

CITY OF TEMPE DEVELOPMENT REVIEW COMMISSION

Meeting Date: 3/23/2021 Agenda Item: 6

ACTION: Request a Use Permit to allow a new 100-foot tall multi-carrier wireless telecommunication facility (monopole) for CROWN CASTLE ADOT 101 & 202, located at 2130 East Rio Salado Parkway. The applicant is Campbell A&Z, LLC.

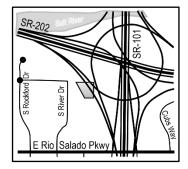
FISCAL IMPACT: N/A

RECOMMENDATION: Staff – Approve, subject to conditions

BACKGROUND INFORMATION: CROWN CASTLE ADOT 101 & 202 (PL210025) is proposing a new monopole wireless telecommunication facility on a parcel of land located southwest of the Loop 202 and 101 freeway interchange in the HID, Heavy Industrial District. The property is owned by the Arizona Department of Transportation (ADOT) and is accessible by access/utility easements through two (2) other ADOT owned parcels and a driveway located just west of the southbound SR-101 East Rio Salado Parkway freeway exit. The monopole will house three (3) carriers. T-Mobile will be the first carrier located at the top antenna array while the next two arrays will be reserved for future carriers. The project scope includes construction of an eight-foot (8'-0") high CMU open-air equipment enclosure that spans thirty feet (30'-0") by sixty feet (60'-0"), and a one-hundred-foot (100'-0") tall monopole with nine (9) antennas and six (6) radios at the ninety-six feet (96'-0") center of radiation. Future carriers are anticipated at the seventy-six feet (76'-0") and eighty-six feet (86'-0") centers of radiation. All cables will be run on the inside of the monopole.

The request includes the following:

ZUP210019 Use Permit to allow a 100-foot tall multi-carrier wireless telecommunication facility (monopole).



Property Owner Arizon
Applicant Micha
Zoning District HID
Site Area 81,000
Equipment Enclosure Area 1,800
Lot Coverage 0% (not)
Landscape Coverage 100%
Monopole Height 100'-0
Monopole Setbacks 270'-0

Arizona Department of Transportation
Michael Campbell, Campbell A&Z, LLC
HID
81,000 s.f.
1,800 s.f.
0% (no max. standard required)
100% (10% min. required)
100'-0" (no max. standard required)

270'-0" front, 38'-9" west side, 284'-8" east side, 33'-6" rear (0', 0', 0', 0' min. required)

ATTACHMENTS: Development Project File

STAFF CONTACT(S): Lee Jimenez, Senior Planner (480) 350-8486

Department Director: Shelly Seyler, Interim Community Development Director

Legal review by: N/A

Prepared by: Lee Jimenez, Senior Planner

Reviewed by: Steve Abrahamson, Principal Planner

COMMENTS

CROWN CASTLE ADOT 101 & 202 (PL210025) is designed to replace an existing Crown Castle facility located on the Brock Property at 2150 East Rio Salado Parkway which is experiencing transmission signal blocking and shadowing from the newly constructed multi-stored Freedom Financial Buildings located to the west and northwest of the project site. A building-mounted rooftop facility was considered on the Freedom Financial buildings as well as a ground facility on the campus. The rooftop facility fell through due to issues with rooftop carrier equipment and the ground space did not pan out due to the timeframe of the availability for the location.

PUBLIC INPUT

As of the publishing of the staff summary report, staff has not received any public comment for this request.

USE PERMIT

The proposed use requires a Use Permit to allow a wireless telecommunications tower and related equipment facilities within the HID zoning district.

Section 6-308(E) Approval criteria for Use Permit (in italics):

- 1. Any significant increase in vehicular or pedestrian traffic; the proposed use is not expected to generate much traffic outside of construction and maintenance vehicles.
- 2. Nuisance arising from the emission of odor, dust, gas, noise, vibration, smoke, heat or glare at a level exceeding that of ambient conditions; the nature of the proposed use is not expected to generate emissions above ambient conditions. The monopole will be painted to not exceed the City's maximum light reflectance value of 75%.
- 3. Contribution to the deterioration of the neighborhood or to the downgrading of property values, which is in conflict with the goals, objectives or policies for rehabilitation, redevelopment or conservation as set forth in the city's adopted plans or General Plan; the proposed use will maintain network integrity and avoid coverage gaps while serving carrier customers and emergency service networks. Furthermore, the proposed use is not in conflict with the goals, objectives or policies of any City adopted plan.
- 4. Compatibility with existing surrounding structures and uses; the proposed use is located near a major freeway interchange and water course. The design height of the monopole will help alleviate service gaps caused by new mid-rise development to the west. Additionally, the monopole's ability to co-locate two (2) additional carriers will eliminate the need for single-carrier facilities located within the service area.
- 5. Adequate control of disruptive behavior both inside and outside the premises which may create a nuisance to the surrounding area or general public; the nature and remote location of the proposed use is not expected to create any disruptive behavior that may create a nuisance to the surrounding area.

REASONS FOR APPROVAL:

Based on the information provided by the applicant and the above analysis, staff supports the requested Use Permit. This request meets the required criteria and will conform to the conditions.

SHOULD AN AFFIRMATIVE ACTION BE TAKEN ON THIS REQUEST, THE FOLLOWING NUMBERED CONDITIONS OF APPROVAL SHALL APPLY. BUT MAY BE AMENDED BY THE DECISION-MAKING BODY.

CONDITION(S) OF APPROVAL: (Non-standard conditions are identified in bold)

EACH NUMBERED ITEM IS A CONDITION OF APPROVAL. THE DECISION-MAKING BODY MAY MODIFY, DELETE OR ADD TO THESE CONDITIONS.

1. The Use Permit is valid only after a Building Permit has been obtained, the required inspections have been completed and a Final Inspection has been passed. As part of the Building Permit process, on-site storm water retention may be required to be verified or accomplished on this Site.

- 2. The Use Permit is valid for the plans as submitted within this application. Any additions or modifications may be submitted for review during the building plan check process.
- 3. The maximum height of the monopole shall be no greater than one hundred feet (100'-0") from grade to the top of structure.
- 4. A weather resistant emergency contact information sign shall be posted on the site and shall be visible to the public.
- 5. The equipment enclosure shall be constructed of masonry or concrete with a finish to not exceed a light reflectance value of 75%.
- 6. The monopole and equipment, with exception to remote radio heads or other sensitive equipment, shall be finished to not exceed a light reflectance value of 75%.

CODE/ORDINANCE REQUIREMENTS:

THE BULLETED ITEMS REFER TO EXISTING CODE OR ORDINANCES THAT PLANNING STAFF OBSERVES ARE PERTINENT TO THIS CASE. THE BULLET ITEMS ARE INCLUDED TO ALERT THE DESIGN TEAM AND ASSIST IN OBTAINING A BUILDING PERMIT AND ARE NOT AN EXHAUSTIVE LIST.

USE PERMIT:

- The Use Permit is valid for Crown Castle ADOT 101 & 202 and may be transferable to successors in interest through an administrative review with the Community Development Director, or designee.
- The use permit approval shall be void if the use is not commenced or if an application for a building permit has not been submitted, whichever is applicable, within twelve (12) months after the use permit is granted or within the time stipulated by the decision-making body.
- The decision-making body, upon finding that the applicant has not taken corrective actions to resolve issues related
 to the permit/approval and that a continuation of the permit/approval is not in the interest of the public health, safety
 and general welfare, can revoke the permit/approval after providing written notice of its intentions to the holder of
 the permit.
- Specific requirements of the Zoning and Development Code (ZDC) are not listed as a condition of approval but
 will apply to any application. To avoid unnecessary review time and reduce the potential for multiple plan check
 submittals, become familiar with the ZDC. Access the ZDC through http://www.tempe.gov/zoning or purchase from
 Development Services.
- SITE PLAN REVIEW: Verify all comments by all departments on each Preliminary Site Plan Review. If questions
 arise related to specific comments, they should be directed to the appropriate department, and any necessary
 modifications coordinated with all concerned parties, prior to application for building permit. Construction Documents
 submitted to the Building Safety Division will be reviewed by planning staff to ensure consistency with this Design
 Review approval prior to issuance of building permits
- All business signs shall receive a Sign Permit. Contact sign staff at 480-350-8435.
- Any intensification or expansion of use shall require a new Use Permit.
- All required permits and clearances shall be obtained from the Audit and Licensing Division of the City of Tempe prior to the Use Permit becoming effective.

- All required Federal, State, County, and Municipal permits, licenses, and clearances shall be obtained, or the Use Permit is void.
- Wireless Telecommunication Facilities may be co-located, subject to administrative review only. Any addition to the existing height or changes in appearance of the tower to facilitate co-location may require a new use permit.
- The wireless device shall be removed within 30 days of discontinuance of use.

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1997/1998	Maricopa County approved an 80' tall monopole which was later annexed into the City of Tempe in 1999. No other details were available in the City records.
June 6, 2000	Hearing Officer approved a Use Permit for VOICESTREAM/BROCK to allow the co-location of a new cellular antenna array at the 62' level on an existing 82'-6" high cellular tower located at 2150 East Rio Salado in the I-3, Heavy Industrial District. (BA000149)
February 7, 2001	Hearing Officer approved a Use Permit for CRICKET COMMUNICATIONS to allow the co- Location of a new antenna array at the 55' level of an existing 89' high monopole located at 2150 East Rio Salado in the I-3, Heavy Industrial District. (BA0100109)
July 15, 2003	Hearing Officer approved a Use Permit for T-MOBILE to add cellular antennas to the existing Sprint/Riverview Monopole located at 2150 East Rio Salado Parkway in the I-3, Heavy Industrial District. (BA030155)
January 15, 2008	Hearing Officer approved a Use Permit to allow the addition of antennas on an existing monopole located at 2150 East Rio Salado in the I-3, Heavy Industrial District. (PL070550)

ZONING AND DEVELOPMENT CODE REFERENCE:

Section 3-302 Permitted Uses in Office/Industrial Districts Section 3-421 Wireless Telecommunication Facilities Section 6-308 Use Permit



DEVELOPMENT PROJECT FILE

for CROWN CASTLE ADOT 101 & 202 (PL210025)

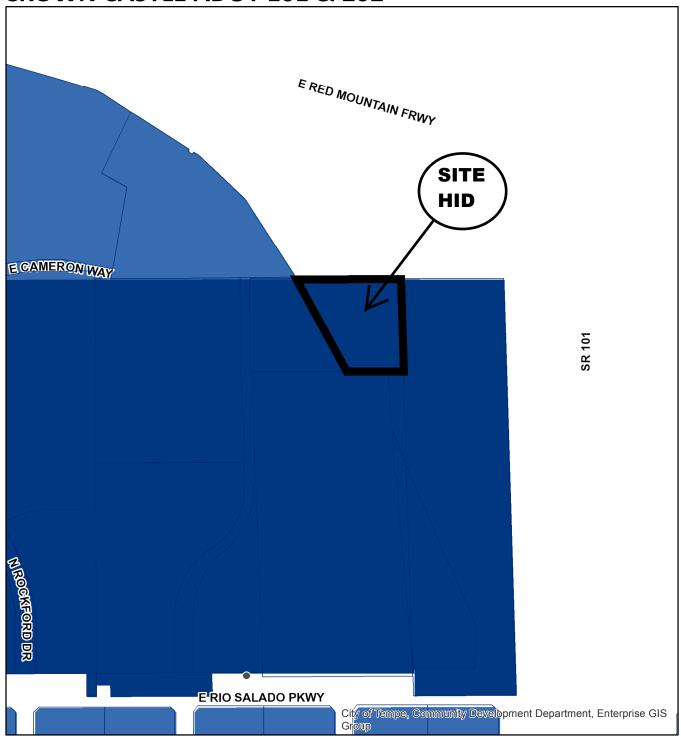
ATTACHMENTS:

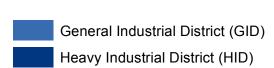
1.	Location Map
2.	Aerial
3-10.	Letter of Explanation
11-20.	Project Plans
21-25.	Photo Simulations
26-42.	City of Tempe Wireless Project Application and Responses
43-48.	RF Analysis
49-52.	Airspace Safety Analysis Compliance Report



CROWN CASTLE ADOT 101 & 202

PL210025









CROWN CASTLE ADOT 101 & 202

PL210025



Aerial Map



Use Permit Narrative

Submitted to the City of Tempe Community Development Department December 23, 2020 January 26, 2021, rvsd

1. GENERAL INFORMATION

Applicant: Michael J Campbell

Campbell A&Z, LLC 602-616-8396

Site Address: 2130 E Rio Salado Parkway

APN: 132-36-007K

Crown Castle Site: 831557 – ADOT Loop 101 & 202

Property Owner: Arizona Department of Transportation

Zoning Classification: HID

2. INTRODUCTION

Crown Castle, a wireless communications infrastructure company operating in the City of Tempe, AZ, owns and operates the wireless communications facility located at 2150 E Rio Salado Pkwy ("Existing Site"). The Existing Site accommodates multiple wireless service providers and has provided a co-location option for wireless communications coverage in the area for the last 23 years. The site was approved by the County and built in 1997/98.

Crown Castle has been part of the national community since 1994, possessing approximately 40,000 cell towers hosting approximately 91,000 carrier installations. Crown Castle's extensive infrastructure including fiber and small cells as well as towers, serves as the backbone of the nation's communication network. The Existing Site is a critical component of that network, providing continuity for the public interest, emergency 911-call services, and reliable long-term stability for wireless service in the community.

Crown invests heavily in the resources necessary to ensure quality, reliable wireless service for the area. In addition to its in-house legal team dedicated to addressing compliance matters, Crown also conducts annual safety inspections on all towers and employs a national operations center monitoring all critical systems 24 hours a day, 7 days a week, 365 days a year. In the event of an emergency, Crown is prepared with a national disaster recovery program on standby with the objective of maintaining wireless communications to the extent possible.

3. REQUEST

Crown Castle proposes to build a new 100' tall multi-carrier wireless communications facility monopole and equipment compound on excess ADOT land as a replacement site for the Crown site at 2150 E Rio Salado Pkwy.

The proposed Crown WCF will consist of the following:

- Installation of a new 100' multi-carrier monopole
- Installation of antenna arrays at the 96', 86' and possibly 76' level
- Construction of a new 1,800 sqft equipment compound to house the monopole and carrier equipment cabinets/shelters.
- All associated cables will be placed inside the monopole and not visible to the public.
- Installation of new electrical and telco service from the local service providers.
- Access to the WCF will be from the ADOT gates on the north side of Rio Salado Pkwy, then north over the existing gravel ADOT drive to the site.

4. PROJECT DESCRIPTION/HISTORY

The existing site currently houses T-Mobile and Sprint on an 80' monopole. The monopole was built and approved by Maricopa County in 1997/98. The site was annexed into the City of Tempe in 1999. Due to the annexation and clean up the former industrial parcels that boarder the south bank of the Salt River, the existing site has been a critical component in providing service along two major freeways. In addition, the densification of the area from Industrial parcels to retail, entertainment, office and residential has only increased demand on wireless services within this area.



The existing site has had unobstructed coverage for the past 20+ years. To the west of the existing site is the Rio 2100 project. This project has taken a portion of the former brownfield site east of Tempe Marketplace and has continued to march toward buildout while increasing the demand in wireless

services due to the densification of uses and population from retail, entertainment, employment or housing.





Phase V of Rio2100 was completed this year and is currently blocking the existing site carrier transmissions. Due to Phase V, the line of site from receiver location to transmitter without any obstacles or obstruction has been disrupted which has caused path loss. This effect happens when there is a large object such as Phase V "blurring" the main radio path between the receiver and the transmitter. This is known as shadowing. The tenants on this monopole have had their transmission signal impacted by the newly constructed 75' tall office building (Phase V) to the west. In addition, the planned Phase III building at the northeast corner of the Freedom Financial campus will further limit their transmission signal to the north and create additional shadowing.

Due to the allowable building height in the HID district, Crown Castle is proposing to relocate the existing site approximately 350' to the northeast of the existing tower. The proposed Crown WCF will be a replacement site for the existing 80' monopole. If approved, the existing site will be decommissioned and removed once the new monopole is up and operational.



5. ZONING

The Proposed Relocation Site is located on ADOT property, but partially within the HID zoning district in the City of Tempe. See zoning map bellow and the surrounding zoning and land use adjacent to the proposed relocation.



Direction	Existing Zoning	Existing Use
Site	HID	ADOT
North	RU-43, Unincorporated	Freeway
	Maricopa County	

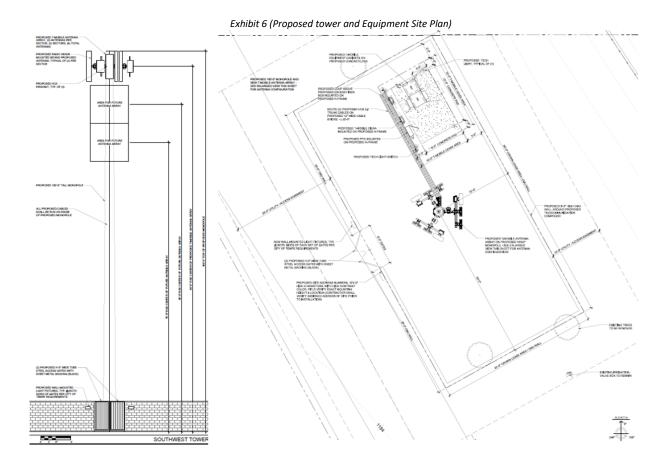
East	HID	Freeway
South	HID	Industrial
West	HID	Industrial

AREA

The location is highly congested with the freeway overpasses and very tall ADOT freeway light poles reaching 160'+ in the area. The closest ADOT light poles are 135' in height. Please see exhibit 5. While these poles are not viable co-locations for the carriers due to ADOT restrictions, they do minimize the visual impact of a new monopole in the vertically congested area.



The 100′ monopole is necessary to preserve the coverage rights for the carriers on the existing monopole, to maintain their network integrity and avoid coverage gaps, while serving their respective customers and emergency service networks. The placement of the new monopole is strategic as it allows a clear transmission west through developing office building campus without signal blockage from the new office buildings. The visual impact of the 100′ monopole will be minimal as the most visible view of the monopole will be from commuters on SR202 and SR101 as they pass through the area. The structures and equipment area will follow the city building codes.



8. ANALYSIS OF FEDERAL LAW

1. Federal Telecommunications Act of 1996

In addition to local and state law, this application is governed by the Federal Communications Act, 47 U.S.C. § 332(c)(7)(B). In the Telecommunications Act of 1996, Pub. L. No 104-104, 110 Stat. 56 ("Telecom Act") Congress added Section 332(c)(7)(B), which provides rights to wireless service providers and establishes limitations upon state and local zoning authorities with respect to applications for permits to construct wireless service facilities. The express purpose of the Act is "to promote competition and reduce regulation in order to secure lower prices and higher quality services for American telecommunications consumers." Pub. L. No. 104-104, 110 Stat. 56, 56 (1996); see also City of Rancho Palos Verdes v. Abrams, 544 U.S. 113, 115 (2005). It also is intended to "encourage the rapid deployment of new telecommunications technologies." Id.; see also H.R. Conf. Rep. No. 104-458, at 113 (1996) (purpose of the 1996 Act is "to provide for a pro-competitive, deregulatory national policy framework designed to accelerate rapidly private sector deployment of advanced telecommunications and information technologies and services . . . by opening all telecommunications markets to competition").

Recognizing that wireless service can bring enormous benefits to communities and can boost jobs and economic productivity, this important law and subsequent regulations applicable to wireless facilities were enacted to remove impediments to and promote the rapid deployment of wireless technology on a national basis.

The applicable limitations and directives include the following:

- (a) State and local governments may not unreasonably discriminate among providers of functionally equivalent services (§332(c)(7)(B)(i)(I)).
- (b) State and local governments may not regulate the placement, construction or modification of wireless service facilities in a manner that prohibits, or has the effect of prohibiting, the provision of personal wireless services (better known as the "effective prohibition clause") (§332(c)(7)(B)(i)(II)).
- (c) State and local governments must act on requests for authorization to construct or modify wireless service facilities within a reasonable period of time (§332(c)(7)(B)(ii)).
- (d) Any decision by a state or local government to deny a request for construction or modification of personal wireless service facilities must be in writing and supported by substantial evidence contained in a written record (§332(c)(7)(B)(iii)).
- (e) Finally, no state or local government or instrumentality thereof may regulate the placement, construction or modification of personal wireless service facilities on the basis of the perceived environmental effects of radio frequency emissions to the extent that such facilities comply with federal communications commission's regulations concerning such emissions (§332(c)(7)(B)(iv)). See Proof of FCC Compliance attached as Exhibit 1.

Rapid deployment of wireless facilities is an important national issue, especially given the trend of Americans eliminating traditional landline service in favor of wireless communications. The Center for Disease Control and Prevention ("CDC") tracks "wireless substitution" rates as part of its National Health Interview Survey and publishes the findings every six months in its Wireless Substitution reports. The most recent report, issued in December of 2019, estimates that more than one-half (57%) of American homes have only wireless phones.

Reliable and robust wireless communication is essential, especially considering over half of Americans and Arizonans do not have a landline and rely on wireless service to conduct personal and business communications, to access the internet or to reach emergency responders. Ensuring access in the event of an emergency is critical, be it communications between emergency service personnel or for people calling for help.

9. CONCLUSION

On behalf of Crown Castle, I respectfully submit this Use Permit Project Narrative and Site Plan for review and comments.

Please contact me at 602-616-8396, or via email at campbellaz1@earthlink.net if you have any questions or need additional information.

Sincerely,

Michael J Campbell

Michael J Campbell Campbell A&Z, LLC 602-616-8396





T-MOBILE / CROWN SITE #: PH40238A / 831557 T-MOBILE / CROWN SITE NAME: ADOT LOOP 101 & 202 CITY: TEMPE

CODE COMPLIANCE

33'6"

284'-8"

80'-4"

38'-9"

100' MONOPOLE SETBACK

2018 IBC

NORTH:

EAST:

SOUTH:

WEST:

2017 NEC

STATE: AZ COUNTY: MARICOPA **DESIGN TYPE: MONOPOLE**

PROJECT INFORMATION

ADDRESS

2130 E. RIO SALADO PARKWAY TEMPE, AZ 85281

COORDINATES

LAT.: 33° 25' 58.58" N (33.432939°) NAD 83 LONG.: 111° 53' 38.06" W (-111.893906°) NAD 83 ELEVATION: 2300.0' A.M.S.L. (NAVD 88)

PROPERTY OWNER

AZ DEPT. OF TRANSPORTATION 205 S. 17TH AVE PHOENIX, AZ 85007 TIM MAHONEY - 602-712-8811

JURISDICTION

CITY OF TEMPE

LAND DESCRIPTION OF SUBJECT PARCEL

ZONING: HID APN#: 132-36-007K

CURRENT USE: VACANT LAND

NEW USE: VACANT LAND / UNMANNED WIRELESS

TELECOMMUNICATIONS FACILITY

GROSS AREA: 80.896.58 SQUARE FEET NET LEASE AREA: 1.800 SQUARE FEET

CONSULTING TEAM

PHONE: (602) 616-8396 EMAIL: CAMPBELLAZ1@EARTHLINK.NET

EMAIL:

PHONE: (480) 735-6954

EMAIL:

PHONE: (480) 231-4402

EMAIL:

10245 E. VIA LINDA #211 SCOTTSDALE, AZ, 85258 CONTACT: JOHN SULTZBACH

APPLICANT

CONTACT: MICHAEL CAMPBELL

CROWN CASTLE PROJECT TEAM

ZONING MANAGER: HEATH REED

PHONE: (480) 734-2431

HEATH.REED@CROWNCASTLE.COM

SITE ACQUISITION MANAGER: RICHARD STANNARD

RICHARD.STANNARD@CROWNCASTLE.COM

CONSTRUCTION MANAGER: JUSTIN KLEIN

JUSTIN.KLEIN@CROWNCASTLE.COM

ARCHITECT

YOUNG DESIGN CORP. PHONE: (480) 451-9609

INDEX OF DRAWINGS

NEW ENLARGED COMPOUND PLAN

NAME OF SHEET

SURVEY PACKAGE

NEW ELEVATIONS

OVERALL SITE PLAN

TITLE SHEET

NUMBER

T-1

A-1

A-2

A-3



VICINITY MAP

DRIVING DIRECTIONS

TAKE SOUTHERN AVENUE EAST TO LOOP 101 NORTH. TAKE 101 NORTH TO RIO SALADO PARKWAY TURN LEFT ONTO RIO SALADO PARKWAY. TURN RIGHT IMMEDIATELY AFTER PASSING UNDER FREEWAY PROCEED NORTH ON DIRT ROAD TO SITE

PLANS PREPARED FOR CONSULTANT: CROWN CASTLE INFORMATION:

ADOT LOOP 101 & 202 PH40238A

2130 F RIO SAI ADO PARKWAY TEMPE AZ 85281 MARICOPA COUNTY

RRENT ISSUE DATE:

REV

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1/22/21

REVIEW

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	B	11/23/20	ISSUED FOR REVIEW	JRS
	\triangle	1/22/21	ISSUED FOR REVIEW	JRS
Ш				

DRAWN BY:

PLANS PREPARED B



architecture / project management 10245 E. Via Linda, Scottsdale, AZ 85258 ph: 480 451 9609 fax: 480 451 9608



TITLE SHEET

1-1

C

YDC-9946

PROJECT DESCRIPTION

INSTALLATION OF NEW 8'-0" CMU WALL. INSTALLATION OF NEW T-MOBILE ANTENNA ARRAY ON PROPOSED 100' TALL MONOPOLE. INSTALLATION OF (9) ANTENNAS AND (6) RADIOS. INSTALLATION OF T-MOBILE EQUIPMENT CABINETS ON PROPOSED CONCRETE PAD INSIDE PROPOSED CMU COMPOUND. INSTALLATION OF PROPOSED PPC CABINET. INSTALLATION OF (3) HYBRID CABLES. INSTALLATION OF PROPOSED ELECTRICAL SERVICE.

RAWLAND SURVEY 831557

ADOT LOOP 101 & 202

SW CORNER OF LOOP 101 & LOOP 202 TEMPE, AZ 85281 MARICOPA COUNTY

VICINITY MAP NTS



AREA SUMMARY

AREA	SQ. FT.	ACRES
PARENT PARCEL	80,897	1.857
EXISTING LEASE AREA	1,800	0.041
20' ACCESS AND UTILITY EASEMENT	29,987	0.688
10' ACCESS & UTILITY EASEMENT	1,982	0.046

CONTENTS

COVER SHEET
PROPERTY OVERVIEW
EASEMENT OVERVIEW
SITE OVERVIEW
SITE OVERVIEW DETAIL (INTERNAL USE)
LEGAL DESCRIPTIONS

UTILITY NOTE

1. Surveyor does not guarantee that all utilities are shown or their locations are definite. It is the responsibility of the contractor and developer to contact any involved agencies to locate all utilities prior to construction, removal, relocation and/or replacement is the responsibility of the contractor.

(USE ONE OF THE BELOW WHEN WE HAVE LOCATE) any underground utilities located and shown hereon were not contracted through ambit consulting.

any underground utilities located and shown hereon were

SURVEY PROCEDURES & EQUIPMENT

The Accuracy Of This Survey Meets Or Exceeds The Minimum Standards As Required By the State of Arizona.

Instruments Used Leica Global Positioning System Leica Total Station

COORDINATES

For internal use

LABEL	LAT, LONG
MON #1 / POC	33*25'45.48", -111*53'30.35"
MON #2	33*25'45.43", -111*54'01.59"
POB	33*25'58.91", -111*53'38.08"
CENTER OF TOWER	33*25'58.58", -111*53'38.06"

ABBREVIATIONS

	POC	POINT OF COMMENCEMENT
	POB	POINT OF BEGINNING
	ROW	RIGHT OF WAY
	NFNS	NOTHING FOUND, NOTHING SET

SURVEY PERFORMED FOR:



Canonsburg, PA 15317

SURVEY COORDINATED BY

AMBIT CONSULTING 410 E. Southern Ave, Tempe, AZ 85282 Tele: (480) 659-4072

SURVEY PERFORMED BY

AMBIT CONSULTING 410 E. Southern Ave. Tempe. AZ 85282 Tele: (480) 659-4072

DRAWN BY: DRH | CHK BY: NS | JOB NO.: 831557

SURVEYOR'S CERTIFICATION:

nereby certify to Crown Castle and Old Republic Title Insurance Co., that this man made under my direction as a licensed surveyor in the State of Arizona; field effort w performed October of 2020.



LEASE AREA ZONING:

LEASE AREA FLOOD NOTE:

THIS PROJECT APPEARS TO BE LOCATED WITHIN FLOOD ZONE "X" ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP(S), MAP ID #04013C2245L, DATED 10/16/2013.

BEARING BASIS:

DEARNING SHOWN HEREON ARE BASED UPON U.S. STATE PLANE NADBS COORDINATE SYSTEM ARIZONA STATE PLANE CENTRAL COORDINATE ZONE, DETERMINED BY GPS OBSERVATIONS.

NOTES:

- SURVEY PERFORMED ON 10/29/2020.
 DATA PROJECTED IN ARIZONA STATE PLANE CENTRAL COORDINATE SYSTEM, WITH NAVDB8 VERTICAL DATUM.
 NO SUBSURFACE INVESTIGATION WAS PERFORMED TO LOCATE UNDERGROUND UTILITIES. UTILITIES SHOWN HEREON ARE LIMITED TO AND ARE PER OBSERVED
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0 11/9/20 PRELIMIN 1 11/13/20 LEGALS SITE INFORMATION: ADOT LOOP 101 & 202 BUN 831557 Address SW COR OF LOOP 101 & LOOP 202 TEMPE, AZ 85281

County MARICOPA COUNTY SITE LOCATED IN:

RAWLAND

SHEET: COVER SHEET

Survey Point Jurisdiction Line Property Line Gravel Property Tie Parent Property Dirt Culvert Tower Easement Right of Way Concrete Setback Utility Vault Wetland Railroad Tracks Centerline Manhole Double Stream Handhole Stream (Directional) Gate - Sliding Ditch Pull box Channel Signs Fence Pedestal Cable LIG Mailbox Combined Sewer Cable TV & Elec Utility Pole Cable TV & Elec UG Meter X Cable, Elec, & Tele Guved Pole Cable, Elec, & Tele UG Pole Valve 🔀 Electric UG 60 Cleanout Fiber ---- F0 -----Fire Hydrant Fiber UG Junction Box Gas Flag Pole Pump Station Shrub Sewer Storm Utility Box Tree - Palm Telephone UG Tree - Coniferous Unknown Utility HVAC Tree - Deciduous Topo - High Point Generator G Metal Platform

Fuel Tanks FUEL O

Traffic Signal Controller

LEGEND

.

Center of Tower

IP / Rebar Monu- Found

Cased Monu

Traverse Point

Cased Monu - Found

0

Transformer (Aerial)

Transformer Pad 🔬

Additional Land

Contour - Major

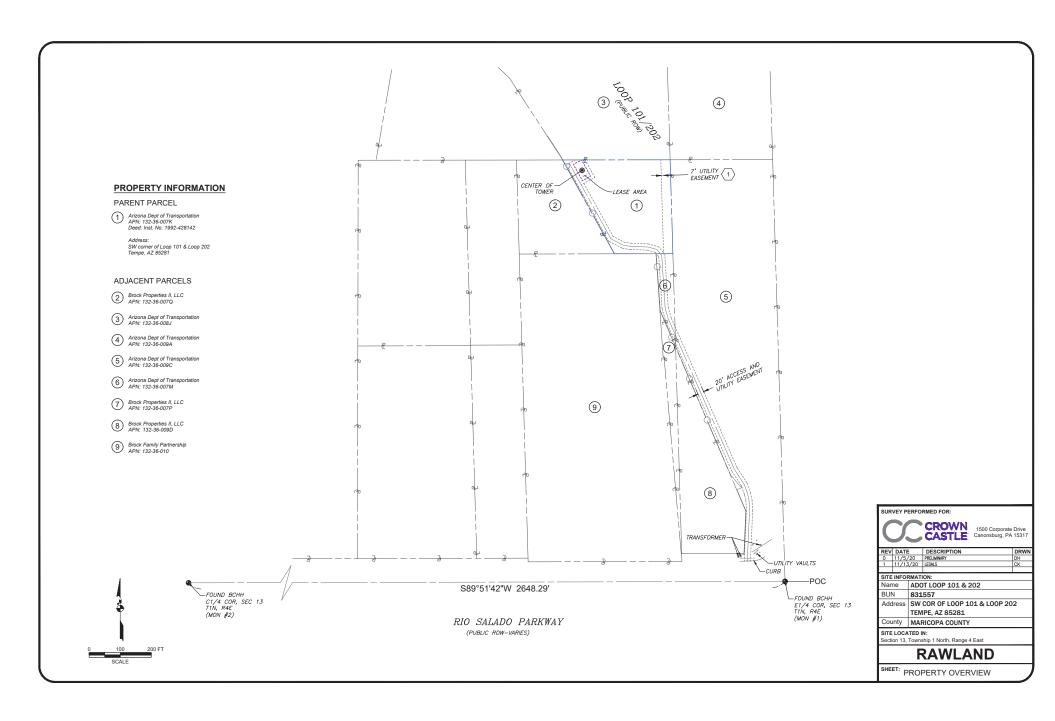
Contour - Minor

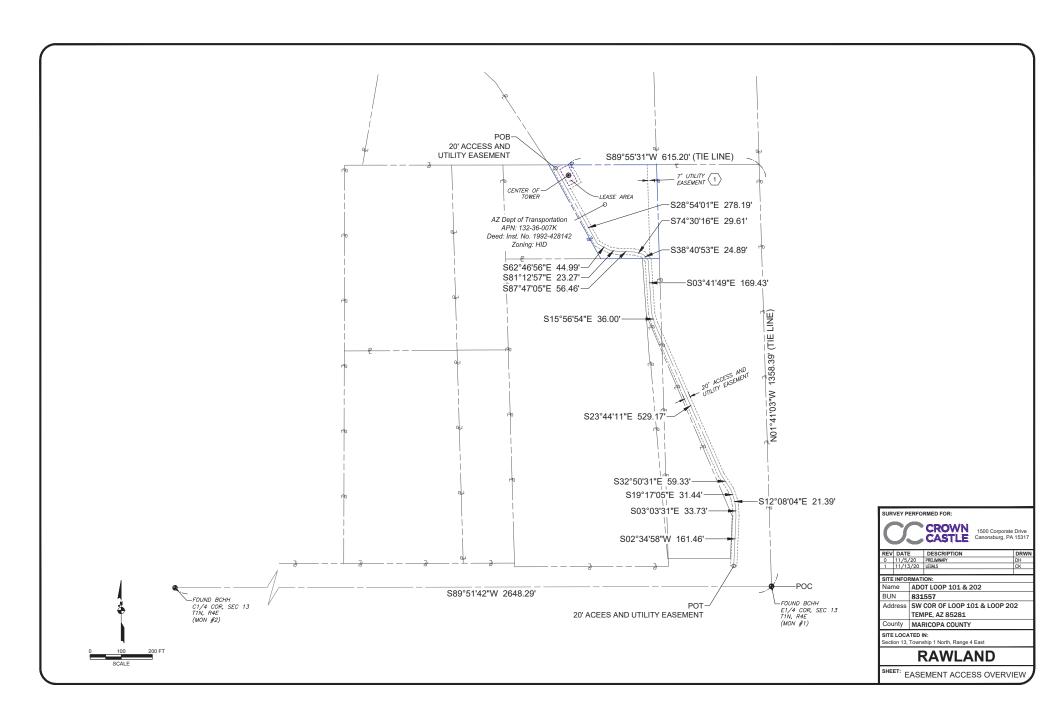
Topo - Low Point

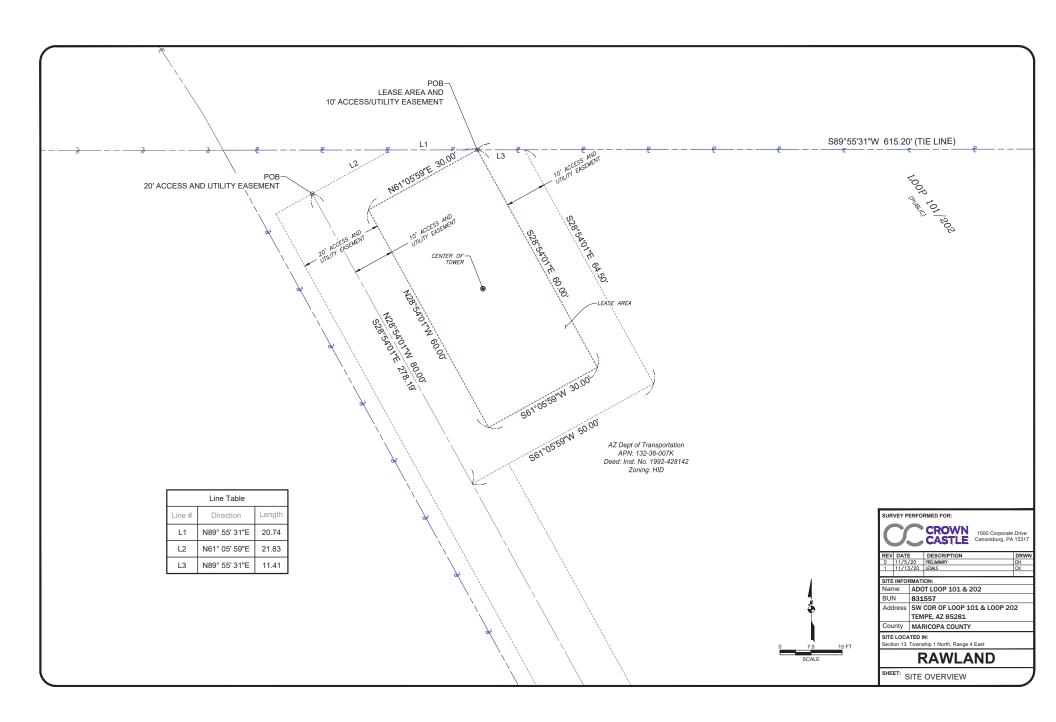
Property Tie

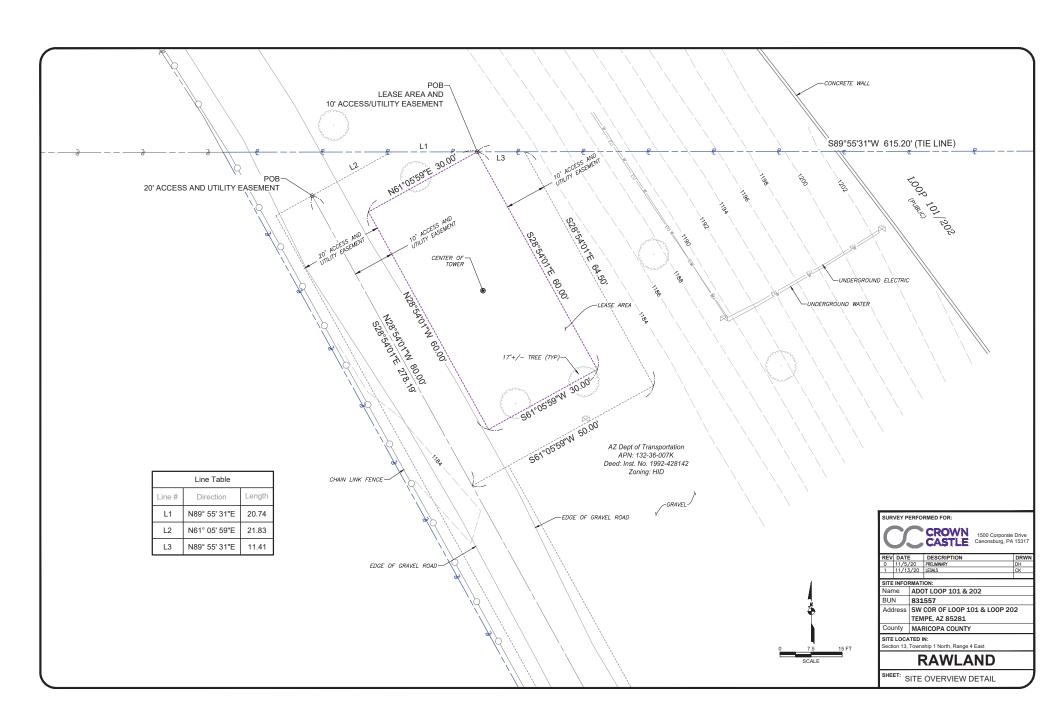
Building

Guiderail









PARENT PARCEL DESCRIPTION

THE WEST 495.00 FEET OF THE EAST 825.00 FEET OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER (SE 1/4 NE 1/4) OF SECTION 13, TOWNSHIP 1 NORTH, RANGE 4 EAST, GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA; EXCEPT THE SOUTH 1056.00 FEET THEREOF.

FURTHER EXCEPT THE PROPERTY SHOWN IN SPECIAL WARRANTY DEED RECORDED 11/09/2006 AS INSTRUMENT 20061482490 OF THE MARICOPA COUNTY RECORDS AND CORRECTED BY CORRECTIVE DOCUMENT RECORDED 11/15/2007 AS INSTRUMENT 20071223058 OF THE MARICOPA COUNTY RECORDS.

DERIVATION CLAUSE

BEING THE SAME PROPERTY CONVEYED TO THE STATE OF ARIZONA, BY AND THROUGH ITS DEPARTMENT OF TRANSPORTATION, GRANTEE, FROM TRI CITY READY-MIX, INC., AN ARIZONA CORPORATION, GRANTOR BY WARRANTY DEED RECORDED 08/04/1992, AS INSTRUMENT NO. 92-0428142 OF COUNTY RECORDS.

COMMITMENT FOR TITLE REVIEW

REFERENCE IS MADE TO THE LIMITED TITLE REPORT ORDER #01-20072394-01S. ISSUED BY OLD REPUBLIC TITLE INSURANCE COMPANY, DATED JUNE 19, 2020. ALL EASEMENTS S CONTAINED WITHIN SAID TITLE REPORT AFFECTING THE IMMEDIATE AREA SURROUNDING THE LEASE HAVE BEEN PLOTTED.

OVERHEAD AND UNDERGROUND POWER EASEMENT UNTO THE SALT RIVER PROJECT AGRICULTURAL IMPROVEMENT AND POWER DISTRICT A POLITICAL SUBDIVISION OF THE STATE OF ARIZONA, RECORDED 04/29/1971, AS BOOK 8666 PAGE 213 OF MARICOPA COUNTY RECORDS

EXISTING LEASE AREA

AS SURVEYED

ALL THAT PORTION OF THE WEST 495.00 FEET OF THE FAST 825.00 FEET OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 13, TOWNSHIP 1 NORTH, RANGE 4 EAST, GLIA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE EAST QUARTER CORNER OF SAID SECTION, FROM WHICH POINT THE CENTER QUARTER CORNER OF SAID SECTION BEARS SOUTH 89° 51' 42" WEST, 2648.29 FEET;

THENCE FROM SAID POINT OF COMMENCEMENT ALONG THE EAST LINE OF SAID NORTHEAST QUARTER, NORTH 01* 41 03 "WEST, 1383.9" FEET TO THE NORTH LINE OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SAID SECTION;

THENCE SOUTH 89° 55' 31" WEST ALONG SAID NORTH LINE 615 20 FEET TO THE POINT OF REGINNING:

THENCE SOUTH 28° 54' 01" EAST, 60.00 FEET; THENCE SOUTH 61° 05' 59" WEST 30.00 FEET

THENCE NORTH 28° 54' 01" WEST, 60.00 FEET;
THENCE NORTH 28° 54' 01" WEST, 60.00 FEET;
THENCE NORTH 61° 05' 59" EAST 30.00 FEET TO THE POINT OF BEGINNING.

CONTAINING 1,800 SQ. FT. OR 0,041 ACRES, MORE OR LESS.

10' ACCESS AND UTILITY EASEMENT

AS SURVEYED

ALL THAT PORTION OF THE SOLITHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 13 TOWNSHIP 1 NORTH, RANGE 4 EAST, GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE EAST QUARTER CORNER OF SAID SECTION, FROM WHICH POINT THE CENTER QUARTER CORNER OF SAID SECTION BEARS SOUTH 89° 51' 42" WEST, 2648.29 FEET

THENCE FROM SAID POINT OF COMMENCEMENT ALONG THE EAST LINE OF SAID NORTHEAST QUARTER NORTH 01° 41' 03" WEST, 1358.39 FEET TO THE NORTH LINE OF THE SOUTHEAST QUARTER OF TH NORTHEAST QUARTER OF SAID SECTION:

THENCE SOUTH 89° 55' 31" WEST ALONG SAID NORTH LINE, 615.20 FEET TO THE POINT OF BEGINNING;

THENCE NORTH 89° 55' 31" EAST, 11.41 FEET ALONG THE NORTH LINE OF THE SOUTHEAST QUARTER OF

THE NORTHEAST QUARTER OF SAID SECTION: THENCE DEPARTING SAID NORTH LINE SOUTH 28° 54' 01" EAST, 64.50 FEET; THENCE SOUTH 61' 05' 99' WEST, 50.00 FEET;

THENCE NORTH 28° 54' 01" WEST, 80.00 FEET:

THENCE NORTH 61° 05° 59° EAST 21.83 FEET TO A POINT ON THE NORTH LINE OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SAID SECTION; THENCE ALONG SAID NORTH LINE NORTH 89°5531° EAST, 20.74 FEET;

THENCE DEPARTING SAID NORTH LINE SOUTH 61° 05' 59" WEST, 30.00 FEET; THENCE SOUTH 28° 54' 01" EAST, 60.00 FEET;

THENCE NORTH 61° 05' 59" EAST, 30.00 FEET

THENCE NORTH 28° 54' 01" WEST, 60.00 FEET TO THE POINT OF BEGINNING.

CONTAINING 1,800 SQ. FT. OR 0.046 ACRES, MORE OR LESS.

ACCESS & UTILITY EASEMENT: NON-EXCLUSIVE

ALL THAT PORTION OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 13 TOWNSHIP 1 NORTH, RANGE 4 EAST, GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA, BEING A STRIP OF LAND 20.00 FEET WIDE, 10.00 FEET ON BOTH SIDES OF THE FOLLOWING DESCRIBED CENTERI INF:

COMMENCING AT THE EAST QUARTER CORNER OF SAID SECTION, FROM WHICH POINT THE CENTER QUARTER CORNER OF SAID SECTION BEARS SOUTH 89° 51' 42" WEST, 2648,29 FEET:

THENCE FROM SAID POINT OF COMMENCEMENT ALONG THE EAST LINE OF SAID NORTHEAST QUARTER, NORTH 01° 41' 03" WEST. 1358.39 FEET TO THE NORTH LINE OF THE SOUTHEAST QUARTER OF THE NORTHEAST OLIARTER OF SAID SECTION:

NORTHEAST QUARTER OF 3319 SECTION,
THENCE SOUTH 89° 55° 31° WEST ALONG SAID NORTH LINE, 635.94 FEET;
THENCE DEPARTING SAID NORTH LINE SOUTH 61°05′ 59° WEST, 21.83 FEET TO THE POINT OF BEGINNING;

THENCE SOUTH 28° 54' 01" EAST, 278.19 FEET; THENCE SOUTH 62° 46' 56" EAST, 44.99 FEET;

THENCE SOUTH 81° 12' 57" EAST, 23.27 FEET; THENCE SOUTH 87° 47' 05" EAST, 56.46 FEET; THENCE SOUTH 74° 30' 16" EAST, 29.61 FEET; THENCE SOUTH 38° 40' 53" EAST, 24.89 FEET;

THENCE SOUTH 03° 41' 49" EAST, 169.43 FEET; THENCE SOUTH 15° 56' 54" EAST, 36.00 FEET;

THENCE SOUTH 23° 44' 11" FAST 529 17 FEFT

THENCE SOUTH 32° 50' 31" EAST, 59.33 FEET

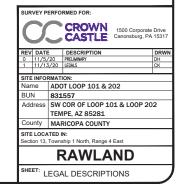
THENCE SOUTH 19° 17' 05" EAST, 31.44 FEET THENCE SOUTH 12° 08' 04" EAST, 21.39 FEET

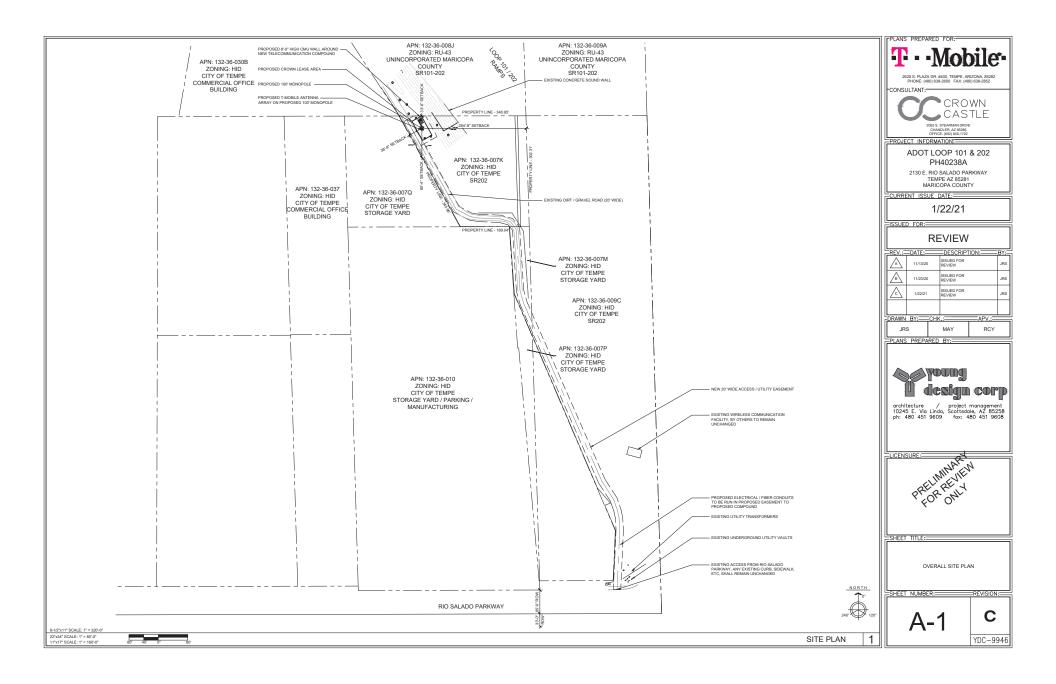
THENCE SOUTH 03° 03' 31" FAST, 33 73 FEET

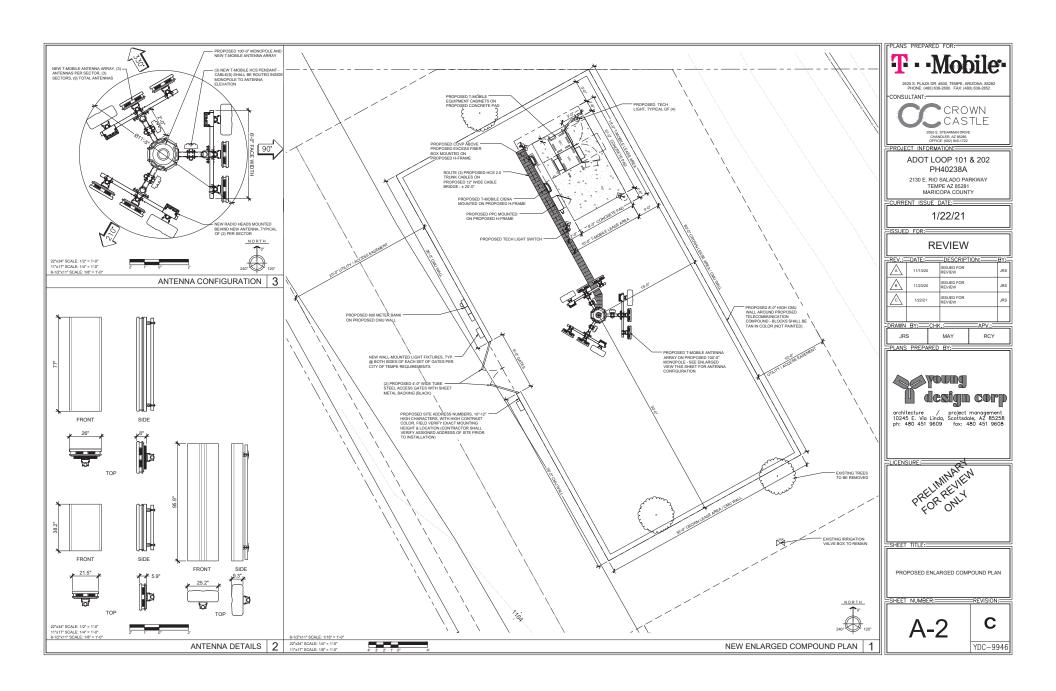
THENCE SOUTH 02° 34' 58" WEST, 161.46 FEET MORE OR LESS TO THE POINT OF TERMINUS,

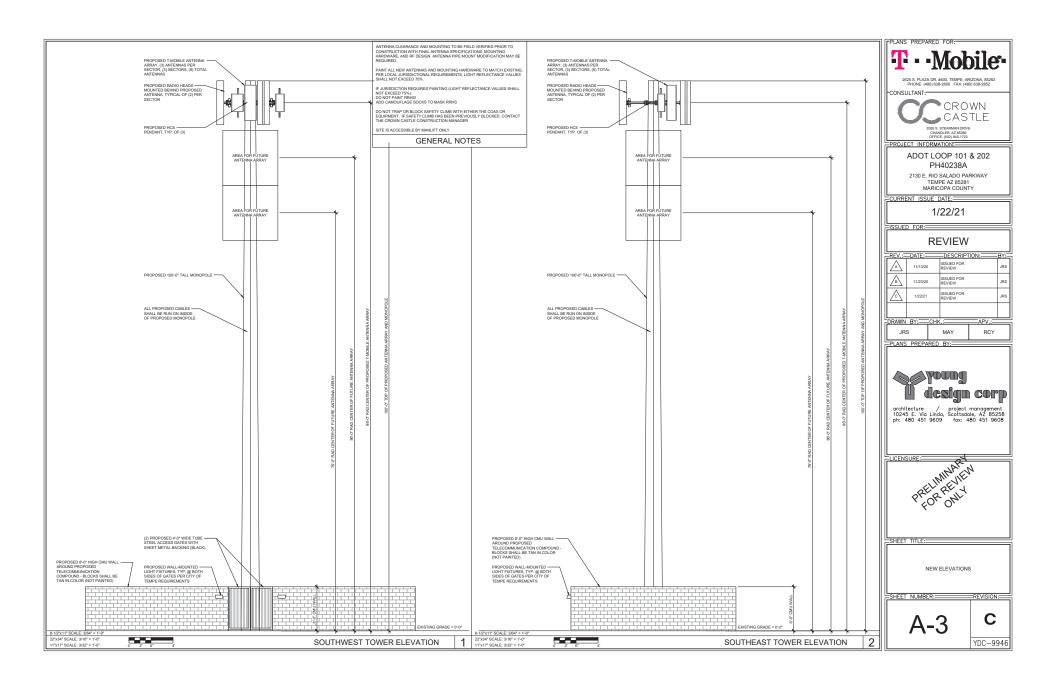
EXCLUDING THEREFROM ANY PORTION LYING WITHIN THE RIO SALADO PARKWAY RIGHT OF WAY

CONTAINING 29,987 SQ. FT. OR 0,688 ACRES, MORE OR LESS











Photographic Simulation

Site Name: ADOT Loop 101 & 202

Site Number: 831557

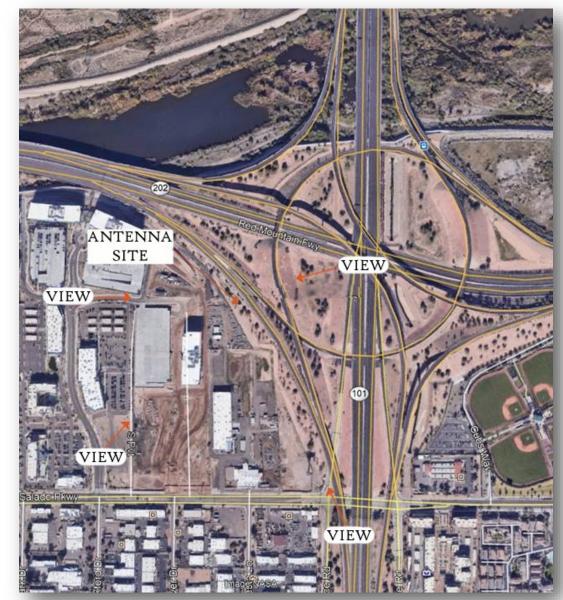
Site Address: SW Corner Loop 101 & 202,

Tempe, AZ 85281

Lat/Long: 33.432939, -111.893906

Date: 12/22/2020

Site Location Map







Existing West View



Proposed West View









Existing Southwest View



Proposed Southwest View







Existing Southeast View



Proposed Southeast View









Existing Northeast View



Proposed Northeast View



CITY OF TEMPE APPLICATION FORM FOR WIRELESS PROJECTS

The provision and siting of wireless (macro and microcell, Wi-Fi, distributed antenna system ("DAS"), etc.) services are highly technical enterprises subject to various federal, state, and local regulations. This application is designed to elicit information for a proposed new or modified wireless communications site project ("Project") within the City of Tempe, whether on private or public property or in the right-of-way ("ROW").

Completion of this application is mandatory for such wireless Projects to comply with City of Tempe duties under its Code; the Communications Act of 1934 as amended; the FCC Shot Clock Order (FCC 09-99); and other local, state, and federal laws, regulations, and court rulings. This document contains information necessary to permit the City of Tempe's informed consideration of a request.

Determination of completeness: No application for a new or modified wireless Project shall be considered until <u>all</u> required responses to this application form and required Exhibits are completed and tendered to the City of Tempe.

If you do not believe that a specific item of information is necessary or applies to your application based on the type of wireless Project, mark the item on this form with the words, "Not Applicable" and attach a detailed written explanation as to the basis for your belief (e.g., "Question 94.7 does not apply to this application because the proposed Project has no microwave transmission element.") An unsupported statement such as "Question 94.7 does not apply" is insufficient, and the determination of completeness of your application will be delayed while you provide a meaningful and detailed explanation.

The City of Tempe will review the application for completeness within 30 days and return incomplete submittals to the applicant.

Every page of this form <u>including this page</u> and the <u>last page</u> must be returned to the City of Tempe. Each page <u>including this page</u> and the <u>last page</u> must be initialed where indicated. The last page must also be completed, signed, and dated. Please note that item numbers in this form are intentionally non-sequential.

Questions should be directed to:

For Projects in the ROW:

For Projects on private or public property:

Land Services – Engineering Division 31 E. Fifth St. Tempe, AZ 85281 City Hall Municipal Complex Garden Level, West Wing 480-350-8200 Planning Division – Community Development 31 E. Fifth St. Tempe, AZ 85281 City Hall Municipal Complex Garden Level, East Wing 480-350-8331

City of Tempe Supplemental Wireless Application March 2016 Page **1** of **15**

Applicant's Representative Listed in 1.00 <u>Must</u> Initial Here: <u>wýc</u>

Please	Identify the Type of Win	eless Project Proposed		
X Ce:	llular Telephone	Broadcast RadioEnhanced Specialized MoSMR/ESMRSatellite DownlinkOther(s) (specify)	Broadcast TV bbile RadioMicrowaveWiFi/WiMaxSmall Cell	
1.00	Project Location and	Applicant Information		
Design	Submit Community Denate this application as "		oject Submittal Application.	
	Initial here <u>mýc</u> to i	indicate that Exhibit 1.01 is	s attached to this form.	
2.00	Project Owner and A	pplicant Information		
form a	Submit Property Owners "Exhibit 2.01"	er/Business Owner/Applica	nt Information Form. Designate this	
	Initial here <u>wýc</u> to	indicate that the Exhibit 2	.01 is attached to this form.	
3.00	FCC License / RF Sat	fety Compliance / FAA C	ompliance:	
3.01 (attach	For each licensee and for each radio service, submit the answers to Appendix A ched). Designate all completed Appendix A forms as "Exhibit 3.01."			
transm wirele wirele	oposed project or the emissions, the DAS provides carrier or wireless sers site. Appendix A for the FCC licensee for the property of the prope	nissions from the site are so der must provide an Appendicular to be transmissions completed by a DAS provider to be transmissions.	S provider is the FCC licensee for lely for the DAS provider's own dix A form completed by each itted through the Project at each rovider are unacceptable if they are to be transmitted through the	
measu under:	re. Do not use effective	isotropic radiated power (nent, you must append the	radiated power (ERP) units of EIRP). To verify your letters "ERP" following each	
	Initial here <u>mý</u> cto indic	cate that Exhibit 3.01 is att	ached to this form.	
Bullet	in 65 requires be evaluate	ted in connection with this	ntifiable RF emitters that FCC OET Project, are all portions of this C OET 65 Bulletin requirements?	
	<u>mý</u> čYes	No		
Supp	City of Tempe lemental Wireless Application	Page 2 of 15	Applicant's Representative Listed in 1.00 <u>Must</u> Initial Here: <u><i>M</i>ý</u> C	

Supplemental Wireless Application March 2016

use co	Provide a written statement for each entity that will be using the Project site that the amplies/will comply with all FCC and FAA regulations. Attach an RF-EME Report if ble. Designate this (these) statement(s) as "Exhibit 3.03."				
	Initial here to indicate that Exhibit 3.03 is attached to this form.				
4.00:	Project Purpose				
inforn	4.01: <u>Note to all applicants</u> : For each entity that will be using the Project site, provide the information in this section. If more than one person/legal entity, provide separate information for each person/legal entity using the Project site.				
	2: Indicate the <u>dominant</u> purpose of the Project (check one or more, then proceed as ected):				
	Add network capacity <u>without</u> adding significant new RF coverage area; Proceed to Section 4.04.				
	Provide significant <u>new</u> radio frequency coverage in an area <u>not</u> already served by radio frequency coverage; Proceed to Section 4.04.				
	<i>mýc</i> Increase the existing RF signal level in an area with existing radio frequency coverage; Proceed to Section 4.04.				
	Other; Proceed to Section 4.03.				
4.03 Attach a written statement fully and expansively describing all portions or elements of the "Other" dominant purpose of this Project. Designate this exhibit as "Exhibit 4.03."					
	Initial here to indicate that Exhibit 4.03 is attached to this form.				
4.04 teleco	Is this Project intended to close or reduce an asserted "significant gap" in a wireless mmunications network? Yes No				
4.05	If the answer to 4.04 is NO proceed to Section 4.07. If YES, proceed to Section 4.06				
4.06	Attach a written statement fully and expansively describing the following:				
	a. A clear description of the geographic boundary of the claimed significant gap area; and				
	b. Attach a street-level map showing the geographic boundary of the claimed significant gap stated in 4.06(a); and				
	c. Identify the size of the area, in units of square miles, of the claimed significant gap; and				
	d. Attach a street-level map showing the geographic boundary that would be served				

City of Tempe Supplemental Wireless Application March 2016 Page **3** of **15**

Applicant's Representative Listed in 1.00 <u>Must</u> Initial Here: <u>*mýc*</u>

by the Project if approved; and

e. Provide all other relevant information that the City of Tempe should consider when evaluating your claim of a significant gap.

	Designate this exhibit as "Exhibit 4.06."		
	Initial here to indicate that Exhibit 4.06 is attached to this form.		
4.07	If applying for a Use Permit:		

A Use Permit shall be granted only upon a finding by the decision-making body, that the use covered by the permit, the manner of its conduct, and any building which is involved, will not be detrimental to persons residing or working in the vicinity, to adjacent property, to the neighborhood, or to the public welfare in general, and that the use will be in full conformity to any conditions, requirements, or standards prescribed therefore by this Code.

In arriving at the above determination, the following factors shall be considered, but not be limited to:

- a. Any significant increase in vehicular or pedestrian traffic;
- b. Nuisance arising from the emission of odor, dust, gas, noise, vibration, smoke, heat, or glare at a level exceeding that of ambient conditions;
- c. Contribution to the deterioration of the neighborhood or to the downgrading of property values which, is in conflict with the goals, objectives or policies for rehabilitation, redevelopment or conservation as set forth in the city's adopted plans or General Plan;
- d. Visual compatibility with existing surrounding structures and uses, including compliance with any stealth and concealment requirements; and
- e. Adequate control of disruptive behavior both inside and outside the premises, which may create a nuisance to the surrounding area or general public.

Attach a letter of explanation that addresses the above Approval Criteria. Designate this exhibit as "Exhibit 4.07."

Initial here <u>myc</u> to indicate that Exhibit 4.07 is attached to this form.

- 4.08 Attach a written statement fully and expansively describing at a minimum:
 - a. Why this Project is the least intrusive means to close the significant gap claimed and described in 4.06.
 - b. Identify and discuss all alternative sites and means considered to close the

City of Tempe Supplemental Wireless Application March 2016 Page **4** of **15**

Applicant's Representative Listed in 1.00 $\underline{\textit{Must}}$ Initial Here: $\underline{\textit{myc}}$

significant gap claimed and described in 4.06.

- c. Whether two or more sites in lieu of the site proposed in Section 1 could close the significant gap claimed and described in 4.06, or to reduce the significant gap to be less than significant, with less impact on the community as compared with a single site? If the answer is no, please explain in narrative format the basis for that answer.
- d. Whether the City of Tempe requiring two or more sites in place of the site proposed in Section 1 would prohibit or have the effect of prohibiting the Applicant from providing any interstate or intrastate telecommunications service. If the response asserts that a prohibition or effective prohibition would occur, explain in detail in narrative form all of the reasons why it would.

Include any other information you believe would assist the City of Tempe in making findings regarding whether the proposed Project is the least intrusive means of closing the significant gap claimed and described in 4.06.

Designate this exhibit as "Exhibit 4.08."

Initial here <u>mýc</u> to indicate that Exhibit 4.08 is attached to this form.

5.00 Project Base Photographs and Photo Simulations

- 5.01 The Applicant shall submit photo simulations consistent with the following standards:
 - 1. Minimum size of each base (existing) photo <u>and</u> each photo simulation must be 10 inches by 8 inches. Each base photo and matching photo simulation must be the same size.
 - 2. All elements of the Project as proposed by the Applicant which can be seen from any point at ground level, or from any level within or on buildings within a ½ mile radius of the Project must be shown in one or more close-in photo simulations (i.e., panel antennas, omni-directional antennas, GPS antennas, antenna camouflage devices, cable trays, equipment cabinets, working lights, etc.).
 - 3. The overall Project as proposed by the Applicant must be shown in three or more area photo simulations. Base photographs must, at a minimum, be taken from widely scattered positions of 120 degrees. A map detail showing each location where a photograph was taken, the proposed site, and the direction to the site from each photo location must be included. Base photographs taken from locations that have some physical feature obscuring the Project site, and the photo simulations associated with those same base photographs, are not acceptable.

Attach all base photographs and photo simulations to this application marked as "Exhibit 5.01."

City of Tempe Supplemental Wireless Application March 2016 Page **5** of **15**

Applicant's Representative Listed in 1.00 Must Initial Here: <u>*mýc*</u>

The purpose of the photo simulations is to allow the City of Tempe to visualize the wireless Project as completed, therefore the number of site photos, and photo simulations, and the actual or simulated camera location of these photos and photo simulations are subject to City of Tempe determination. The Applicant should submit photos and photo simulations consistent with these instructions, and be prepared to provide additional photos and photo simulations should they be requested by the City of Tempe.

The Applicant certifies by initialing in the space at the end of this paragraph that all of the photos and photo simulations provided for Exhibit 5.01 are accurate and reliable photographic representations of the current Project site and the proposed Project to be constructed or modified, and that the Applicant is fully aware that the City of Tempe will rely on all of the photos and photo simulations provided in Exhibit 5.01 when it considers approval of this Project, and later when determining Project completion.

Applicant's	initials:	mýc

6.00 Minimization of Visual Impact

6.01 Provide documentation of the steps that will be taken to minimize visual impact of the proposed wireless attachment or facility to comply with any stealth and concealment requirements. Designate this exhibit as "Exhibit 6.01."

Initial here <u>mýc</u> to indicate that Exhibit 6.08 is attached to this form.

7.00 **Landscape Plan**

7.01 Provide a landscape plan, drawn to scale, that is consistent with the need for screening at the site. Any existing vegetation that is to be removed must be clearly indicated and provision for mitigation included where appropriate. Designate this exhibit as "Exhibit 7.01."

8.00 Feasibility Study for Co-Location

- 8.01 Provide a feasibility study for the co-location of telecommunication facilities as an alternative to new structures. The study shall include:
 - a. An inventory, including the location, ownership, height, and design of existing Wireless Telecommunication Facilities within one-half (1/2) mile of the proposed location of a new Wireless Telecommunication Facilities. The city may share such information with other applicants seeking permits for WTFs, but shall not, by sharing such information, in any way represent or warrant that such sites are available or suitable.
 - b. Applicant shall document efforts made to co-locate on existing verticality. Each applicant shall make a good faith effort to contact the owner(s) of existing or approved structures and shall provide a list of all owners contacted in the area,

City of Tempe Supplemental Wireless Application March 2016 Page **6** of **15**

Applicant's Representative Listed in 1.00 <u>Must</u> Initial Here: <u>*mýc*</u>

including the date, form and content of such contact. Co-location shall not be precluded simply because a fee for shared use is charged, or because of reasonable costs necessary to adapt the existing and proposed uses to a shared

	site.			
	Designate t	this study as "Ex	xhibit 8.01."	
	Initial here	<u>ýc</u> to indicate	e that Exhibit 8.0	01 is attached to this form.
9.00	Alternative Ca	andidate Sites		
9.01	Amateur radio	applicants proce	eed to Section 10	0.00.
agreen	d or attempted to	o secure any lea	ses or lease-opti	g on behalf of the Applicant or Owner ons or similar formal or informal s other than the proposed Project site?
	If the answer ton 9.04.	o 9.02 is NO pro	oceed to Section	9.05. If the answer is YES, proceed to
techni		as to why each s	such other site wa	location, and provide an expansive as disfavored over the Project site.
Initial	here to	o indicate that E	xhibit 8.04 is atta	ached to this form.
the Ci				l only one location within or outside of s of the Project?
9.06 to Sec	If the answer to tion 9.07.	o 9.05 is NO, pr	oceed to Section	10.00. If the answer is YES, proceed
the proposible expans	ehensive radio for posed site is the ly meet the radio	requency data a e one and only o o frequency obje	nd all other nece one location with ectives of the Pro	splanation supported as required by ssary information fully describing why in or outside of the City of Tempe that can bject. Explain, in exact and Project that can be achieved only at this
Design	nate this exhibit	as "Exhibit 9.07	7."	
Initial	here <u>wýc</u> to	o indicate that E	xhibit 9.07 is atta	ached to this form.
	City of Tempe		Page 7 of 15	Applicant's Representative Listed

Supplemental Wireless Application March 2016

Page **7** of **15**

Applicant's Representative Listed in 1.00 <u>Must</u> Initial Here: <u>*mýc*</u>

10.00 **Identification of Key Persons**

10.01 Identify by name, title, company affiliation, work address, telephone number and extension, and email address of the key person or persons most knowledgeable regarding this Project so that the City of Tempe may contact them with questions regarding the Project:

10.02	Name: Title:	the final site selection for the Project; see attached for 10.2 ~ 10.4
	Company Affiliation: Work Address:	
	Telephone / Ext.:	
	Email Address:	
10.03	-	the radio frequency engineering of the Project; RF
	Name:	
	Title: Company Affiliation:	
	Work Address:	
	Telephone / Ext.:	
	Email Address:	
10.04	1	rejection of other candidate sites evaluated, if any;
	Name:	
	Title:	
	Company Affiliation: Work Address:	
	Telephone / Ext.:	
	Email Address:	
	Email Hadross.	
11.00	Additional Information P	rovided by Applicant
		aged to provide any additional written information of any ape to consider in connection with your proposed Project.
If you	wish to attach additional wri	itten information, designate this exhibit as "Exhibit 11.01"
Initial	here to indicate tha	at Exhibit 11.01 is attached to this form,

12.00 Certification of Accuracy and Reliability

<u>or</u> initial here <u>wic</u> to indicate that there is no Exhibit 11.01 attached.

12.01 The undersigned certifies on behalf of itself, the Applicant, the Project Owner, and the Property Owner (if property owner is other than the City of Tempe) that the information provided in this form and its contents are true and complete to the best of the undersigned's ability and knowledge, and that information provided here can and should be relied upon by

City of Tempe Supplemental Wireless Application March 2016 Page **8** of **15**

Applicant's Representative Listed in 1.00 <u>Must</u> Initial Here: <u>Wyc</u>

the City of Tempe as being accurate and complete as the City of Tempe evaluates this Project.

Michael J. Campbell	Consultant
Signature	Title
Michael J Campbell	campbellaz1@earthlink.net
Print Name	Provide Email Address
Campbell A&Z, LLC	602-616-8396
Print Company Name	Provide Telephone Number
3/4/21	
Date Signed	<u> </u>

<Last Page: Remember to sign above and initial below>

Appendix A

Checklist to Determine Whether a Facility is Categorically Excluded From Determination of Compliance

The FCC has determined that many wireless facilities are unlikely to cause human exposures in excess of RF exposure guidelines. Operators of those facilities are exempt from routinely having to determine their compliance. These facilities are termed "categorically excluded." Section 1.1307(b)(1) of the FCC's rules defines those categorically excluded facilities.

This checklist will assist the City in identifying those wireless facilities that are categorically excluded, and thus are highly unlikely to cause exposure in excess of the FCC's guidelines. Provision of the information identified on this checklist may also assist FCC staff in evaluating any inquiry regarding a facility's compliance with the RF exposure guidelines.

BACKGROUND INFORMATION

1.	Facility Operator's Legal Name: CROWN CASTLE
2.	Facility Operator's Mailing Address: 2055 S STERAMAN, CHANDLER AZ 85286
3.	Facility Operator's Contact Name/Title: HEATH REED
4.	Facility Operator's Office Telephone: 480-734-2431
	Facility Operator's Fax: N/A
	Facility Name: CROWN ADOT LOOP 101 & 202
7.	Facility Address: 2130 E RIO SALADO PARKWAY
8.	Facility City/Community: TEMPE
9.	Facility State and Zip Code: AZ, 85281
10.	Latitude: 33-25-58.85
11.	Longitude: 111-52-38.06

City of Tempe Supplemental Wireless Application March 2016 Page **10** of **15** Applic

Applicant's Representative Listed in 1.00 $\underline{\textit{Must}}$ Initial Here: $\underline{\textit{myc}}$

Checklist (page 2)

EVALUATION OF CATEGORICAL EXCLUSION

13. Structure Type (free-standing or building/roof-mounted): free-standing
14. Antenna Type [omnidirectional or directional (includes sectored)]: directional 3 sectors
15. Height above ground of the lowest point of the antenna (in meters): 22.86m
16. 🛎 Check if <u>all</u> of the following are true:
(a) This facility will be operated in the Multipoint Distribution Service, Paging and
Radiotelephone Service, Cellular Radiotelephone Service, Narrowband or Broadband
Personal Communications Service, Private Land Mobile Radio Services Paging

- (a) This facility will be operated in the Multipoint Distribution Service, Paging and Radiotelephone Service, Cellular Radiotelephone Service, Narrowband or Broadband Personal Communications Service, Private Land Mobile Radio Services Paging Operations, Private Land Mobile Radio Service Specialized Mobile Radio, Local Multipoint Distribution Service, or service regulated under Part 74, Subpart I (see question 12).
- (b) This facility will not be mounted on a building (see question 13).

12. Licensed Radio Service (see attached Table 1): Cellular, PCS Wireless, 4G LTE

(c) The lowest point of the antenna will be at least 10 meters above the ground (see question 15).

If box 16 is checked, this facility is categorically excluded and is unlikely to cause exposure in excess of the FCC's guidelines. The remainder of the checklist need not be completed. If box 16 is not checked, continue to question 17.

17. Enter the power threshold for categorical exclusion for this service from the attached		
Table 1 in watts ERP or EIRP* (note: EIRP = (1.64) X ERP):		
18. Enter the total number of channels if this will be an omnidirectional antenna, or the		
maximum number of channels in any sector if this will be a sectored antenna:		
19. Enter the ERP or EIRP per channel (using the same units as in question 17):		
20. Multiply answer 18 by answer 19:		
21. Is the answer to question 20 less than or equal to the value from question 17 (yes or no)?		

If the answer to question 21 is YES, this facility is categorically excluded. It is unlikely to cause exposure in excess of the FCC's guidelines.

If the answer to question 21 is NO, this facility is not categorically excluded. The City will need further information to verify whether the facility may cause exposure in excess of the FCC's guidelines.

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Applicant's Representative Listed in 1.00 <u>Must</u> Initial Here: <u>WÝC</u>

^{*&}quot;ERP" means "effective radiated power" and "EIRP" means "effective isotropic radiated power

$\underline{\mathsf{TABLE}}$ 1: TRANSMITTERS, FACILITIES AND OPERATIONS SUBJECT TO ROUTINE ENVIRONMENTAL EVALUATION

SERVICE (TITLE 47 CFR RULE PART)	EVALUATION REQUIRED IF:
Experimental Radio Services (part 5)	power > 100 W ERP (164 W EIRP)
Multipoint Distribution Service (subpart K of part 21)	non-building-mounted antennas: height above ground level to lowest point of antenna < 10 m and power > 1640 W EIRP building-mounted antennas: power > 1640 W EIRP
Paging and Radiotelephone Service (subpart E of part 22)	non-building-mounted antennas: height above ground level to lowest point of antenna < 10 m and power > 1000 W ERP (1640 W EIRP) building-mounted antennas: power > 1000 W ERP (1640 W EIRP)
Cellular Radiotelephone Service (subpart H of part 22)	non-building-mounted antennas: height above ground level to lowest point of antenna < 10 m and total power of all channels > 1000 W ERP (1640 W EIRP) building-mounted antennas: total power of all channels > 1000 W ERP (1640 W EIRP)

City of Tempe Supplemental Wireless Application March 2016 Page **12** of **15**

Applicant's Representative Listed in 1.00 <u>Must</u> Initial Here: <u>Wyc</u>

TABLE 1 (cont.)

SERVICE (TITLE 47 CFR RULE PART)	EVALUATION REQUIRED IF:
Personal Communications Services (part 24)	(1) Narrowband PCS (subpart D): non-building-mounted antennas: height above ground level to lowest point of antenna < 10 m and total power of all channels > 1000 W ERP (1640 W EIRP) building-mounted antennas: total power of all channels > 1000 W ERP (1640 W EIRP) (2) Broadband PCS (subpart E): non-building-mounted antennas: height above ground level to lowest point of antenna < 10 m and total power of all channels > 2000 W ERP (3280 W EIRP) building-mounted antennas: total power of all channels > 2000 W ERP (3280 W EIRP)
Satellite Communications (part 25)	all included
General Wireless Communications Service (part 26)	total power of all channels > 1640 W EIRP
Wireless Communications Service (part 27)	total power of all channels > 1640 W EIRP
Radio Broadcast Services (part 73)	all included

TABLE 1 (cont.)

SERVICE (TITLE 47 CFR RULE PART)	EVALUATION REQUIRED IF:
Experimental, auxiliary, and special broadcast and other program distributional services (part 74)	subparts A, G, L: power > 100 W ERP subpart I: non-building-mounted antennas: height above ground level to lowest point of antenna < 10 m and power > 1640 W EIRP building-mounted antennas: power > 1640 W EIRP
Stations in the Maritime Services (part 80)	ship earth stations only
Private Land Mobile Radio Services Paging Operations (part 90)	non-building-mounted antennas: height above ground level to lowest point of antenna < 10 m and power > 1000 W ERP (1640 W EIRP) building-mounted antennas: power > 1000 W ERP (1640 W EIRP)
Private Land Mobile Radio Services Specialized Mobile Radio (part 90)	non-building-mounted antennas: height above ground level to lowest point of antenna < 10 m and total power of all channels > 1000 W ERP (1640 W EIRP) building-mounted antennas: total power of all channels > 1000 W ERP (1640 W EIRP)

TABLE 1 (cont.)

SERVICE (TITLE 47 CFR RULE PART)	EVALUATION REQUIRED IF:
Amateur Radio Service (part 97)	transmitter output power > levels specified in § 97.13(c)(1) of this chapter
Local Multipoint Distribution Service (subpart L of part 101)	non-building-mounted antennas: height above ground level to lowest point of antenna < 10 m and power > 1640 W EIRP building-mounted antennas: power > 1640 W EIRP LMDS licensees are required to attach a label to subscriber transceiver antennas that: (1) provides adequate notice regarding potential radiofrequency safety hazards, e.g., information regarding the safe minimum separation distance required between users and transceiver antennas; and (2) references the applicable FCC-adopted limits for radiofrequency exposure specified in § 1.1310 of this chapter.

CROWN CASTLE ADOT LOOP 101 & 202 2130 E RIO SALADO PARKWAY MARCH 4, 2021 CITY OF TEMPE SUPPLEMENTAL WIRELESS APPLICATION SPR200113

Project Location:

1.0- 2130 E Rio Salado Parkway., ADOT SR101 & 202 interchange.

Project Owner & Applicant Information:

2.0-Crown Castle, 2055 S Stearman Dr, Chandler AZ 85286 Project Owner Campbell A&Z, LLC 6880 W Antelope Dr., Peoria AZ 85383, Applicant

FCC License/RF Safety/FAA Compliance:

3.01-See attached letter

Project Purpose:

4.02-4.04 The proposed Crown Castle new build 100' tall monopole and equipment cabinet compound is designed to replace an existing Crown Castle facility located on the 2150 E Rio Salado Pkwy, the Brock property. The existing site is experiencing transmission signal blocking and shadowing from the newly constructed multi-storied Freedom Financial Buildings located due west and northwest of the existing monopole.

The relocation site will allow the carrier, TMobile, to continue the respective network coverage areas and to serve their customers is focused on the immediate lands in and around the intersection of SR101, SR 202 and Rio Salado Parkway. RF coverage maps are attached are attached. The maps show the coverage from the existing site, 879278 Riverview, coverage from the new site 831557 ADOT LOOP 101 & 202, and the area without the replacement monopole site.

- 4.06-A copy of the target area is attached. The target area covers an area that surrounds the SR101 and SR202 interchange and the businesses along Rio Salado Parkway, east and west of SR101. The approx gross target area is approx 2560 acres in size.
- 4.07-The request for a Use Permit to allow the Crown Castle monopole site will not create any significant increase in vehicular or pedestrian traffic; the site will not create any odor, dust, gas, noise, vibration, smoke, heat or glare at a level that exceeds the current conditions of the area; the site will not contribute to the deterioration if the neighborhood or downgrade property values, in fact the improved wireless network coverage has been found to improve area values as the public reliance on wireless service has increased while the public reliance on wireline communication has fallen; the site will be visually compatible with the area as there are a number of tall light poles in the area of the freeway interchange, the site will be secured and not accessible by the public, therefore eliminating the issue of potential of disruptive behavior at the site.
- 4.08-The proposed Crown Castle site is the least invasive design to maintain the current network coverage for the carrier, without creating coverage gaps in a mature network. The alternative sites discussed were rooftop sites on the Freedom Financial buildings and a ground space on the Freedom Financial campus. The rooftop facility fell out due to issues with rooftop carrier equipment and the ground space location fell out to due to the timeframe of the availability for the location. This replacement site will allow for removal of the existing monopole at 2150 E Rio Salado Parkway once the new monopole is constructed and operational.

Project Base Photographs & Photo Simulations:

5.01-See attached photo sims and site photos

Minimization of Visual Impact:

6.01-The proposed Crown Castle site will be visually compatible with the area as there are several tall ADOT light poles serving the freeway interchange.

Landscape Plan:

7.01-. There is no landscape plan for this proposed facility. ADOT does not allow additional landscaping at carrier facilities.

Feasibility Study for Co-location:

8.01-The Crown Castle site will house TMobile. The monopole will be engineered for two additional carriers.

Alternative Candidate Sites:

9.05-The alternative locations reviewed as noted above were properties at the Freedom Financial campus.

9.07-Coverage Maps attached.

Identification of Key Persons:

10.02-Site Selection: Michael J Campbell Campbell A&Z, LLC 6880 W Antelope Dr. Peoria AZ 85383 608-616-8396 campbellaz1@earthlink.net

10.03-RF Engineer Mehdi Abbas T-Mobile 1330 W Southern Ave., A-102 Tempe AZ 85282 904-662-9267 mehdiabbasnaqvi.naqvi1@t-mobile.com

10.04-Candidate Rejection:
Richard Stannard
Crown Castle
2055 S Stearman Dr
Chandler AZ 85286
480-735-6954
Richard.stannard@crowncastle.com

11.0-nothing additional

12.01 Affidavit signed



879278 RF Analysis - T-Mobile

Danny Sosa

Senior RF Engineer
Data & Demand Planning

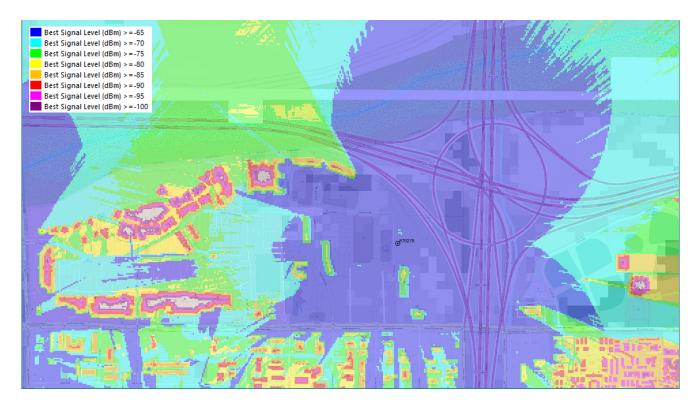
March

2021

The pathway to possible.

T-Mobile coverage pre-buildings

 Estimated coverage before buildings were constructed

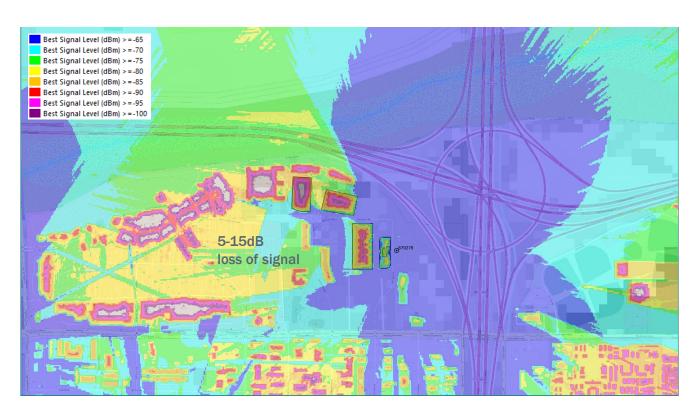




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T-Mobile coverage pre-buildings

- Estimated coverage after buildings were constructed
 - Since 2018, there appear to be three new parking garages along with the building directly in front of 879278 in 2019.
- Some areas to the west of the new building are showing a 5-15dB loss of signal strength
 - A 5-15 dB loss equates to 32% down to 3% of the original signal

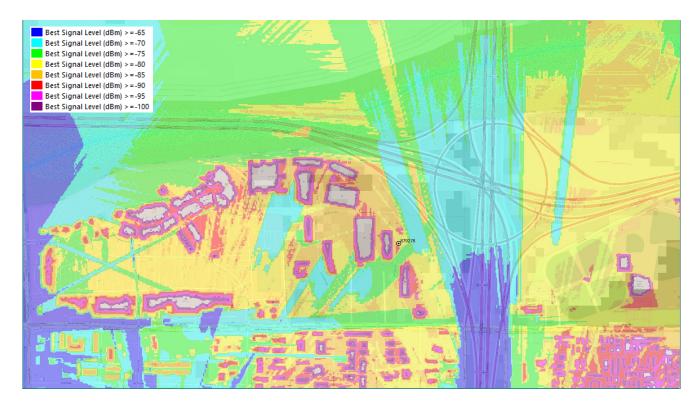




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T-Mobile coverage post-buildings

 Estimated coverage after buildings were constructed also removing 879278

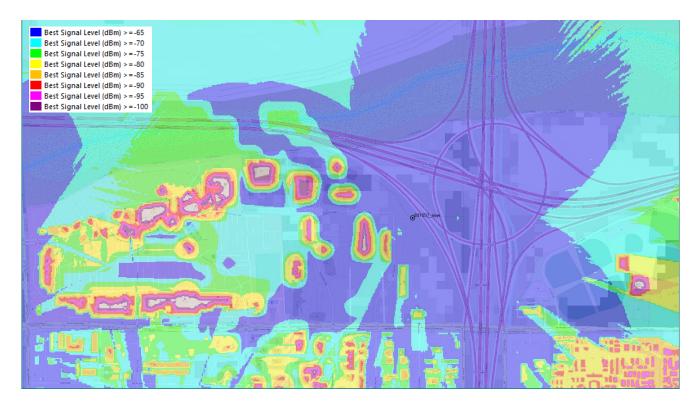




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T-Mobile coverage post-buildings

• Estimated coverage after buildings were constructed adding in 831557





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Thank you

For further information please contact:

Danny Sosa Senior RF Engineer (610) 567-7989 daniel.sosa@crowncastle.com



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ASAC SITE SPECIFIC EVALUATION FOR

Site Name: ADOT Loop Site Number: 831557 Site Location: Tempe, AZ.

Requestors Name: Heath Reed Company Name: Crown Castle Street Address: 2055 S. Stearman Drive City and Zip: Chandler, AZ. 85286

This is an evaluation based on application of surfaces identified in Federal Aviation Regulation (FAR) Part 77 and Federal Communication Commission (FCC) Rules Part 17.

EXECUTIVE SUMMARY

- **♣** The max height that can be built at this site without notice to the FAA is 200 feet AGL or 1384 feet AMSL.
- The max No Extended Study height at this site is 491 AGL, or 1675 AMSL.
- The max no hazard height at this site is 499 AGL, or 1683 AMSL.
- The max no marking and lighting height at this site is 200 AGL, or 1384 AMSL.

SITE DATA

Structure Type: Antenna Tower

Coordinates of site: Lat: 33°25'58.58"

Long: 111°53'38.06" Datum: NAD 83

Site ground elevation:

Total height above the ground of the entire structure (AGL):

100

Total height above mean sea level (AMSL):

1284

831557.doc 1/29/2021

AIRPORT/HELIPORT INFORMATION

Nearest public use or Government Use (DOD) facility: Phoenix Sky Harbor International.

This structure will be located 5.9 NM or 35934 FT from the airport on a bearing of 270 degrees true to the airport.

Nearest private use landing facility is: JSJ.

This structure will be located 2.5 NM from the helipad on a bearing of 70 degrees true to the helipad.

STUDY FINDINGS

<u>FAA FAR Part 77 paragraph 9 (FAR 77.9)</u>: (Construction or Alteration requiring notice.) (These are the imaginary surfaces that the FAA has implemented to provide general criteria for notification purposes.)

This structure does not require notification to the FAA.

<u>FAA FAR Part 77 paragraph 17(FAR 77.17):</u> (Standards for Determining Obstructions.)(These are the imaginary surfaces that the FAA has implemented to protect aircraft safety. If any of these surfaces are penetrated, the structure may pose a Hazard to Air Navigation.)

This structure does not exceed these surfaces.

FCC Notice Requirements:

(FCC Rules, Part 17)

This structure does not require notification to the FAA or FCC based on these rules.

FAA EMI:

(The FAA protects certain air navigational aids, radio transmitters, and RADAR facilities from possible interference. The distance and direction are dependent on the type of facility being evaluated. Some of these transmission and receiver facilities are listed in the National Flight Data Center (NFDC) database.)

This site would not affect any FAA air navigational aids or transmitters.

831557.doc 1/29/2021

Military Airspace:

(This would include low level visual and instrument routes along with operations areas and special use airspace.)

This structure will not affect this airspace.

AM Facilities:

(The FCC protects AM radio stations from possible interference for a distance of 3.0 km for directional facilities, and 1.0 km for non-directional facilities. New changes to the FCC critical distances are calculated based on the AM transmission Movement Method Proof evaluation.)

This site was evaluated against the FCC's AM antenna database using the Movement Method proof calculations and no further action is required.

MARKING AND LIGHTING

FAA Advisory Circular 70/7460-1:

Marking and lighting is not required for this structure.

RECOMMENDATIONS

This site was evaluated in accordance with the requirements specified by the FAA under Federal Aviation Rules part 77, and found not to be a hazard to air navigation.

