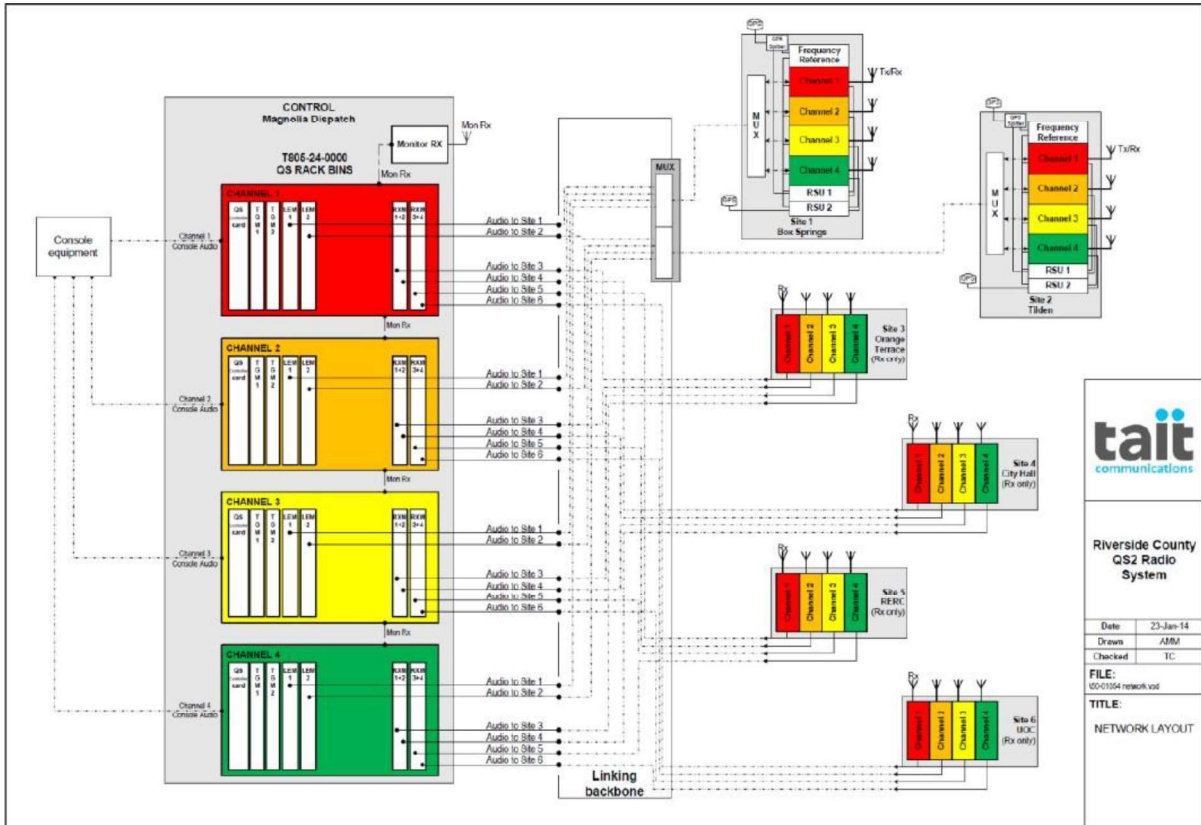


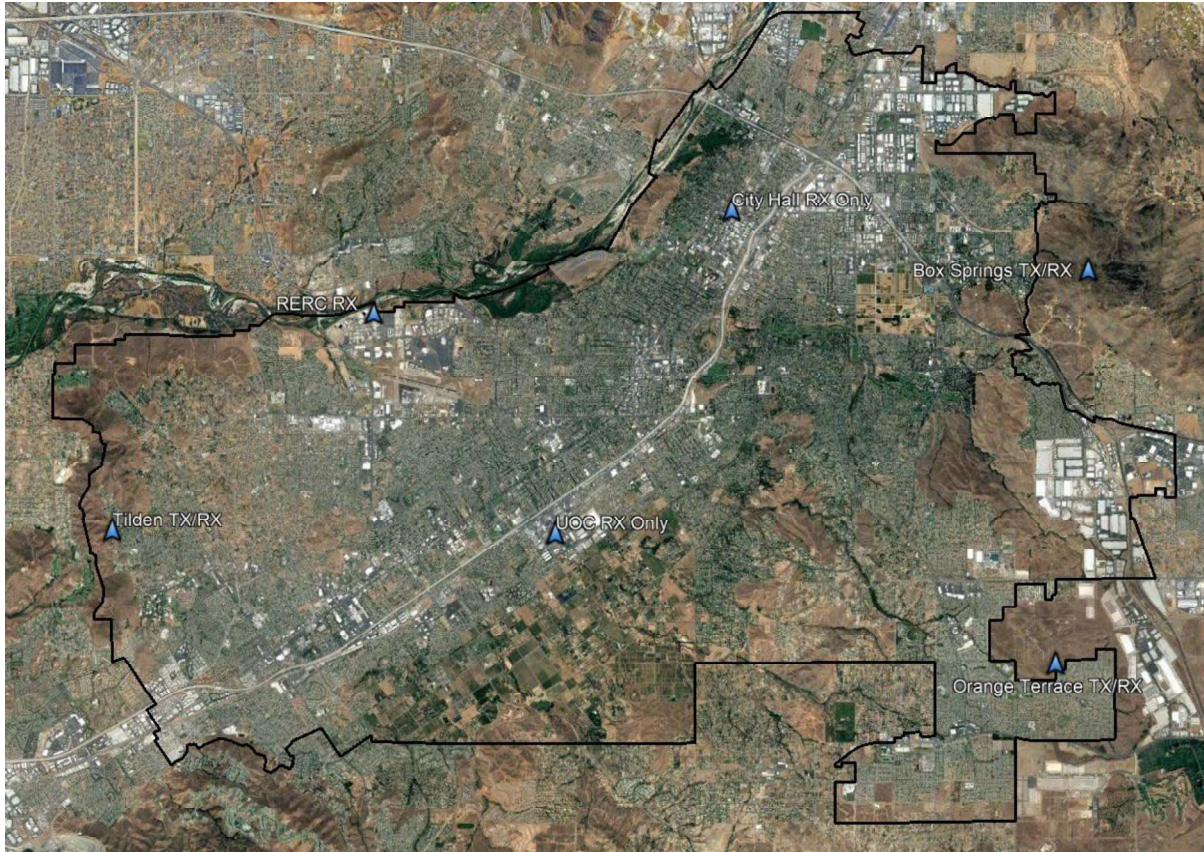
Figure 1: System Overview Diagram

The City of Riverside, CA Fire Department wishes to upgrade their current QS2 system with a TB9400 ASIP solution. As part of the update process, the City of Riverside Fire Department also wishes to replace the current RF Infrastructure to include all feedline, antennas, combining, and multicoupler equipment. The conversion of the Orange Terrace site from a Receive Only to a Transmit and Receive radio site was requested by the Riverside Fire Department. The equipment and cost for frequency licensing at the Orange Terrace site has been updated based on this request.



## 2. RADIO SITE CONFIGURATION

The updated radio site topology is shown in Figure 2 below.



**Figure 2 Riverside FD Radio Site Topology**

**Table 1 Riverside FD Radio Site Locations**

Name	Latitude	Longitude
Box Springs	33-58-10.73 N	117-17-52.28 W
City Hall RX Only	33-58-49.92 N	117-24-50.53 W
Orange Terrace	33-53-54.41 N	117-18-18.26 W
RERC RX Only	33-57-42.26 N	117-27-13.20 W
Tilden	33-55-21.19 N	117-30-38.45 W
UOC RX Only	33-55-19.34 N	117-22-32.22 W

The updated radio site configuration information is provided in Table 2.

**Table 2 Riverside FD Radio Site Configurations**

Site Name	Site Config	Antenna Model	Antenna Quantity
Box Springs	TX/RX	DS4C06F36U-D	2
Tilden Reservoir	TX/RX	DS4C06F36U-D	2
UOC	RX Only	DS4C06F36U-D	1
RERC	RX Only	DS4C06F36U-D	1
Orange Terrace	TX/RX Only	DS4C06F36U-D	2
City Hall	RX Only	DS4C00F36U-D	1
Magnolia Dispatch	Dispatch	NA	0

\*The Magnolia Dispatch radio site was originally used as a QS2 training site and with the update to the TB9400 ASIP system it is no longer needed as a QS2 training radio site.

### 3. SCOPE OF WORK

The high-level scope of work for this project includes the following activities:

- Replacement of RF infrastructure at all six radio sites
- Replacement of GPS Timing system at all six radio sites
- Upgrade of 4 of the existing QS2 channels with AS-IP
- Connection of Console to TB9400 Channel Groups via RICMz
- Decommission the existing TB8100s, QS2 RSUs, and LEM cards

#### 3.1 PROJECT PHASES

The project will consist of two major phases, which is the replacement of the RF infrastructure at each site and the upgrade of the TB8100/TB9100 base stations with the TB9400 base stations.

Note: The TB9400 AS-IP platform is narrow band (12.5Khz), has a Linear PA for LSM modulation, also P25 FDMA and TDMA capable offering a future proof solution (e.g. sw upgradeable to P25 Trunking Phase2)

To complete the scope described above Tait is proposing a number of project phases.

1. **Phase 1:**

- a. Replace RF Infrastructure at each of the six sites
  - i. Antenna Systems
  - ii. Feedline
  - iii. Combiner
  - iv. Receive multicoupler
- b. Go live

2. **Phase 2:**

- a. For each of the four channels
  - i. Upgrade TB8100/TB9100s with TB9400 at each of the sites
  - ii. Channels to be migrated one channel group at a time
- b. Configure RICMz Connectivity between Dispatch Console system and TB9400 Channel Groups
- c. Go live

3. **Phase 3:**

- a. Decommission QS2 shelves (RSU T805-26-8301) at all sites
- b. Decommission any unused punch blocks and remove all wiring
- c. Decommission LEM cards

\*Coverage Testing is not within the scope of this Project

## 4. PROJECT RESPONSIBILITIES

The table below outlines the high-level tasks of the project and identifies the party responsible for performing each task. This will serve to create a mutually agreed upon matrix of tasks and responsibilities from which to negotiate the system implementation.

Tasks	City of Riverside, CA	Tait
Presentation, review, and discussions of the Detailed Design Documentation	X	X
List of equipment for the Sites		X
Backhaul requirements		X
System IP Plan		X
Project Schedule Review	X	X
Formal approval of the Detailed Design	X	
Insert equipment delivery dates into the material planning system		X
Place orders with the factory		X
Place orders with key suppliers		X
Place orders for supplier items		X
Manufacture all infrastructure equipment		X
Tower structure	X	
Tower Structural Analysis	X	
Tower and shelter ground rings, tower ground bar, and AC neutral-ground bond to grounding system	X	
Prepare the site for installations	X	
Provide adequate shelter/equipment room	X	
Provide site access	X	
Provide building penetrations and cable ports	X	
Install, test and verify ethernet backhaul system		X
Provide and install 120VAC power system		X
Furnish and install electrical circuit breakers	X	
Install Tait base stations		X

Tasks	City of Riverside, CA	Tait
Install network equipment, interface to network, and verify network connectivity		X
Provide cable tags		X
Provide equipment labelling		X
Set all system levels and parameters		X
Provide single point ground system including ground buss bar for the grounding of coax cables inside the building to the shelter ground bar	X	
Attach jumper ground wires between the RF rack and the shelter single point ground system		X
Provide grounding inside the RF rack		X
Furnish and connect RF jumper cables from rack to antenna lighting surge suppression devices (polyphaser)		X
Furnish and install the polyphaser and ground the device to main ground bus bar		X
Furnish and connect RF cables from polyphaser to antennas		X
Execute RF installation performance tests - VSWR, etc.		X
Complete the inventory of the installed equipment, s/w and configurations documentation		X
Post-installation site clean-up		X
Provide as-built photos of all the equipment and RF installations		X
Perform Acceptance Test Plan (ATP)		X
Submit as-built documentation		X

## 5. MILESTONES & DELIVERABLES

Tait will update all original as-built documentation as part of this project, including the following:

- System Requirement Specification - 50-01054 Riverside Fire Department SRS.docx
- System Dossier - 50-01054 Riverside Fire Department e-dossier.pdf (latest version)

All associated system-level, tower, rack diagrams, and IP address plans will be updated during documentation updates.

## 6. BILL OF MATERIAL



A preliminary Bill of Materials is provided in the table below.

Part Number	Description	SA	Qty
<b>TaitEnable</b>			<b>1</b>
TE1000-0201-0001-AAAA-10	E-Monitor Srvr AC Ess 100 net devices 1yr main	Y	1
<b>Console Integration</b>			<b>1</b>
RIC-Mz	RIC-M with z processor and TLS encryption implemented		9
RIC-Mz-3YR-WYT-PLUS	Additional 3 year warranty plus.		9
TT0006-0016	Cisco Router ISR 4331 DC 16P	Y	1
<b>TX/RX Sites x 3</b>			<b>3</b>
TB9435S-100T	TB9435 Single 100Watts Chassis Assembly	Y	4
TBA30A2-2100	TB8000/9000 Power Management Unit ACDC24 aux12	Y	4
T01-01121-LBAA	TB94 Linear PA 440-480M 100W	Y	4
T01-01103-LAAA	TB94 Rctr 440-480MHz S2	Y	4
302-06033-00	BRKT 3mm sprt	Y	8
219-01561-00	CBL cord 2m USA IEC blk	Y	4
TBAS061	SFE Key - Central Voter (91/94)	Y	4
TBAS062	SFE Key - Simulcast Enable Phase I (91/94)	Y	4
TT0006-0016	Cisco Router ISR 4331 DC 16P	Y	1
<b>GPS Frequency Reference</b>			
950-21116-00	OSC 2402-613 SecureSync Model 2402-613		1
950-21117-00	PS 2400-HS-D2 SecureSync Hot Swap 24/48VDC		2
950-00005-02	Orolia Epsilon SAS-17E		1
950-00005-03	Orolia Model 8226 Surge Supp		1
950-00005-21	Orolia Model 8230 GNSS Antenna		1
950-00002-84	300380_Ground Kit for LMR-600 GK-S600TT		1
950-00001-43	411476 Cold Shrink Tubing/WeatherProofing Kit (921226-001)		1
950-10015-67	475433 N Male EZ for LMR-600		4

950-00001-19	86672 LMR-600 ½" Foam Cable - Stand. w/ Foam Dielectric		50
RACK01	19" Rack Pkg - 7 Ft, Black, CHW 55053-703 (Includes 2 power strips and ground bar)		1
<b>RX Only Sites x 3</b>			<b>3</b>
TB9444-RX4T	TB9444 Multi Receiverx4 Chassis Assy	Y	1
TBA30A2-2100	TB8000/9000 Power Management Unit ACDC24 aux12	Y	2
T01-01104-LAAA	TB94 RxOnly 440-480MHz S2	Y	4
302-06033-00	BRKT 3mm sprt	Y	2
219-01561-00	CBL cord 2m USA IEC blk	Y	1
TBAS071-R0	SFE Key - IP Networking Satellite Rx Only	Y	4
TT0006-0016	Cisco Router ISR 4331 DC 16P	Y	1
GPS Frequency Reference			
950-21116-00	OSC 2402-613 SecureSync Model 2402-613		1
950-21117-00	PS 2400-HS-D2 SecureSync Hot Swap 24/48VDC		2
950-00005-02	Orolia Epsilon SAS-17E		1
950-00005-03	Orolia Model 8226 Surge Supp		1
950-00005-21	Orolia Model 8230 GNSS Antenna		1
950-00002-84	300380_Ground Kit for LMR-600 GK-S600TT		1
950-00001-43	411476 Cold Shrink Tubing/WeatherProofing Kit (921226-001)		1
950-10015-67	475433 N Male EZ for LMR-600		4
950-00001-19	86672 LMR-600 ½" Foam Cable - Stand. w/ Foam Dielectric		50
<b>Antenna &amp; RF Filtering Subsystems</b>			<b>1</b>



TX/RX Sites x 3				
HC10400-04J	450-475 MHz 4-channel hybrid tx combiner			3
DSRMC06-08BA	370-512 MHz 8-Channel RX Multicoupler			3
MWDTF4AU-D	UHF Dual sub-band Milled TX filter			3
DB3826BPB	450-475 MHz Dual Band RX window filter			3
DS4C06F36U-D	450-482 MHz 6 dB gain omni antenna DIN connector			6
RX Sites x 3				
DS4C00F36U-D (City Hall Site)	450-482 MHz 0 dB gain omni antenna DIN connector			1
DS4C06F36U-D	450-482 MHz 6 dB gain omni antenna DIN connector			2
DB3826BPB	450-475 MHz Dual Band RX window filter			3
DSRMC06-08BA	370-512 MHz 8-Channel RX Multicoupler			3
<b>Spare Equipment</b>				<b>1</b>
TX/RX Site Base Stations				
TB9435S-100T	TB9435 Single 100Watts Chassis Assembly	Y		2
TBA30A2-2100	TB8000/9000 Power Management Unit ACDC24 aux12	Y		2
T01-01121-LBAA	TB94 Linear PA 440-480M 100W	Y		2
T01-01103-LAAA	TB94 Rctr 440-480MHz S2	Y		2
302-06033-00	BRKT 3mm sprt	Y		2
219-01561-00	CBL cord 2m USA IEC blk	Y		2
TBAS061	SFE Key - Central Voter (91/94)	Y		2
TBAS062	SFE Key - Simulcast Enable Phase I (91/94)	Y		2
RX Only Base Stations				
TB9444-RX4T	TB9444 Multi Receiverx4 Chassis Assy	Y		2
TBA30A2-2100	TB8000/9000 Power Management Unit ACDC24 aux12	Y		4
T01-01104-LAAA	TB94 RxOnly 440-480MHz S2	Y		8

302-06033-00	BRKT 3mm sprt	Y	2
219-01561-00	CBL cord 2m USA IEC blk	Y	2
TBAS071-R0	SFE Key - IP Networking Satellite Rx Only	Y	8
<b>GPS Reference</b>			
950-21116-00	OSC 2402-613 SecureSync Model 2402-613		1
950-21117-00	PS 2400-HS-D2 SecureSync Hot Swap 24/48VDC		2
950-00005-02	Orolia Epsilon SAS-17E		1
950-00005-03	Orolia Model 8226 Surge Supp		1
950-00005-21	Orolia Model 8230 GNSS Antenna		1
950-00002-84	300380_Ground Kit for LMR- 600 GK-S600TT		1
950-00001-43	411476 Cold Shrink Tubing/WeatherProofing Kit (921226-001)		1
950-10015-67	475433 N Male EZ for LMR- 600		4
950-00001-19	86672 LMR-600 ½" Foam Cable - Stand. w/ Foam Dielectric		50
<b>Project Works and Services</b>			<b>1</b>
SVF-PMN	Services - Project Management		1
SVF-SYS	Services - System Design		1
SVF-COM	Services - Commissioning		1
L-T&L	Travel and Lodging		1
<b>Frequency Coordination</b>			<b>1</b>
License 4 TX Channels	Frequency Coordination: Orange Terrace TX		1
<b>Installation</b>			<b>1</b>
L-3PServices	Equipment Installation for QS2 to ASIP migration		1
<b>Training</b>			<b>1</b>

SVF-TDL	Services - Training Delivery	5
<b>Project Contingencies and Risk</b>		<b>1</b>
Risk	Risk	1
<b>Customer OTD &amp; Dealer Commission</b>		<b>1</b>
Customer One Time Discount	QS2 Trade In Value	1
<b>Service Advantage</b>		<b>1</b>
Tait EnableMonitor Annual License		
TEMMC100	Tait EnableMonitor <100 dev Soft Maint	7
Tait Advantage		
SRVADV-INW-TAM-1	Tait Advantage TAM Yr#1 Infra No Warrant	1
SRVADV-INW-TAM-2	Tait Advantage TAM Yr#2 Infra No Warrant	1
SRVADV-INW-TAM-3	Tait Advantage TAM Yr#3 Infra No Warrant	1
SRVADV-INW-TAM-4	Tait Advantage TAM Yr#4 Infra No Warrant	1
SRVADV-INW-TAM-5	Tait Advantage TAM Yr#5 Infra No Warrant	1
SRVADV-INW-TAM-6	Tait Advantage TAM Yr#6 Infra No Warrant	1
SRVADV-INW-TAM-7	Tait Advantage TAM Yr#7 Infra No Warrant	1
Extended Hardware Maintenance		
System Warranty includes years 1 and 2		
EPW-INF-TAM-3	Extended Warranty TAM Infrastructure Yr#3	1
EPW-INF-TAM-4	Extended Warranty TAM Infrastructure Yr#4	1
EPW-INF-TAM-5	Extended Warranty TAM Infrastructure Yr#5	1
EPW-INF-TAM-6	Extended Warranty TAM Infrastructure Yr#6	1
EPW-INF-TAM-7	Extended Warranty TAM Infrastructure Yr#7	1

---

Maintenance		
Year 1	On Site Maintenance Support Year 1	1
Year 2	On Site Maintenance Support Year 2	1
Year 3	On Site Maintenance Support Year 3	1
Year 4	On Site Maintenance Support Year 4	1
Year 5	On Site Maintenance Support Year 5	1
Year 6	On Site Maintenance Support Year 6	1
Year 7	On Site Maintenance Support Year 7	1

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## 7. UHF ANALOG LINK BUDGET

The UHF Analog link budget was designed to show coverage with a Delivered Audio Quality of 3.4 at 95 percent reliability. Table 3 and Table 4 provide the link budget parameters for radio system Talk In and Talk Out.

**Table 3 Talk In Link Budget**

Talk-In Configuration	
Band / Protocol	UHF Analog Conventional
Inferred Noise Floor	-127.5
Cs/N Static	7
Base Station Receiver Sensitivity	-120.5
DAQ Level	DAQ 3.4
C/(I+N) for Specified DAQ	26
UHF Environmental Noise at Radio Site	4 dB
Talk In Target in dBm	<b>-97.5</b>
Portable Body Loss	6.1 (Portable at Head)

**Table 4 Talk Out Link Budget**

Talk-Out Configuration	
Band / Protocol	UHF Analog Conventional
Inferred Noise Floor	-128.7
Cs/N Static	7 dB
Portable Receiver Sensitivity	-121.7
DAQ Level	DAQ 3.4
C/(I+N) for Specified DAQ	26 dB
Talk Out Target in dBm	<b>-102.7</b>
Portable Body Loss	12.6 dB (Portable On Hip)

## 7.1 RECEIVE AND TRANSMIT SITE INFORMATION

**Table 5 Receive System Parameters**

Name	Receive CoR	FL Length	FL Type	FL Loss	Filter Loss	Antenna Gain
Box Springs	75	85	7/8" Foam	0.71	2.5	6
City Hall RX Only	80	15	7/8" Foam	0.13	2.5	0
Orange Terrace	65	75	7/8" Foam	0.63	2.5	6
RERC RX Only	85	95	7/8" Foam	0.79	2.5	6
Tilden	65	75	7/8" Foam	0.63	2.5	6
UOC RX Only	60	75	7/8" Foam	0.63	2.5	6

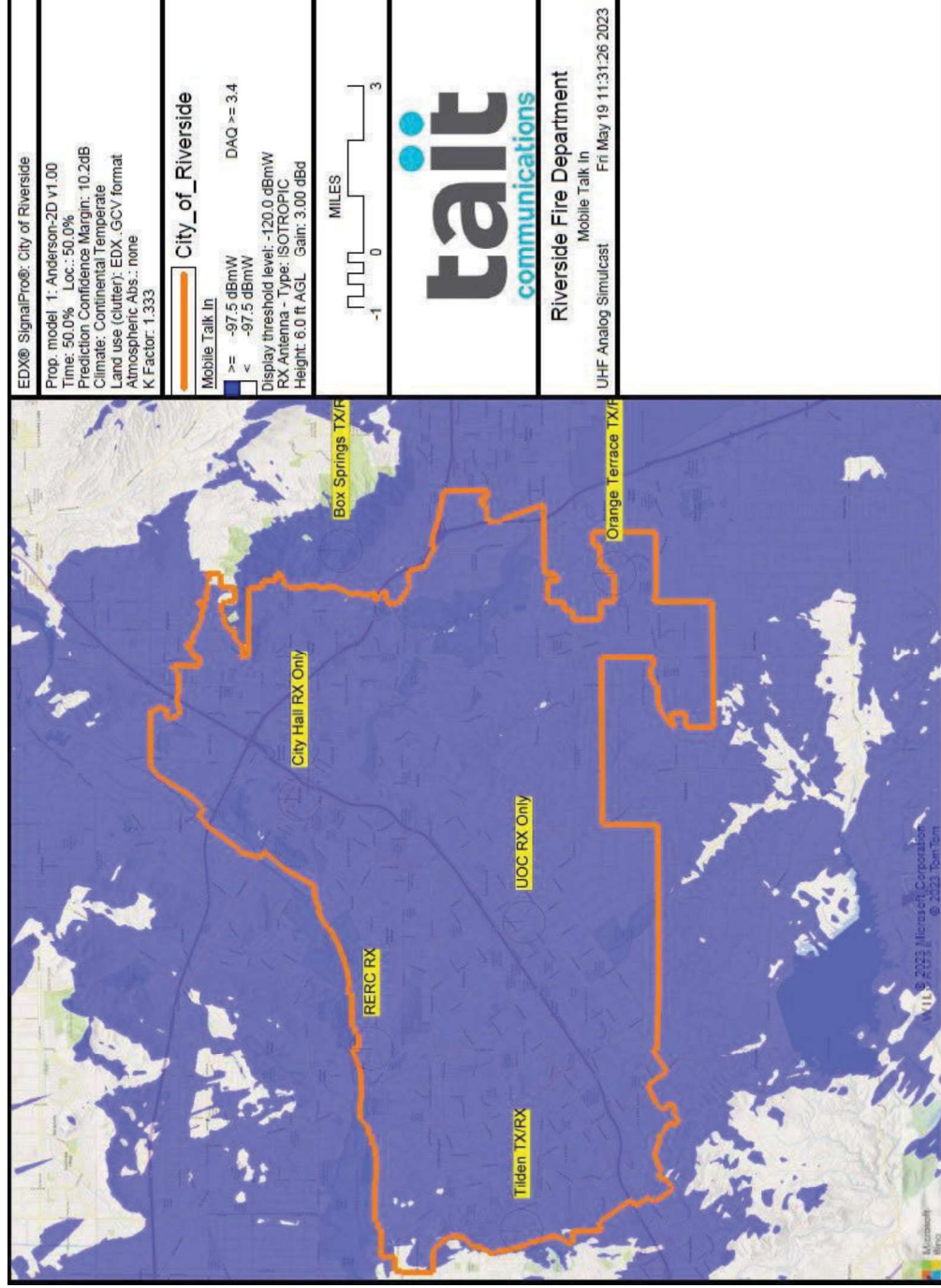
**Table 6 Transmit System Parameters**

Name	Transmit CoR	FL Length	FL Type	PA Output in dBm	Combiner Loss	Misc Loss	Feedline Loss	Ant Gain	ERP in dBm	ERP in Watts
Box Springs	35	50	7/8" Foam	50	7.5	1	0.38	6	47.12	52
Orange Terrace	35	50	7/8" Foam	50	7.5	1	0.42	6	47.08	51
Tilden	36	50	7/8" Foam	50	7.5	1	0.38	6	47.12	52

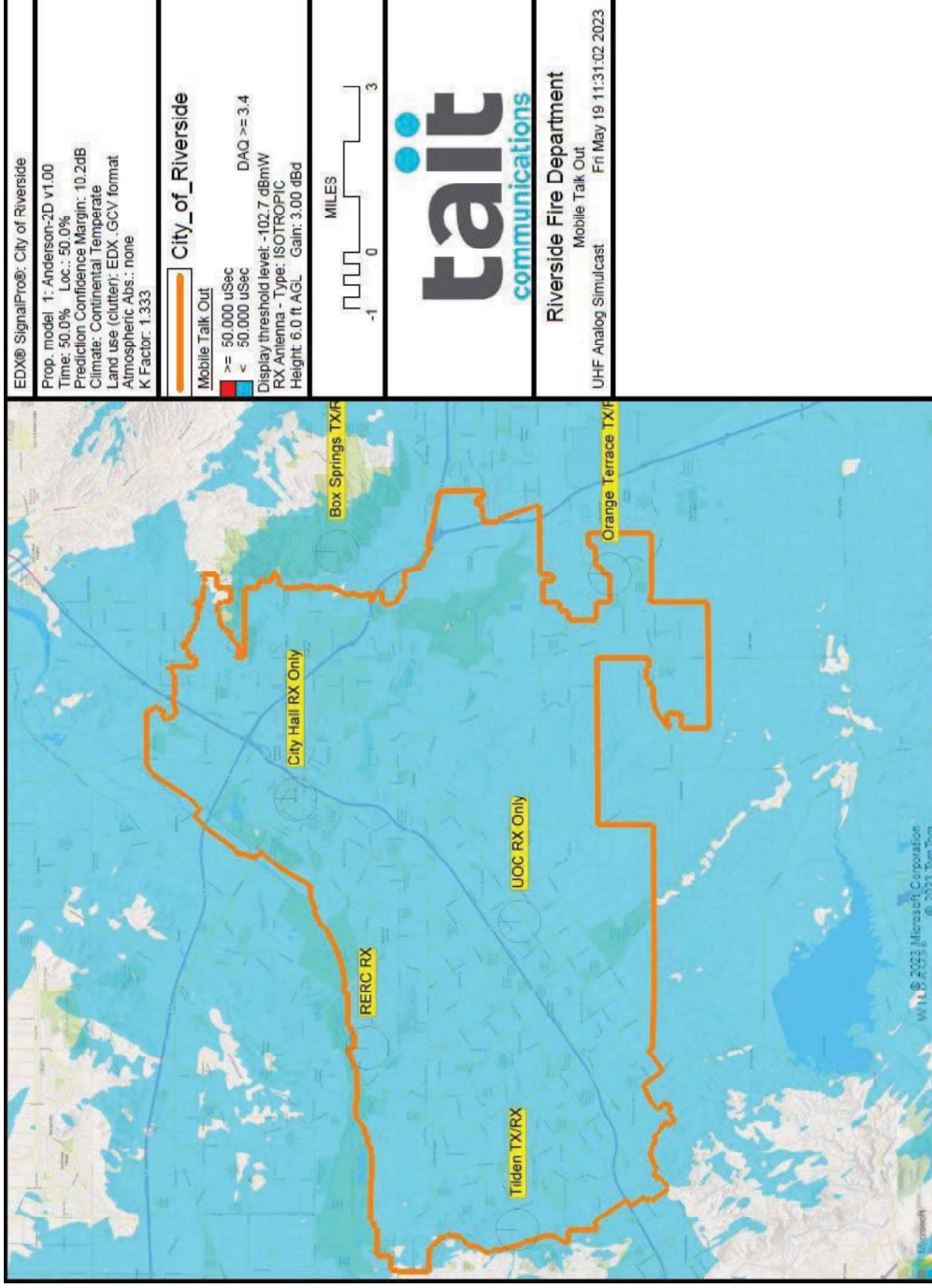
## 8. COVERAGE MAPS

Coverage Maps are provided as Information Only.

### 8.1 MOBILE TALK IN (MOBILE RADIO USERS TO SYSTEM)

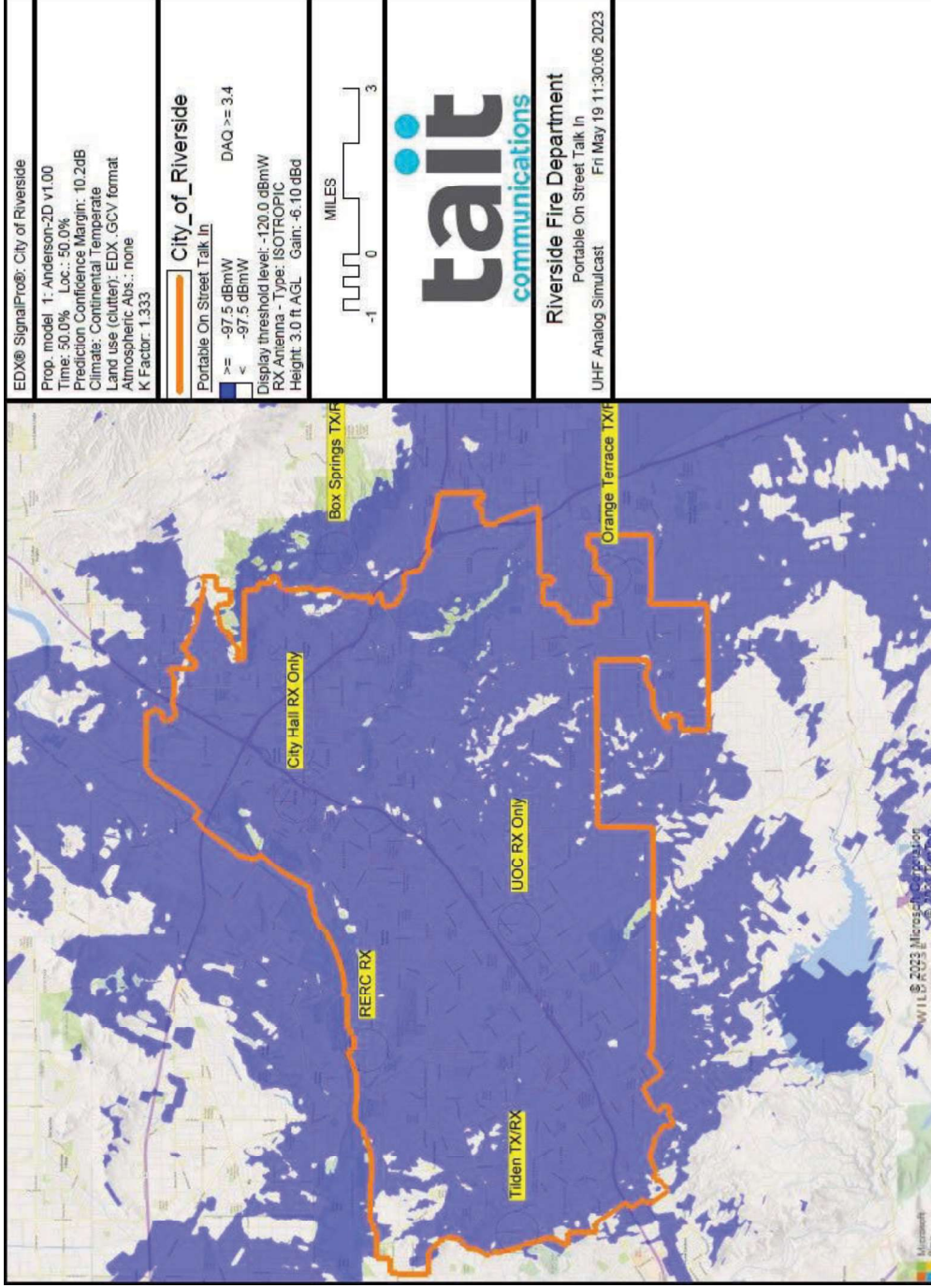


8.2 MOBILE TALK OUT (SYSTEM TO MOBILE RADIO USERS)

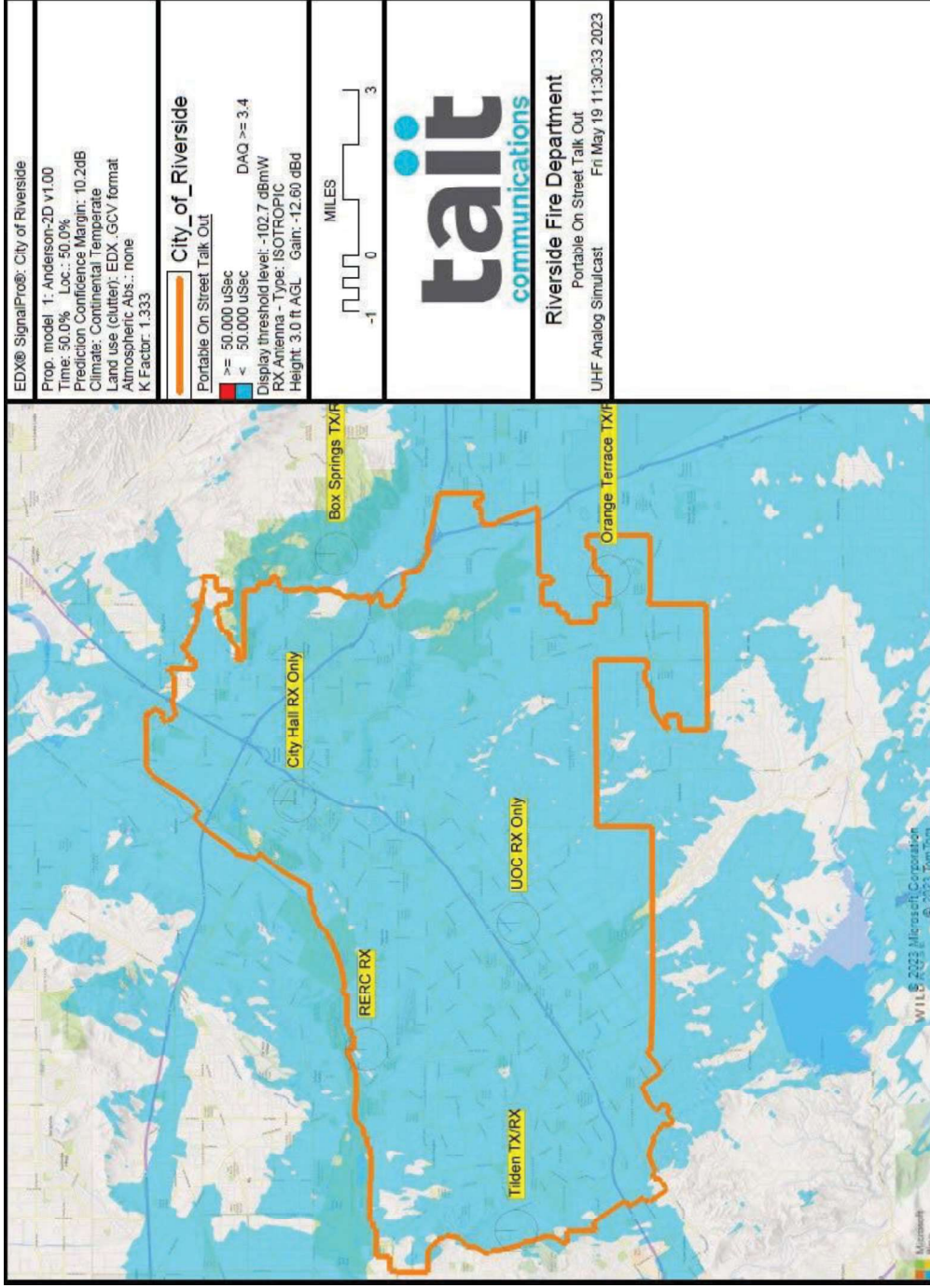




### 8.3 PORTABLE TALK IN (PORTABLE RADIO TO SYSTEM)



8.4 PORTABLE TALK OUT (SYSTEM TO PORTABLE RADIO)





# SECTION 3

# DELIVERY, INSTALLATION & STATEMENT OF WORK

TAIT PROPOSAL TO CITY OF  
RIVERSIDE FIRE DEPARTMENT

**CONFIDENTIAL**

# **DELIVERY AND INSTALLATION**

## Statement of Work

### **City of Riverside Fire Department**

### **QS2 to AS-IP Upgrade with Site Add-On**



## CONTACT INFORMATION

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## 1 INTRODUCTION

### 1.1. Purpose of this Statement of Work

This Statement of Work (SOW) defines the approach that Tait Communications (Tait) will take for the successful implementation of the City of Riverside Fire Department (RCFD) QS2 to AS-IP Upgrade with Site Add-On. It identifies the project tasks required and the party responsible for performing each task. This SOW creates a mutually agreed upon matrix of tasks and responsibilities which will result in successful system implementation.

It is important to note that this SOW is flexible and presented with the understanding that it will change once the dynamics and constraints of the project and the environment are established, during the design phase, for the successful completion of the project. Tait prides itself on being the company that listens to the Customer and excels in the execution of successful projects.

### SCOPE

The following documents detail Tait's work efforts and responsibilities for the Services and are included as Sections and an attachment to this document:

- a. Section A - Project Requirement
- b. Section B – Terms and Conditions

Services shall be supplied for the products at the sites identified in this SOW and unless agreed otherwise in writing, Tait shall not be obligated to provide the Services located at any other site(s). Any products and/or systems not listed in the SOW. ("Additional Products") shall only be covered by this agreement if agreed in writing by the Parties

### SECTION A - Project Requirements

#### 1.2. Riverside City Fire Department Proposal

This document addresses the SOW requirements for the City of Riverside Fire Department

The SOW for this project includes the following activities:

- Replacement of RF infrastructure at six radio sites
- Replacement of GPS Timing system at six radio sites
- Replacement of 4 of the existing QS2 channels with AS-IP
- Connection of Console to TB9400 Channel Groups via RIC-Mz
- Decommission the existing TB8100s, QS2 RSUs, and LEM cards.

## 2. STATEMENT OF WORK

Tait is well experienced with the needs and requirements of the implementation of critical communication systems. For this project, Tait is will undertake the following major activities:

1. System Design
2. Project Management
3. System Production and Field Preparations
4. Fixed Equipment Installation
5. Channel by Channel Migration
6. System and Site Commissioning and Optimization
7. Final System Acceptance Testing and 30-Day Burn-in
8. Close-out, As-Builts and System Dossiers

Some of these milestones are sequential and some can be executed in parallel. The Project Schedule reflects the recommended sequence and schedules of the work efforts.

To complete the scope described above, Tait is proposing three project phases.

- **Phase 1:**
  - Replace RF Infrastructure at each of the six sites.
    - Antenna Systems
    - Feedline
    - Combiner
    - Receive multicoupler.
  - Go live.
- **Phase 2:**
  - For each of the four channels
    - Replace TB8100/TB9100s with TB9400 at each of the sites.
    - Channels to be migrated one channel group at a time.
  - Configure RIC-Mz Connectivity between Dispatch Console system and TB9400 Channel Groups
  - Go live.
- **Phase 3:**
  - Decommission QS2 shelves (RSU T805-26-8301) at all sites.
  - Decommission any unused punch blocks and remove all wiring.
  - Decommission LEM cards.



\*Coverage Testing is not within the scope of this Project

### 3. SYSTEM DESIGN

#### 3.1. Project Kick-Off Meeting

The project manager will initiate the project implementation with the Project Kick-Off meeting with City of Riverside Fire Department at a mutually agreeable date and time. The Project Kick-off will be completed within 30 days of the contract award. The objectives of the kick-off meeting are:

- Introduction of all the project team and participants
  - Review and establish the roles of the project participants.
- Project background and requirements
- Proposed system overview
- Review the Statement of Work for the project scope, objectives responsibilities, and deliverables.
- System design strategy and methodology
- Fixed equipment installation and channel migration plan
- Detailed discussions on the preliminary project schedule
- Project risks and mitigation
- Wrap-up and next steps

**Project Kick-off Meeting Responsibility Matrix**

Tasks	RCFD	Tait
<b>Kick-Off Meeting</b>		
Assemble project team and travel to the RCFD location		X
Assemble customer team for kick-off meeting	X	
Create a Conferencing Bridge for those not able to attend in person		X
Provide location in appropriate conference room or training facility	X	
Review Statement of Work, scope, objectives, responsibilities, and deliverables	X	X
Discuss Next Steps, Detail Design Review	X	X

The result of this meeting will be that the Project Team Members are completely engaged, and Tait has sufficient information to create the Detail Design Review.

#### 3.2. Detailed Design Review

The Tait Team will use all the information provided and discussed at the kick-off meeting, the preliminary design review, and site survey information to develop and deliver the final system design

at the Detailed Design Review (DDR). Tait will present comprehensive and detailed design drawings and documentation to review and discuss with RCFD during the DDR.

Additional discussions are recommended to take place regarding the Customer, and Final Acceptance Testing Plans.

### Detailed Design Review Responsibility Matrix

Tasks	RCFD	Tait
<b>Detailed Design Review Deliverables</b>		
Assemble project team and travel to RCFD location	X	
Assemble customer team for Detailed Design Review meeting		X
Create a Conferencing Bridge for those not able to attend in person		X
Provide location in appropriate conference room or training facility	X	
Presentation, review, and discussions of the Detailed Design Documentation	X	X
List of equipment for all Sites		X
Site Acceptance Test Document review	X	X
Final System Acceptance Test Document review	X	X
Training Plan Review	X	X
Project Schedule Review	X	X
Formal approval of the Detailed Design	X	

RCFD's approved Detailed Design will lead to the next major steps of the project:

- Equipment Ordering
- Update and review the Project Schedule
- Installation of the equipment at Riverside City site facilities
- Site Commissioning
- Channel by Channel Migration
- Site Acceptance Testing
- Optimization of the installed system
- System Acceptance Testing
- 30-Day Burn-in
- Final System Acceptance

## 4. SYSTEM PRODUCTION AND INSTALLATION PREPARATIONS

### 4.1. Equipment Ordering and Preparations

Upon RCFD’s approval of the Detailed Design Review Documentation, Tait will place the order for the equipment. The equipment ordered will be RF site equipment from Tait manufacturing, and other site equipment and antenna and line equipment from other suppliers. Tait will be advising RCFD of the status of the anticipated equipment delivery.

The System and site RF Designs may have make-ready requirements, in which case work will be performed in preparation for the equipment installation.

During this period, it is recommended that the Site Acceptance Test documentation be completely reviewed as well as the Final Acceptance Test documentation.

It is recommended that we review the Tait equipment site requirements documentation to confirm that the site will be ready for installation.

**Equipment Ordering and Installation Preparations Responsibility Matrix**

Tasks	RCFD	Tait
<b>Equipment Ordering and Preparations</b>		
Approval of the Detailed Design Review	X	
Insert equipment delivery dates into the material planning system		X
Place orders with the factory		X
Place orders with key suppliers		X
Manufacture all infrastructure equipment		X
Review Tait equipment site requirements	X	X

## 5. RF SITE AND FIXED EQUIPMENT INSTALLATION

While RCFD will be responsible for any site development where equipment will be installed, Tait has provided the site requirements for the fixed equipment installation so that Riverside FD can pursue the necessary site development tasks in preparation for the installation.

Tait will create the Infrastructure Equipment Site designs and provide to RCFD. Tait Site Designs provide rack space requirements to RCFD for each site. Tait will deliver and install the RF equipment at each site.

Tait has created and provided individual RF Site designs for each site which details the equipment, in addition to the antenna and line requirements. Tait will be supplying the material and labor for this complete installation per the RF Site Designs. Tait’s designs will comply with the feedline standards, where ground kits are required at exterior building penetration, bottom of tower, and at each 100’ elevation on the tower.

Tait will be employing professional, experienced installation and integration teams for the RF Site equipment installations, utilizing the approved RF Site Design documentation.

A key aspect of the infrastructure equipment work is installation of the proposed antenna systems. Tait will mount the antennas on the towers, connect coaxial cables to the antennas and mount the cables to the tower cable ladder and onto the ice bridge terminating to a polyphaser inside the building.

After the installation, we will sweep the RF transmission lines and antennas utilizing an Anritsu Site Master, or equivalent cable-testing device. The cables will be tested at the designated frequency band(s) to measure the insertion loss and impedance. Tait will record the test data and provide the test data to Riverside FD.

Tait will install the base-stations and associated equipment. The Tait base station and associated equipment will be mounted in existing rack spaces. New jumper cables will be connected to the equipment and routed through the top of the racks onto the overhead cable trays and terminated to the coaxial cables that connect to the antenna.

Tait shall connect the equipment racks to power and will attach ground wires from the racks to the RCFD supplied grounding buss bar. Tait technicians shall set levels and verify the proper settings on the Tait base stations in preparation for the commissioning and optimization tests.

An inventory of the equipment installed, software and all configurations and levels will be documented, as well as comprehensive photos will be taken and provided to RCFD for maintenance reference and in compliance with the “As-Built” documentation requirements. Tait will provide RCFD with the installation documentation in a mutually agreed upon format, for each site installation.

Tait will work closely with the RCFD team to minimize impacts on RCFD operations during installation, commissioning, and channel migration. Tait’s implementation activities will be coordinated as appropriate with the RCFD Implementation Team.

### RF Site and Fixed Equipment Installation Responsibility Matrix

Tasks	RCFD	Tait
<b>RF Site and Fixed Equipment Installation</b>		
Prepare the site for installations	X	
Provide adequate shelter/equipment room	X	
Install network equipment, interface to network, and verify network connectivity to Tait ASIP		X
Provide site access	X	
Provide cable tags		X
Provide equipment tags		X
Set all system levels and parameters		X
Complete the inventory of the installed equipment, s/w and configurations documentation		X
Provide as-built photos of all the equipment installations		X
Confirm network connectivity.		X
Post-installation site clean-up		X
Tower structure	X	
Tower and shelter ground rings, tower ground bar, and AC neutral-ground bond to grounding system	X	
Provide adequate shelter/equipment room	X	
Provide site access	X	
Provide building penetrations and cable ports	X	

Prepare the site for installations	X	
Install network equipment, interface to network, and verify network connectivity		X
Install antenna systems		X
Tag and identify each new antenna line		X
Sweep test each new antenna line		X
Provide and install 48VDC power system, including primary, back-up, and AC surge suppression		X
Furnish and install electrical circuit breakers	X	
Install Tait base stations and RF equipment rack		X
Provide cable tags		X
Provide equipment tags		X
Provide single point ground system including ground buss bar for the grounding of coax cables inside the building to the shelter ground bar	X	
Attach jumper ground wires between the RF rack and the shelter single point ground system		X
Provide grounding inside the RF rack		X
Furnish and connect RF jumper cables from rack to antenna lightning surge suppression devices (polyphaser)		X
Furnish and install the polyphaser and ground the device to main ground bus bar		X
Furnish and connect RF cables from polyphaser to antennas, including polyphasers		X
Confirm network connectivity.		X
Execute RF installation performance tests - VSWR, etc.		X
Complete the inventory of the installed equipment, s/w and configurations documentation		X
Provide as-built photos of all the equipment and RF installations		X
Post-installation site clean-up		X

Once the RF Sites and Fixed Equipment has been installed and connected, channel migration will take place in accordance with the approved cutover plan.

## 6. SYSTEM MIGRATION AND FIELD OPTIMIZATION

System Migration and Field Optimization will be performed to make sure that each site and all systems will be ready for the Final System Acceptance Testing. The first requirement is to confirm that microwave system and connectivity is meeting the network and bandwidth requirements for jitter and delay.

Tait has a Site Commissioning task that will take place once the RF site is installed and connected to the network. This consists of a final inspection and quality control checklist in preparation for the Final System Acceptance Testing. Tait will utilize RCFD portable radios to confirm the commissioning performance of each site. The checklist confirms and verifies the site is configured and performing per the RF Site Design Document:

- The equipment has been inventoried and is inspected for any damage.
- Network connectivity to the RF system is established and operational.
- Frequencies of the base stations match the combiners/duplexers.
- RF channel(s) transmit.
- RF channel(s) receive.
- RF channel(s) site sensitivity.
- RF channel(s) functional
- RF channel(s) operational
- Antenna(s) VSWR test
- Antenna/Duplexer isolation test
- Base stations are labeled with the frequency and IP address.
- Combiner/Duplexer insertion loss checked.
- Site is clean.
- Trash has been removed.

Tait will also complete the installation of the Fixed System Equipment, including EnableMonitor and the RIC-Mz console interface. All systems will then be optimized for operation and functionality. This optimization is to confirm that the system is performing per the published hardware specifications and will demonstrate system functionality.

#### System Migration and Field Optimization Responsibility Matrix

Tasks	RCFD	Tait
<b>System and Field Optimization</b>		
Provide site access	X	
Complete installation of EnableMonitor and RIC-Mz interfaces to console system	X	X
RF Site Optimization	X	X
Verify Connectivity to RFSSs	X	X
Perform Site Commissioning and Optimization		X
Channel Cutover in accordance with approved Migration Plan	X	X
Prepare for Final System Acceptance Testing	X	X

Upon the completion of the Site and System Optimization, the system will be ready for Final System Acceptance Testing and the 30-day burn-in period.

## 7. FINAL SYSTEM ACCEPTANCE TESTING

Tait will notify RCFD when the installation and optimization has been completed and the system is ready for Final System Acceptance Testing. Tait will perform Final System Acceptance Testing per the RCFD approved Final System Acceptance Test Plan with RCFD assigned personnel.

The Tait system engineer will provide documentation defining each of the tests. The test procedures contain a short description, test methodology, and a record form for logging results and acceptance signatures for each test. The Tait Team will use a punch list to document any issues found, so the team can quickly resolve each. Follow-up documents will show the correction of any open items.

Upon satisfactory completion of each test, the project manager will present the System Acceptance documentation to RCFD's project manager. With RCFD's approval, the project team and RCFD can proceed with the 30-day burn-in period.

### Final System Acceptance Testing Responsibility Matrix

Tasks	RCFD	Tait
<b>Final Network Acceptance Testing</b>		
Assemble project team and travel to the Riverside FD's location	X	
Assemble customer team for Final System Acceptance Testing		X
Create a Conferencing Bridge for those not able to attend in person		X
Provide location in appropriate conference room or training facility		X
Perform functional ATP on radio system, console system and EnableMonitor .		X
Submit functional Final System Acceptance Test results		X
Approve functional Final System Acceptance Test results (within 5 business days)	X	

## 8. DECOMMISSIONING AND EQUIPMENT REMOVAL

Tait understands that RCFD will be responsible for the equipment removal and transporting of all decommissioned fixed-base equipment following Final System Acceptance.

## 9. ADDITIONAL INFORMATION

Tait's experience in Project Management and System Implementation demonstrates that it is most important for open and complete communications to be facilitated throughout the project's life cycle and that situations arise, requiring adjustment to the Statement of Work and Project Schedule.

Tait is looking forward to working with RCFD on the successful implementation of their ASIP upgraded two way radio communication system.

## SECTION B: TERMS AND CONDITIONS

As it pertains to this Statement of Work (hereinafter, the “SOW”) the following terms will apply. In the event of discrepancy of any term with the terms of the Support Agreement, precedence will be given in the following order: (1) this SOW, (2) attachments to this SOW, and (3) the Support Agreement executed by the parties. All attachments, and all documents referred to in this paragraph, are hereby incorporated fully by reference.

### 1. DELIVERY OF EQUIPMENT

- 1.1 Equipment will be delivered CIP Destination (Incoterms 2010) to the Client’s site location(s).
- 1.2 In the event Equipment is delivered to Client or Client’s representative, no claim for shortage, out of box failures or damage in respect of Equipment delivered will be considered unless received in writing by Tait within seven days from the earlier of the date of receipt of the Equipment by the Client or Client’s representative.
- 1.3 **TITLE AND RISK OF LOSS.** Title to equipment supplied under this SOW shall pass to the Client upon full payment to Tait for such equipment. Risk of loss to the Equipment will pass to Client upon delivery of the Equipment, except that title to Software will not pass to Client at any time. The Client acknowledges this SOW creates a security interest in favor of Tait in Products supplied by Tait to the Client which have not been paid for in full, as security for payment of all monies payable from time to time to Tait by the Client and for the performance of all the Client’s other obligations from time to time to Tait. The Client shall do anything including signing and delivering any documents Tait reasonably requires to ensure Tait has a perfected security interest in goods supplied. The Client waives any rights it may have to receive a statement regarding registration of the security interest.
- 1.4 **DISCLAIMER OF LICENSE.** Except as explicitly provided in the Tait Software License SOW, nothing in this SOW will be deemed to grant, either directly or by implication, estoppel, or otherwise, any license or right under any patents, patent applications, copyrights, trademarks, trade secrets or other intellectual property of Tait.

### 2. PAYMENT TERMS

- 2.1 Client shall pay Tait within 30 days of invoice date. Overdue invoices will bear interest at a rate of 1.25% per month of the overdue amount for every month or fraction thereof, unless such rate exceeds the maximum allowed by law, in which case it shall be reduced to the maximum allowable rate.
- 2.2 No payment may be withheld by the Client by way of set-off (legal, equitable or otherwise) against any sums owed to Tait.
- 2.3 Prices are inclusive of packing to full normal shipping standards. Contract price is inclusive of freight charges.
- 2.4 Prices for Equipment are exclusive of any taxes, if any. Client shall reimburse Tait where Tait pays the same or is responsible for payment of all such taxes including penalties where Client actions resulted in incurring such penalties.
- 2.5 If Client requires Tait to vary quantities, delivery dates or Equipment specifications from those against which prices were quoted; Tait shall have the right to adjust the quoted price.



### **3. INSPECTION, TESTING AND ACCEPTANCE**

- 3.1 The Equipment will be submitted to Tait's standard tests before shipment.
- 3.2 Any additional tests of the Equipment, which may be required by Client, must be agreed to separately in writing and may be subject to additional charges.
- 3.3 **SYSTEM ACCEPTANCE.** During system acceptance testing:
  - a. If the Acceptance Test Plan includes separate tests for individual subsystems, both parties shall promptly execute certificates of subsystem acceptance upon the successful completion of testing of such subsystems. For avoidance of doubt there will be no acceptance testing completed for each individual site to test the existing base station functionality. Communication with the core network will be the focus of the system acceptance testing.
  - b. Minor omissions or variances in performance which do not materially affect the operation of the Communications System as a whole will not postpone acceptance.
  - c. Client and Tait will jointly prepare a list of such omissions and variances which Tait will correct according to an agreed upon schedule.
  - d. Final System Acceptance will occur upon the successful completion of such testing at which time both parties shall promptly execute a certificate of system acceptance.
- 3.4 Tait agrees to notify Client when the System is ready for acceptance testing. Tait and Client agree to commence acceptance testing within ten business days after receiving such notification.
- 3.5 Tait may, but is not obligated to, issue written authorization for Client's use of the Communications System or its subsystem(s) for limited training or testing purposes, prior to the completion of testing by Tait. Any use of the Communications System without prior written authorization by Tait shall constitute System Acceptance.
- 3.6 Any use of the Communications System or its subsystems by Client, following a purported notification that the System is not operating properly or is deficient in any aspect or performance shall constitute System Acceptance.

### **4. DELAYS/CANCELLATION**

- 4.1 Successful project implementation will require cooperation and fairness between the parties. Because it is impractical to provide for every contingency which may arise during the performance of this SOW, the parties agree to notify the other if they become aware that any condition will significantly delay performance. The parties will agree to reasonable extensions of the project schedule by executing a written change order. In the event Tait's performance is delayed by acts of the Client or any party under its control (including subcontractors), Tait shall be entitled to an adjustment for time and expenses resulting therefrom in addition to an extension of time and of performance.
- 4.2 No action on any changes this SOW will be taken until the official Change Request has been signed by Client and received and approved by Tait. Responsibilities remain unchanged until the issuance of a Change Request and a new revised Scope of Work which would specify new rates of payment, if that has changed.
- 4.3 Under no circumstances will either party be responsible for delays or lack of performance resulting from events beyond the reasonable control of that party ("Force Majeure events") such as delay in delivery, nor for any failure to perform this SOW, or for loss or damage to the

Products directly or indirectly caused by any act of God, fire, theft, riot, war, embargo, natural disaster, adverse weather, failure of third party suppliers to deliver parts and components, an action of any government or any other occurrence (whether or not of a similar nature to those specified) beyond the Party's reasonable control.

- 4.4 Client will make available to Tait the sites when scheduled and Client will not otherwise unreasonably delay or prevent Tait's performance of its responsibilities. If Client delays Tait's performance, the parties will execute a Change Order to compensate Tait for reasonable charges incurred because of such delays. Such charges include, but are not limited to, costs incurred by Tait and/or its subcontractors for additional freight, warehousing and handling; suspending and re-mobilizing the work; additional engineering and standby time calculated at then current man-day rates; and preparing and implementing a "work around" plan.

## **5. EQUIPMENT SPECIFICATION AND QUALITY**

- 5.1 Tait reserves the right to amend details of the technical specification of the Equipment in the Contract to improve the facilities or performance of the Equipment or to substitute items of equivalent performance where items referred to in the quotation are no longer available.
- 5.2 All specifications, particulars and descriptions set out in catalogs, brochures and similar documents, shipping specifications and particulars of weight and dimension are approximate and being intended for general guidance and shall not be binding.
- 5.3 Tait reserves the right to discontinue the sale of Equipment and to change the formula, contents or packaging thereof. Tait shall not incur any liability thereby or any obligation to change or repurchase Equipment previously sold by Tait to Client.
- 5.4 **INTRINSICALLY SAFE PRODUCT.** IF the Client purchases Intrinsically Safe (IS) Products (both IS radios and/or IS accessories), THEN specific additional terms shall apply What are they?

## **6. COMMISSIONING AND SITE CONDITIONS**

- 6.1 In addition to its responsibilities described in the Statement of Work, Client agrees to provide a designated project director, procure any necessary construction permits, building permits, zoning variances and the like, provide access to the sites identified in the Scope of Work as requested by Tait, and have such sites available for commissioning of the Equipment by Tait in accordance with the performance schedule and Statement of Work.
- 6.2 If Client and Tait determine that any change in sites, site availability, installation plans, or specifications will require an adjustment in the contract price or in the time required for the performance of this SOW, the parties will agree to an equitable adjustment in the price, performance schedule, or both; and the corresponding SOW will be modified by a Change Order, in accordance with Clause 9 (Change Request) below.
- 6.3 This SOW is predicated upon normal soil conditions as defined by the version of Electronics Industries Alliance (E.I.A.) standard RS-222 (Structural Standards for Steel Antenna Towers and Antenna Supporting Structures), and as amended, in effect on the Effective Date of this SOW. If any remediation is required as a result of soil conditions outside the specifications of the SOW, they will be Client's sole responsibility to cure.

## 7. TERRITORIAL RESTRICTIONS

- 7.1 The Client shall not without the express written approval of Tait export or use the Equipment, or sell or hire it to a person who to his knowledge intends to export or use it, outside the country of intended use as declared to Tait. The Client undertakes to comply with United States re-export control restrictions where applicable.
- 7.2 If export or import restrictions are imposed or export or import licenses are cancelled, withdrawn or not renewed, then the Client shall pay for all goods and services already delivered at the contract rate and payments already made may be used by Tait in respect of claims or demands made or losses incurred under or in connection with the Contract.

## 8. INDEMNIFICATION

- 8.1 GENERAL INDEMNITY. Subject to the limitations in the Limitation of Liability clause of this Section, Tait will indemnify and hold Client harmless from any liabilities which may accrue against Client on account of direct physical damage to tangible property or personal injury to the extent the damage or injury is caused by Tait's negligence or recklessness, or that of its employees, subcontractors, or agents while on the Client's premises during the provision of services pursuant to this SOW, provided that Tait is promptly informed in writing and is furnished a copy of each communication, notice or other action and is given full and complete authority, information and assistance (at Tait's expense) necessary for the defense, compromise or settlement of such claim. Tait shall not be liable for any negligent act or omission of any indemnified party.
- 8.2 Client hereto agrees to defend and indemnify and hold Tait, its officers, directors and employees, from and against any and all claims, demands and causes of action asserted by any third party for loss or damage to tangible property or injury or death to any person, to the extent such damage, injury or death is caused by the negligence or other wrongful acts or omissions of the Client in the performance of the Client's obligations under this SOW, provided that Client is promptly informed in writing and is furnished a copy of each communication, notice or other action and is given full and complete authority, information and assistance (at Client's expense) necessary for the defense, compromise or settlement of such claim.

8.3 Tait's indemnification of Client under this clause will be the full extent of Tait's indemnification of Client from liabilities that are in any way related to Tait's performance under this SOW.

## 9. LIMITATION OF LIABILITY

- 9.1 Notwithstanding any other provision contained in this SOW, Tait's total liability, whether for breach of contract, warranty, negligence, strict liability, tort, indemnification, or otherwise, will be limited to the direct damages recoverable under law, but not to exceed (i) for claims regarding Products, the price of the equipment with respect to which losses or damages are claimed; or (ii) for claims regarding Services, the amount paid or payable by the Client during the twelve months immediately preceding the first event giving rise to the liability;
- 9.2 NEITHER PARTY WILL BE LIABLE FOR ANY (I) LOSS OF PROFITS; (II) LOSS OF TURNOVER; (III) LOSS OF OR DAMAGE TO REPUTATION; (IV) LOSS OF, OR LOSS OF THE USE OF ANY SOFTWARE OR DATA; (V) LOSSES OR LIABILITIES IN RELATION TO ANY OTHER CONTRACT; OR (VI) INDIRECT, INCIDENTAL, SPECIAL OR

CONSEQUENTIAL LOSS OR DAMAGE INDIRECT, PUNITIVE, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGE IN CONNECTION WITH OR ARISING OUT OF THIS SOW HOWEVER IT ARISES, WHETHER FOR BREACH OR IN TORT, UNDER AN INDEMNITY, EQUITY OR OTHERWISE, EVEN IF THAT PARTY HAS BEEN PREVIOUSLY ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

- 9.3 No action for a breach of this SOW or otherwise relating to the transactions contemplated by this SOW may be brought more than one year after the accrual of such cause of action except for money due upon an open account.
- 9.4 To the maximum extent permitted by law, the parties agree that ALL TERMS IMPLIED BY LAW INCLUDING ANY WARRANTY OR CONDITION AS TO MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF THE EQUIPMENT ARE HEREBY EXCLUDED.
- 9.5 The Client acknowledges that it uses the Equipment for business purposes and therefore agrees that all consumer protection terms implied by law shall not apply.
- 9.6 The Client warrants that it has not relied on any representation made by Tait which has not been stated expressly in this Contract or upon any catalogs or publicity material produced by Tait and no statement made or agreed and no liability undertaken orally shall be binding upon Tait unless confirmed by Tait in writing.
- 9.7 The standard equipment is not designed or intended for use in on-line control of aircraft, air traffic, aircraft navigation or aircraft communications; intrinsically safe environments (unless intrinsically safe equipment is specifically ordered and supplied and used in accordance with the supplied instructions) or in the design, construction, operation or maintenance of any nuclear facility. Tait disclaims any express or implied warranty of fitness for such uses. The Client will not use or resell Products for such purposes.
- 9.8 The Client acknowledges that any software supplied cannot be tested in every possible permutation and accordingly Tait does not warrant that software supplied will be free of all defects or that its use will be uninterrupted.
- 9.9 Client agrees that it shall take such reasonable precautions (relative to the importance to Client of the Products), including without limitation backing up software and data at reasonable intervals, implementing back-up systems or redundancy and maintaining suitable numbers of spare units at suitable locations (at a minimum to Tait recommended spares levels). Tait shall have no liability for any losses suffered by Client to the extent that the loss concerned would have been prevented by the taking of such reasonable precautions.
- 9.10 The provisions of this Clause 17 have been considered by the Parties in the light of the availability of insurance and the relative positions, risks, and responsibilities of the Parties and both Parties agree that they are fair and reasonable
- 9.11 All provisions of this Limitation of Liability and its subclauses shall survive the expiration or termination of this SOW.

## 10. GOVERNING LAW

This Contract shall be governed and construed in accordance with the laws of the State of Texas, USA. Any US or state conflict of law rule that may require reference to the laws of some

other country or state shall be disregarded, the result being that Texas substantive law will control the issue.

## **11. DISPUTES**

- 11.1 Tait and Client will attempt to settle any claim or controversy arising from this SOW through consultation and negotiation in good faith and a spirit of mutual cooperation. Neither party shall institute a proceeding hereunder unless at least sixty days prior thereto such party shall have furnished to the other written notice by registered mail of its intent to do so. Notice to the Client shall be addressed to Lexington County Solicitor. Notice to Tait shall be addressed to its "General Counsel." If those attempts fail, the dispute will be mediated by a mediator chosen jointly by Tait and Client within thirty days after notice by one of the parties demanding non-binding mediation. Neither party may unreasonably withhold consent to the selection of a mediator, and Tait and Client will share the cost of the mediation equally. The parties may postpone mediation until they have completed some specified but limited discovery about the dispute. The parties may also replace mediation with some other form of non-binding alternative dispute resolution ("ADR") procedure.
- 11.2 Any dispute that cannot be resolved between the parties through negotiation or mediation within two months after the date of the initial demand for non-binding mediation may then be submitted by either party to court. If it is necessary to institute a legal proceeding with respect to the terms or performance of the Contract, the parties hereby agree to submit such dispute to the jurisdiction of the Court of Harris County, Texas, which shall be the exclusive forum and venue for resolution of any such disputes. The use of any ADR procedures will not be considered under the doctrine of laches, waiver, or estoppel to adversely affect the rights of either party. Either party may resort to the judicial proceedings described in this paragraph prior to the expiration of the two-month ADR period if (a) good faith efforts to attempt resolution of the dispute under these procedures have been unsuccessful or (b) interim relief from the court is necessary to prevent serious and irreparable injury to such party or any of its affiliates, agents, employees, customers, suppliers, or subcontractors.

## **12. INTELLECTUAL PROPERTY WARRANTY**

- 12.1 Because of the complexity of manufacturing techniques for electronic components and of the intellectual property rights pertaining thereto including software, Tait is unable to declare that the Equipment does not infringe the intellectual property rights of third parties. Tait will defend, at its own expense, any suit brought against the Client to the extent that it is based on a claim that the Equipment or Tait Software infringe a United States patent or copyright, and Tait will pay those costs and damages finally awarded against the Client in any such suit which are attributable to any such claim. If unfavorable judgment is rendered against Tait, Tait shall at its option take out a license from the said third party or shall modify the Equipment in such a way as to avoid infringement or replace the components or software with components or software of equivalent quality, functionality and performance. If such solution shall be impractical for economic and/or technical reasons Tait shall accept the return of the Equipment and refund the Client the Client's net book value for the Equipment deemed to infringe.
- 12.2 Tait's obligations under Clause 15.1 shall only apply if the Client promptly notifies Tait, grants Tait sole control of the defense or settlement of the Claim and if appropriate settle the claim at Tait's expense, gives Tait all available information, assistance and authority to enable Tait to defend or settle the claim at Tait's expense and has not made any admission as to liability in

relation to or compromising or agreeing to any settlement of any Claim without the prior written consent of Tait.

- 12.3 Tait's obligations under Clause 15.1 will not apply to any claim, suit or any loss or damage ("Claim") resulting from it to the extent that the Claim arises from: a. the combination or the use in combination of the Equipment with any other products or items not supplied or not previously approved by Tait; b. the possession or use of the Equipment (or any part of them) other than in accordance with the terms of the SOW; c. the possession or use of the Equipment (or any part of them) by anyone other than Client or its authorized subcontractors; d. failure by Client to implement changes, replacements or new releases recommended by Tait where the infringement would have been avoided by such changes replacements or new releases; e. the modification or adjustments of the Equipment by anyone other than Tait or its approved suppliers.
- 12.4 Notwithstanding anything in this SOW Tait will not be liable for any claim by the Client in relation to this SOW unless the claim is received in writing by Tait within 3 months of the date of when the alleged claim ought reasonably to have come to the attention of the Client.
- 12.5 This Clause states the entire liability of Tait and the exclusive remedies for the Client for claims of infringement of third-party intellectual property rights.

### **13. LIMITED WARRANTY**

- 13.1 **TAIT MAKES NO WARRANTY OR REPRESENTATION WITH RESPECT TO ANY OF ITS PRODUCTS, THEIR WORKMANSHIP OR MERCHANTABILITY, EXCEPT THOSE MADE UNDER ITS STANDARD LIMITED WARRANTY INCLUDED AS AN EXHIBIT TO THIS SOW.**
- 13.2 Warranty repairs shall only be undertaken by an Authorized Tait Service Center unless specifically authorized in writing by Tait. In cases where Tait authorizes the Client to undertake warranty repairs, Tait will replace faulty components free of charge. No reimbursement will be made with respect to labor.
- 13.3 Warranty shall start from final acceptance or Beneficial Use, whichever occurs first.
- 13.4 Tait warrants that it shall perform the Services in a professional and workmanlike manner, subject to a claim against this warranty being notified to Tait within 90 days of provision of the relevant Support Services. Client's sole and exclusive remedy and Tait's entire liability for such breach of the above warranty or any claim related to the Support Services shall be re-performance of the Support Services.
- 13.5 The Client acknowledges that while Tait may be called upon to give consultative advice under this SOW and while Tait will use its reasonable endeavours to give the best advice it can to the Client, Tait advice is dependent upon inter alia the information supplied to Tait by the Client and third parties and accordingly the Client may make no claim against Tait or its personnel for the appropriateness of such advice.
- 13.6 Warranties given in this Clause are unique to and may not be assigned or transferred in whole or in part by, Client.

### **14. ORDER OF PRECEDENCE**

In the event there should be any conflict or ambiguity created between the provision of this SOW, any Purchase Order, invoice, statement, whether written or oral, between Client and

Tait, or subsequent agreements between the Parties dealing with the subject matter of this SOW, the provisions of this SOW shall control unless modified by a written instrument executed by each of the parties hereto.

## **15. SURVIVAL AND SEVERABILITY**

- 15.1 All provisions of this SOW which by their nature should apply beyond its term will remain in force after any termination or expiration of this SOW including, but not limited to, those addressing the following subjects: Limitation of Liability, Intrinsically Safe Product, Confidentiality, Relationship of The Parties, Governing Law, Dispute Resolution, Survival, Defined Terms and Payment and extend to all media in which data and information may be stored or displayed.
- 15.2 In the event that any provision of this SOW is held by a court of competent jurisdiction to be invalid or unenforceable, the remainder of the provisions of this SOW will remain in full force and effect.

## **16. MISCELLANEOUS**

- 16.1 **TAXES.** The purchase price does not include any amount for federal, state, or local excise, sales, lease, service, rental, use, property, occupation, or other taxes, all of which (other than federal, state, and local taxes based on Tait's income or net worth) will be paid by Client except as exempt by law. If Tait is required to pay or bear the burden of any such taxes, Tait will send an invoice to Client who will pay Tait the amount of such taxes (including any interest and penalties) within twenty days after the date of the invoice. Client will be solely responsible for reporting the Equipment for personal property tax purposes.
- 16.2 **NOTICES.** Any notice required or contemplated by this Contract shall be in writing, delivered in person, by facsimile, courier or by registered mail with return receipt requested, addressed to the parties at their addresses hereinabove set forth, or at such other address as may from time to time be substituted therefore by notice in writing sent by the party changing its address.
- 16.3 **NO WAIVER.** Failure or delay on the part of Tait or Client to exercise any right, power, or privilege hereunder shall not operate as a waiver. If any provision of this SOW is contrary to, prohibited by or held invalid by any law, rule, order, or regulation of any government or by the final determination of any state or federal court, such invalidity shall not affect the enforceability of any other provisions not held to be invalid. Clause, section and paragraph headings used in this SOW are for convenience only and are not to be used to construe the provisions of this SOW.
- 16.4 **SUBCONTRACTING.** Tait retains the right to subcontract, in whole or in part, any effort required to fulfill its obligations under this SOW. Additionally, Tait may assign or subcontract any and all rights and obligations hereunder upon notification to the Client to (i) any Tait-affiliated company; (ii) a third party pursuant to any sale or transfer of all or part of Tait's assets or business; or (iii) a third party pursuant to or in connection with any financing, merger, consolidation, change in control, reorganization or other combination involving Tait.
- 16.5 **ENTIRE AGREEMENT.** This SOW (and any Schedules, attachments, addenda, and supplements thereto), shall be the complete and exclusive statement of the agreement between the parties as to the subject matter of the SOW, and shall be binding upon each of the parties hereto, their respective successors and, to the extent permitted, their assigns. This

SOW supersedes and cancels all prior discussions, Contracts and understandings with respect to the subject matter hereof between the parties, written, oral or implied. Neither this SOW nor any Schedules can be amended or otherwise modified, except as agreed to in a written instrument signed by the duly authorized representatives of both parties hereto.





# SECTION 3.1

# PROJECT SCHEDULE

TAIT PROPOSAL TO CITY OF  
RIVERSIDE FIRE DEPARTMENT

**CONFIDENTIAL**

ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Resource Names	art
1		<b>City of Riverside FD QS2 to ASIP Conversion</b>	<b>230 days</b>	<b>Mon 7/17/23</b>	<b>Fri 5/31/24</b>			N
2		Contract Award	1 day	Mon 7/17/23	Mon 7/17/23		RCFD	
3		Project Kick Off Meeting	1 day	Tue 8/8/23	Tue 8/8/23	2FS+15 days	Tait,WC	
4		<b>Detail Design Preparation and Work Efforts</b>	<b>31 days</b>	<b>Wed 8/9/23</b>	<b>Wed 9/20/23</b>			
5		<b>6 Sites</b>	<b>31 days</b>	<b>Wed 8/9/23</b>	<b>Wed 9/20/23</b>	<b>3</b>		
6		Schedule site visits	1 day	Wed 8/9/23	Wed 8/9/23	2FS+15 days	Tait,RCFD,VC	
7		Site Surveys	5 days	Thu 8/10/23	Wed 8/16/23	6	VC	
8		Site Documentation Reports	5 days	Thu 8/17/23	Wed 8/23/23	7	VC	
9		RF Site Design	20 days	Thu 8/24/23	Wed 9/20/23	8	Tait	
10		<b>Detailed System Design Review</b>	<b>6 days</b>	<b>Wed 9/20/23</b>	<b>Thu 9/28/23</b>			
11		Detailed Design Presentation and Review	1 day	Thu 9/21/23	Thu 9/21/23	9	Tait,WC	
12		Site Acceptance Test Plan	0 days	Wed 9/20/23	Wed 9/20/23	9	Tait	
13		System Acceptance Test Plan	0 days	Wed 9/20/23	Wed 9/20/23	9	Tait	
14		Cutover Transition Planning	0 days	Wed 9/20/23	Wed 9/20/23	9	Tait	
15		Training Plan	0 days	Wed 9/20/23	Wed 9/20/23	9	Tait	
16		Riverside City FD Approval of Detailed System Design	5 days	Fri 9/22/23	Thu 9/28/23	11	RCFD	
17		<b>Ordering, Production &amp; Delivery</b>	<b>146 days</b>	<b>Wed 8/9/23</b>	<b>Wed 2/28/24</b>			
18		Antenna Sybssystem Orders Placed	5 days	Fri 9/29/23	Thu 10/5/23	16	Tait	
19		Antenna Subsystem Equipment Manufacturing	30 days	Fri 10/6/23	Thu 11/16/23	18	Tait	
20		Antenna Sbsystem Orders Delivered	10 days	Fri 11/17/23	Thu 11/30/23	19		
21		RF Equipment Orders Placed	5 days	Fri 9/29/23	Thu 10/5/23	16		
22		RF Equipment Manufacturing	40 days	Fri 10/6/23	Thu 11/30/23	21	Tait	
23		RF Equipment Delivered	15 days	Fri 12/1/23	Thu 12/21/23	22		

Project: City of Riverside Fire Department  
Date: Tue 6/13/23

**Task**

**Split**

**Milestone**

**Summary**

**Project Summary**

**Inactive Task**

**Inactive Milestone**

**Inactive Summary**

**Manual Task**

**Duration-only**

**Manual Summary**

**Manual Summary**

**Start-only**

**Finish-only**

**External Tasks**

**External Milestone**

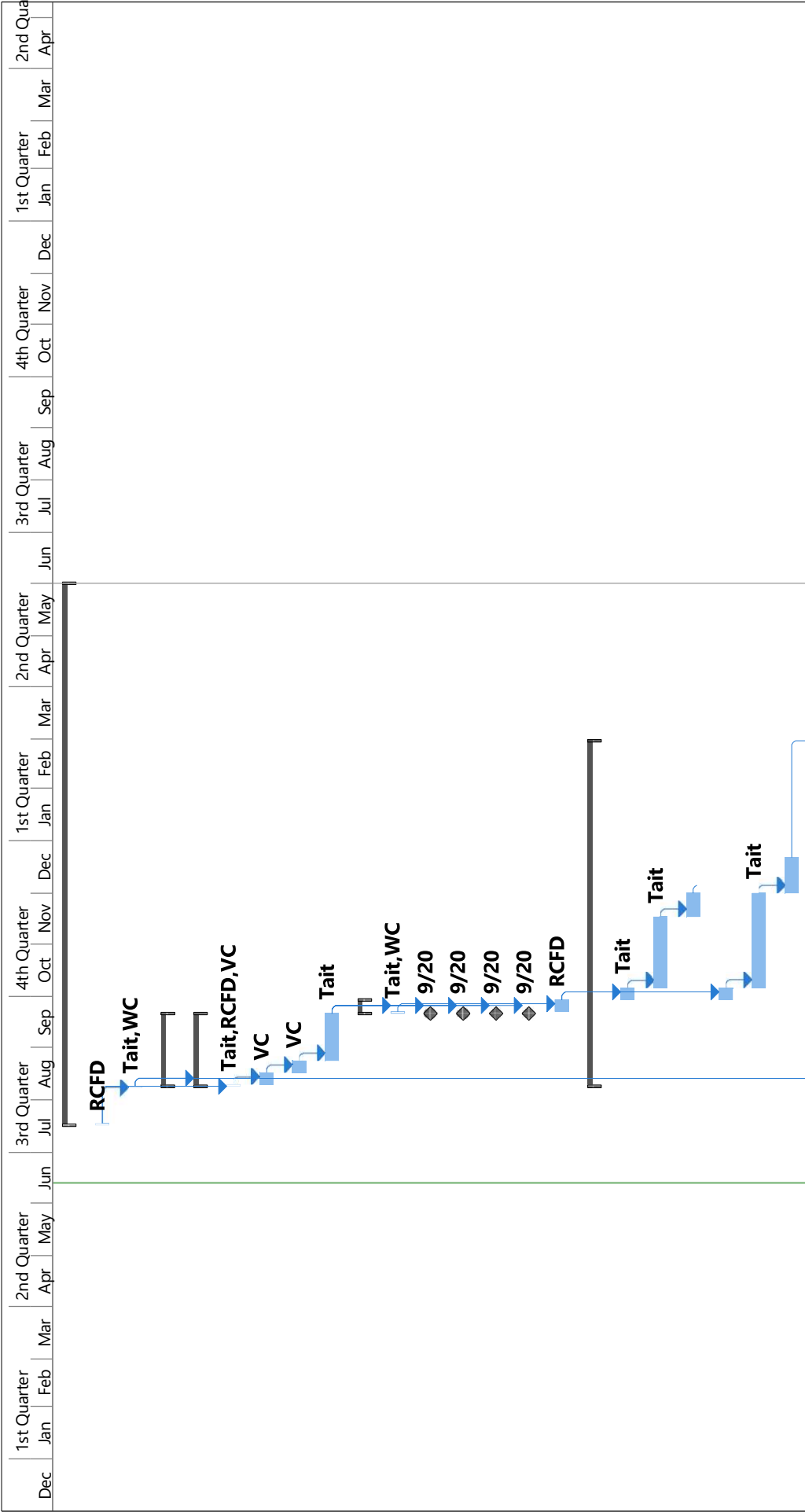
**Deadline**

**Cindy Langston**  
2023-07-20 16:09:16

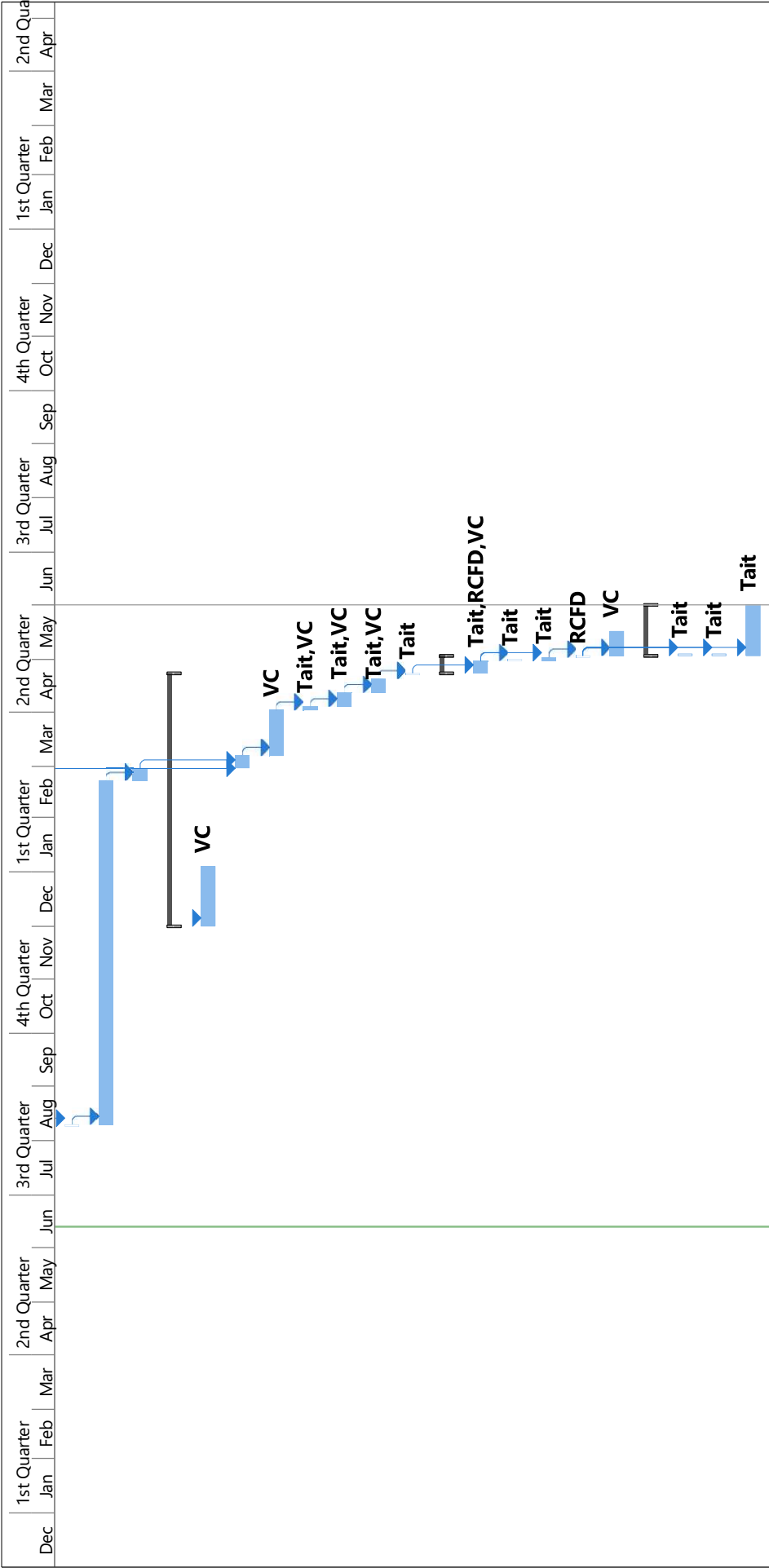
C

ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Resource Names	art
24		3rd Party Equipment Orders Placed	1 day	Wed 8/9/23	Wed 8/9/23	3		N
25		3rd Party Equipment Manufacturing	140 days	Thu 8/10/23	Wed 2/21/24	24		
26		3rd Party Equipment Delivered	5 days	Thu 2/22/24	Wed 2/28/24	25		
27		<b>Site Implementation</b>	<b>102 days</b>	<b>Fri 12/1/23</b>	<b>Mon 4/22/24</b>			
28		Antenna & Line Installation	24 days	Fri 12/1/23	Wed 1/3/24	20	VC	
29		Unpack RF Equipment & Configure Base Stations	5 days	Thu 2/29/24	Wed 3/6/24	23,26		
30		RF Equipment Transportation and Site Equipment Installation	18 days	Thu 3/7/24	Mon 4/1/24	29	VC	
31		Install Enable/Monitor	2 days	Tue 4/2/24	Wed 4/3/24	30	Tait,VC	
32		Site Commissioning	6 days	Thu 4/4/24	Thu 4/11/24	31	Tait,VC	
33		Channel Migration	6 days	Fri 4/12/24	Fri 4/19/24	32	Tait,VC	
34		System Optimization and Preparation for Acceptance Testing	1 day	Mon 4/22/24	Mon 4/22/24	33	Tait	
35		<b>System Acceptance Process</b>	<b>8 days</b>	<b>Tue 4/23/24</b>	<b>Thu 5/2/24</b>			
36		Conduct Site Acceptance Testing with Riverside City FD	5 days	Tue 4/23/24	Mon 4/29/24	34	Tait,RCFD,VC	
37		Submit Site Acceptance Tests to Riverside City FD	1 day	Tue 4/30/24	Tue 4/30/24	36	Tait	
38		Conduct System Operational Performance Tests	2 days	Tue 4/30/24	Wed 5/1/24	36	Tait	
39		System Acceptance by Riverside City FD	1 day	Thu 5/2/24	Thu 5/2/24	38	RCFD	
40		<b>Remove Decommissioned Equipment to City Designated Site</b>	<b>10 days</b>	<b>Fri 5/3/24</b>	<b>Thu 5/16/24</b>	39	VC	
41		<b>Project Closeout</b>	<b>21 days</b>	<b>Fri 5/3/24</b>	<b>Fri 5/31/24</b>			
42		Commencement of Warranty	1 day	Fri 5/3/24	Fri 5/3/24	39	Tait	
43		Handover to SMC	1 day	Fri 5/3/24	Fri 5/3/24	39	Tait	
44		Complete and Deliver Final Documentation	21 days	Fri 5/3/24	Fri 5/31/24	39	Tait	

Project: City of Riverside Fire Department  
Date: Tue 6/13/23



Project: City of Riverside Fire  
 Department  
 Date: Tue 6/13/23



Project: City of Riverside Fire  
 Department  
 Date: Tue 6/13/23

- Task
- Split
- Milestone
- Summary
- Project Summary
- Inactive Task
- Inactive Milestone
- External Tasks
- External Milestone
- Deadline
- Progress
- Manual Progress
- Inactive Summary
- Manual Task
- Duration-only
- Manual Summary Rollup
- Manual Summary
- Start-only
- Finish-only



# SECTION 4

# TAIT QUOTATION

# FOR UPGRADE

TAIT PROPOSAL TO CITY OF  
RIVERSIDE FIRE DEPARTMENT

**CONFIDENTIAL**

Tait North America Inc  
 15352 Park Row  
 Houston  
 Texas 77084  
 United States of America

# Quotation



**For the attention of:**  
**Client** City of Riverside Fire Department  
**Quote Number** 111,073  
**Total Price** 1,547,912.36  
**Currency** USD  
**Date** Wednesday, 2 August 2023 14:05  
**Project Name** QS2 System Replacement  
**Project Description** Replacement of existing QS2 System with TB9400 ASIP/P25C System  
 Replacement of RF Infrastructure  
 Addition of East Site to the Simulcast Configuration  
**Prepared by:** Elliott McNeese

**Incoterm:** CIP TAM  
**Validity:** 30 Calendar Days

Section	Build With	Rack With	Part Number	Description	SA	Qty	Unit List	Discount	Unit Sell	Ext'd Sell	Section Total
<b>110</b>			<b>TaitEnable</b>			<b>1</b>		<b>0%</b>			<b>14,074.06</b>
110.01			TE1000-0201-0001-AAAA-10	E-Monitor Svr AC Ess 100 net devices 1yr main	Y	1	19,019.00	26%	14,074.06	14,074.06	
<b>120</b>			<b>Console Integration</b>			<b>1</b>		<b>0%</b>			<b>28,928.32</b>
120.01			RIC-Mz	RIC-M with z processor and TLS encryption implemented		9	2,037.42	0%	2,037.42	18,336.78	
120.02			RIC-Mz-3YR-WYT-PLUS	Additional 3 year warranty plus.		9	471.15	0%	471.15	4,240.35	
120.03			TT0006-0016	Cisco Router ISR 4331 DC 16P	Y	1	6,351.19	0%	6,351.19	6,351.19	
<b>201</b>			<b>TX/RX Sites x 3</b>			<b>3</b>		<b>0%</b>			<b>257,674.71</b>
201.01			TB9435-100T	TB9435 Single 100Watts Chassis Assembly	Y	4	1,566.00	26%	1,158.84	4,635.36	
201.02			TBA30A2-2100	TB8000/9000 Power Management Unit ACDC24 aux12	Y	4	3,063.00	26%	2,266.62	9,066.48	
201.03			T01-01121-LBAA	TB94 Linear PA 440-480M 100W	Y	4	2,497.00	26%	1,847.78	7,391.12	
201.04			T01-01103-LAAA	TB94 Rctr 440-480MHz S2	Y	4	3,161.00	26%	2,339.14	9,356.56	
201.05			302-06033-00	BRKT 3mm sprt	Y	8	54.00	26%	39.96	319.68	
201.06			219-01561-00	CBL cord 2m USA IEC blk	Y	4	16.00	26%	11.84	47.36	
201.07			TBAS061	SFE Key - Central Voter (91/94)	Y	4	5,910.00	26%	4,373.40	17,493.60	
201.08			TBAS062	SFE Key - Simulcast Enable Phase I (91/94)	Y	4	5,792.00	26%	4,286.08	17,144.32	
201.09			TT0006-0016	Cisco Router ISR 4331 DC 16P	Y	1	6,351.19	0%	6,351.19	6,351.19	
								0%			
				GPS Frequency Reference				0%			
201.1			950-21116-00	OSC 2402-613 SecureSync Model 2402-613		1	5,929.20	0%	5,929.20	5,929.20	
201.11			950-21117-00	PS 2400-HS-D2 SecureSync Hot Swap 24/48VDC		2	935.55	0%	935.55	1,871.10	
201.12			950-00005-02	Orolia Epsilon SAS-17E		1	4,070.25	0%	4,070.25	4,070.25	
201.13			950-00005-03	Orolia Model 8226 Surge Supp		1	376.65	0%	376.65	376.65	
201.14			950-00005-21	Orolia Model 8230 GNSS Antenna		1	364.50	0%	364.50	364.50	
201.15			950-00002-84	300380_Ground Kit for LMR-600 GK-S600TT		1	34.09	0%	34.09	34.09	
201.16			950-00001-43	411476 Cold Shrink Tubing/WeatherProofing Kit (921226-001)		1	32.56	0%	32.56	32.56	
201.17			950-10015-67	475433 N Male EZ for LMR-600		4	23.95	0%	23.95	95.80	
201.18			950-00001-19	86672 LMR-600 3/4" Foam Cable - Stand. w/ Foam Dielectric		50	2.74	0%	2.74	137.03	
								0%			
201.19			RACK01	19" Rack Pkg - 7 Ft, Black, CHW 55053-703 (Includes 2 power strips and ground bar)		1	1,174.73	0%	1,174.73	1,174.73	
								0%			
<b>202</b>			<b>RX Only Sites x 3</b>			<b>3</b>		<b>0%</b>			<b>97,525.08</b>
202.01			TB9444-RX4T	TB9444 Multi Receiverx4 Chassis Assy	Y	1	1,346.00	26%	996.04	996.04	
202.02			TBA30A2-2100	TB8000/9000 Power Management Unit ACDC24 aux12	Y	2	3,063.00	26%	2,266.62	4,533.24	
202.03			T01-01104-LAAA	TB94 RxOnly 440-480MHz S2	Y	4	2,108.00	26%	1,559.92	6,239.68	
202.04			302-06033-00	BRKT 3mm sprt	Y	2	54.00	26%	39.96	79.92	
202.05			219-01561-00	CBL cord 2m USA IEC blk	Y	1	16.00	26%	11.84	11.84	
202.06			TBAS071-R0	SFE Key - IP Networking Satellite Rx Only	Y	4	468.00	26%	346.32	1,385.28	
202.07			TT0006-0016	Cisco Router ISR 4331 DC 16P	Y	1	6,351.19	0%	6,351.19	6,351.19	
								0%			
				GPS Frequency Reference				0%			
202.08			950-21116-00	OSC 2402-613 SecureSync Model 2402-613		1	5,929.20	0%	5,929.20	5,929.20	
202.09			950-21117-00	PS 2400-HS-D2 SecureSync Hot Swap 24/48VDC		2	935.55	0%	935.55	1,871.10	
202.1			950-00005-02	Orolia Epsilon SAS-17E		1	4,070.25	0%	4,070.25	4,070.25	
202.11			950-00005-03	Orolia Model 8226 Surge Supp		1	376.65	0%	376.65	376.65	
202.12			950-00005-21	Orolia Model 8230 GNSS Antenna		1	364.50	0%	364.50	364.50	
202.13			950-00002-84	300380_Ground Kit for LMR-600 GK-S600TT		1	34.09	0%	34.09	34.09	

202.14	950-00001-43	411476 Cold Shrink Tubing/WeatherProofing Kit (921226-001)	1	32.56	0%	32.56	32.56
202.15	950-10015-67	475433 N Male EZ for LMR-600	4	23.95	0%	23.95	95.80
202.16	950-00001-19	86672 LMR-600 1/2" Foam Cable - Stand. w/ Foam Dielectric	50	2.74	0%	2.74	137.03
					0%		
					0%		
<b>401</b>	<b>Antenna &amp; RF Filtering Subsystems</b>		<b>1</b>		<b>0%</b>		<b>83,135.70</b>
					0%		
					0%		
	TX/RX Sites x 3				0%		
401.01	HC10400-04J	450-475 MHz 4-channel hybrid tx combiner	3	4,899.15	0%	4,899.15	14,697.45
401.02	DSRMC06-08BA	370-512 MHz 8-Channel RX Multicoupler	3	2,551.50	0%	2,551.50	7,654.50
401.03	MWDTF4AU-D	UHF Dual sub-band Milled TX filter	3	3,936.60	0%	3,936.60	11,809.80
401.04	DB3826BPB	450-475 MHz Dual Band RX window filter	3	4,577.85	0%	4,577.85	13,733.55
401.05	DS4C06F36U-D	450-482 MHz 6 dB gain omni antenna DIN connector	6	1,645.65	0%	1,645.65	9,873.90
					0%		
					0%		
	RX Sites x 3				0%		
401.06	DS4C00F36U-D (City Hall Site)	450-482 MHz 0 dB gain omni antenna DIN connector	1	687.15	0%	687.15	687.15
401.07	DS4C06F36U-D	450-482 MHz 6 dB gain omni antenna DIN connector	2	1,645.65	0%	1,645.65	3,291.30
401.08	DB3826BPB	450-475 MHz Dual Band RX window filter	3	4,577.85	0%	4,577.85	13,733.55
401.09	DSRMC06-08BA	370-512 MHz 8-Channel RX Multicoupler	3	2,551.50	0%	2,551.50	7,654.50
					0%		
<b>800</b>	<b>Spare Equipment</b>		<b>1</b>		<b>0%</b>		<b>71,970.57</b>
					0%		
	TX/RX Site Base Stations				0%		
800.01	TB94355-100T	TB9435 Single 100Watts Chassis Assembly	Y 2	1,566.00	26%	1,158.84	2,317.68
800.02	TBA30A2-2100	TB8000/9000 Power Management Unit ACDC24 aux12	Y 2	3,063.00	26%	2,266.62	4,533.24
800.03	T01-01121-LBAA	TB94 Linear PA 440-480M 100W	Y 2	2,497.00	26%	1,847.78	3,695.56
800.04	T01-01103-LAAA	TB94 Rctr 440-480MHz S2	Y 2	3,161.00	26%	2,339.14	4,678.28
800.05	302-06033-00	BRKT 3mm sprt	Y 2	54.00	26%	39.96	79.92
800.06	219-01561-00	CBL cord 2m USA IEC blk	Y 2	16.00	26%	11.84	23.68
800.07	TBAS061	SFE Key - Central Voter (91/94)	Y 2	5,910.00	26%	4,373.40	8,746.80
800.08	TBAS062	SFE Key - Simulcast Enable Phase 1 (91/94)	Y 2	5,792.00	26%	4,286.08	8,572.16
					0%		
	RX Only Base Stations				0%		
800.09	TB9444-RX4T	TB9444 Multi Receiverx4 Chassis Assy	Y 2	1,346.00	26%	996.04	1,992.08
800.1	TBA30A2-2100	TB8000/9000 Power Management Unit ACDC24 aux12	Y 4	3,063.00	26%	2,266.62	9,066.48
800.11	T01-01104-LAAA	TB94 RxOnly 440-480MHz S2	Y 8	2,108.00	26%	1,559.92	12,479.36
800.12	302-06033-00	BRKT 3mm sprt	Y 2	54.00	26%	39.96	79.92
800.13	219-01561-00	CBL cord 2m USA IEC blk	Y 2	16.00	26%	11.84	23.68
800.14	TBAS071-RO	SFE Key - IP Networking Satellite Rx Only	Y 8	468.00	26%	346.32	2,770.56
					0%		
					0%		
	GPS Reference				0%		
800.15	950-21116-00	OSC 2402-613 SecureSync Model 2402-613	1	5,929.20	0%	5,929.20	5,929.20
800.16	950-21117-00	PS 2400-HS-D2 SecureSync Hot Swap 24/48VDC	2	935.55	0%	935.55	1,871.10
800.17	950-00005-02	Orolia Epsilon SAS-17E	1	4,070.25	0%	4,070.25	4,070.25
800.18	950-00005-03	Orolia Model 8226 Surge Supp	1	376.65	0%	376.65	376.65
800.19	950-00005-21	Orolia Model 8230 GNSS Antenna	1	364.50	0%	364.50	364.50
800.2	950-00002-84	300380_Ground Kit for LMR-600 GK-5600TT	1	34.09	0%	34.09	34.09
800.21	950-00001-43	411476 Cold Shrink Tubing/WeatherProofing Kit (921226-001)	1	32.56	0%	32.56	32.56
800.22	950-10015-67	475433 N Male EZ for LMR-600	4	23.95	0%	23.95	95.80
800.23	950-00001-19	86672 LMR-600 1/2" Foam Cable - Stand. w/ Foam Dielectric	50	2.74	0%	2.74	137.03
					0%		
<b>900</b>	<b>Project Works and Services</b>		<b>1</b>		<b>0%</b>		<b>187,710.00</b>
					0%		
900.01	SVF-PMN	Services - Project Management	1	88,000.00	10%	79,200.00	79,200.00
900.02	SVF-SYS	Services - System Design	1	86,515.00	10%	77,863.50	77,863.50
900.03	SVF-COM	Services - Commissioning	1	22,385.00	10%	20,146.50	20,146.50
900.04	L-T&L	Travel and Lodging	Y 1	10,500.00	0%	10,500.00	10,500.00
					0%		
<b>901</b>	<b>Frequency Coordination</b>		<b>1</b>		<b>0%</b>		<b>13,500.00</b>
					0%		
901.01	License 4 TX Channels	Frequency Coordination: Orange Terrace TX	1	13,500.00	0%	13,500.00	13,500.00
					0%		
<b>910</b>	<b>Installation</b>		<b>1</b>		<b>0%</b>		<b>350,945.33</b>
					0%		
910.01	L-3PServices	Equipment Installation for QS2 to ASIP migration	1	350,945.33	0%	350,945.33	350,945.33
					0%		
<b>920</b>	<b>Training</b>		<b>1</b>		<b>0%</b>		<b>17,077.50</b>
					0%		



920.01	SVF-TDL	Services - Training Delivery	5	3,795.00	10%	3,415.50	17,077.50
					0%		
<b>930</b>	<b>Project Contingencies and Risk</b>		<b>1</b>		<b>0%</b>		
					0%		
930.01	Risk	Risk	1		0%		
					0%		
<b>935</b>	<b>Customer OTD &amp; Dealer Commission</b>		<b>1</b>		<b>0%</b>		<b>-52,480.80</b>
935.01	Customer One Time Discount	QS2 Trade In Value	1	-52,480.80	0%	-52,480.80	-52,480.80
					0%		
					0%		
<b>940</b>	<b>Service Advantage</b>		<b>1</b>		<b>0%</b>		<b>477,851.90</b>
					0%		
	Tait EnableMonitor Annual License				0%		
940.01	TEMMC100	Tait EnableMonitor <100 dev Soft Maint	7	1,883.00	26%	1,393.42	9,753.94
					0%		
	Tait Advantage				0%		
940.02	SRVADV-INW-TAM-1	Tait Advantage TAM Yr#1 Infra No Warrant	1	22,373.66	24%	17,003.98	17,003.98
940.03	SRVADV-INW-TAM-2	Tait Advantage TAM Yr#2 Infra No Warrant	1	22,373.66	24%	17,003.98	17,003.98
940.04	SRVADV-INW-TAM-3	Tait Advantage TAM Yr#3 Infra No Warrant	1	22,373.66	24%	17,003.98	17,003.98
940.05	SRVADV-INW-TAM-4	Tait Advantage TAM Yr#4 Infra No Warrant	1	22,373.66	24%	17,003.98	17,003.98
940.06	SRVADV-INW-TAM-5	Tait Advantage TAM Yr#5 Infra No Warrant	1	22,373.66	24%	17,003.98	17,003.98
940.07	SRVADV-INW-TAM-6	Tait Advantage TAM Yr#6 Infra No Warrant	1	23,492.34	24%	17,854.18	17,854.18
940.08	SRVADV-INW-TAM-7	Tait Advantage TAM Yr#7 Infra No Warrant	1	24,666.96	24%	18,746.89	18,746.89
					0%		
	Extended Hardware Maintenance				0%		
	System Warranty includes years 1 and 2				0%		
940.09	EPW-INF-TAM-3	Extended Warranty TAM Infrastructure Yr#3	1	4,474.73	24%	3,400.80	3,400.80
940.1	EPW-INF-TAM-4	Extended Warranty TAM Infrastructure Yr#4	1	4,474.73	24%	3,400.80	3,400.80
940.11	EPW-INF-TAM-5	Extended Warranty TAM Infrastructure Yr#5	1	4,474.73	24%	3,400.80	3,400.80
940.12	EPW-INF-TAM-6	Extended Warranty TAM Infrastructure Yr#6	1	4,698.47	24%	3,570.84	3,570.84
940.13	EPW-INF-TAM-7	Extended Warranty TAM Infrastructure Yr#7	1	4,933.39	24%	3,749.38	3,749.38
					0%		
	Maintenance				0%		
940.14	Year 1	On Site Maintenance Support Year 1	1	34,776.00	0%	34,776.00	34,776.00
940.15	Year 2	On Site Maintenance Support Year 2	1	36,514.80	0%	36,514.80	36,514.80
940.16	Year 3	On Site Maintenance Support Year 3	1	38,340.23	0%	38,340.23	38,340.23
940.17	Year 4	On Site Maintenance Support Year 4	1	40,257.00	0%	40,257.00	40,257.00
940.18	Year 5	On Site Maintenance Support Year 5	1	42,269.85	0%	42,269.85	42,269.85
940.19	Year 6	On Site Maintenance Support Year 6	1	43,537.95	0%	43,537.95	43,537.95
940.2	Year 7	On Site Maintenance Support Year 7	1	44,844.08	0%	44,844.08	44,844.08
					0%		
					0%		
	Taxes	California State Tax 8.75%		48,414.49		48,414.49	48,414.49
<b>Total System</b>							<b>1,547,912.36</b>

Tait Standard Terms and Conditions of Sale apply. By accepting this offer you acknowledge and agree to those terms. Sales Quotation may not include Tax. If the Sales Quotation becomes a Sales Order the correct State Sales Tax will apply. All items subject to prior sale. If pricing for equipment and/or services is quoted as part of email correspondence, the price will expire 30 days after the date provided. Tait reserves the right to amend pricing in the event of typographical or mathematical error, or in case of new information, specifications or requirements. Unless otherwise agreed in writing by an authorized representative of Tait, pricing is subject to Tait's Standard Terms and Conditions of Sale current on the date provided, copies available upon request.



# SECTION 5

# PROPOSED AMENDMENT

# TO SUPPORT AGREEMENT

TAIT PROPOSAL TO CITY OF  
RIVERSIDE FIRE DEPARTMENT

**CONFIDENTIAL**

**First Amendment To  
Support Agreement between  
Tait North America and City of Riverside FD**

This Amendment is made this \_\_\_\_\_ day of \_\_\_\_\_, 2023 (the “Effective Date”), by and between **TAIT NORTH AMERICA, INC.**, a Texas corporation, having its principal place of business at 15352 Park Row Dr, Houston, TX 77084 (“Tait”) and **City of Riverside Fire Department**, with offices located at 3401 University Ave., Riverside, CA 92501 (“Company”), the parties to the Support Agreement for Project #50-904854, effective as of November 1<sup>st</sup>, 2019 (the “Agreement”).

The parties have reached an understanding regarding the Agreement, and by this Amendment reduce the understanding to binding form.

NOW, THEREFORE, in consideration of the mutual covenants, terms, and conditions set forth in the Agreement, the parties hereto mutually agree to amend the agreement as follows:

**FIRST:** Section A of the Agreement is updated to read as follows:

1	<b>Client</b>	City of Riverside
2	<b>Client Address for Notices</b>	3401 University Ave, Riverside, CA 92501
3	<b>Client Support Manager</b>	La Wayne Hearn <a href="mailto:lhearn@riversideca.gov">lhearn@riversideca.gov</a> Main: (951) 826-5321 Direct: (951) 826-5414
4	<b>Client Solution and Products including licensed Software</b>	Tait-provided infrastructure products (excludes terminals and accessories) in QS2 Simulcast System deployed under Tait Project No. 50-904854.
5	<b>Renewal Date for Support Services</b>	July 31 <sup>st</sup> , 2023.  Except as modified herein, all the terms and conditions of the Support Agreement remain in effect.
6	<b>Term of Support Agreement</b>	Five (5) years from Renewal Date.
7	<b>Support Fee</b>	<b>\$279,527.00</b> , to be invoiced annually at least 30 days in advance of each anniversary of the Renewal Date.
8	<b>Network Upgrade Fee</b>	The total contract price for the Network Upgrade (Exhibit 1) is <b>USD\$1,499,498</b>

		Customer agrees to make payments to Tait within thirty days after the date of invoices that will be submitted by Tait according to the following payment schedule:  a) Contract Execution – \$374,874.00 b) Detail Design Approval – \$374,874.00 c) Delivery of Antenna and RF Equipment – \$449,849.00 d) Final System Acceptance – \$299,900.00
9	<b>Email address for invoices</b>	[Customer’s email for invoicing]
10	<b>Review of Support Fee and Additional Charges</b>	Support Fees will be reviewed as Products are added or removed from the network upon each anniversary of the Renewal Date.

**SECOND:** Tait’s address for notice is deleted in its entirety and replaced with the following text:

Tait North America, Inc.  
Attention: Legal Department  
15352 Park Row Dr,  
Houston, TX 77084  
Email: commercial.tam@taitcommunications.com

**Third:** The Newtwork Upgrade (QS2 to ASIP) Statement of Work (Exhibit 1) is hereby included as part of the Agreement under Appendix B.

Except as amended herein, the Agreement will remain unchanged.

IN WITNESS WHEREOF, the parties have executed this Amendment.

**AGREED:**  
**Tait North America, Inc.**

**AGREED:**  
**City of Riverside Fire Department**

Signature: \_\_\_\_\_

Signature: \_\_\_\_\_

Print name: \_\_\_\_\_

Print name: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_