August 2, 2011

Requisition No. 1103210 – Pima Emergency Communications and Operations Center

On July 12, 2011, I advised the Board of Supervisors that an adjacent property owner and two other representatives of the Julia Keene Neighborhood Association had requested additional information regarding the proposed modification and design of the Pima Emergency Communications and Operations Center (PECOC). The neighbors have identified two impacts as objectionable.

Objections

The neighborhood representatives object to the construction of a 125-foot high self-supporting antenna tower on the site. The tower is necessary to support the Pima County Wireless Integrated Network (PCWIN) public safety radio system and radio systems deployed by the Radio Amateur Civil Emergency Services (RACES) organization in support of the Pima Emergency Communications and Operations Center (PECOC).

The neighbors have more recently objected to the planned demolition of an existing 2,900 square foot rotunda building to make way for a larger structure to house the new PECOC. The Modern Architecture Preservation Project (MAPP) initially raised objections to the planned demolition of the rotunda building. On May 6, 2011, I submitted a report to the Board describing the objections of MAPP representatives, the extent of the site improvements and design constraints.

The project site is in the Julia Keene Neighborhood. The project site, which faces onto 22nd Street, was zoned C1 for local commercial facilities, including offices, prior to the County’s purchase of the site. Present zoning is appropriate for the planned facility.

Facility and Site Design

Domestic preparedness has become both a social and political priority and a reality of the times in which we live. Lessons learned from past terrorist attacks, as well as other natural disasters, indicate that coordination, communication and command and control are the most frequent points of failure during prevention, preparedness, response, and recovery operations. These phases require efficient, effective, and sustainable capabilities.

Emergency Operations Centers (EOCs) are the points of coordination for organizations, municipalities, counties, and states. EOCs are prominent in the National Incident Management System (NIMS), serving as coordination points for large-scale responses. In order for an EOC to effectively serve in commanding this capacity during a disaster
response and recovery effort, the EOC must have a highly reliable capability to receive, process and transmit emergency-related information to a range of different agencies, entities and jurisdictions. As a result, efficient and sound management of communication systems and technologies and the ability to interact and interoperable efficiently with the emergency responders and the public is key to a successful EOC.

911 public safety answering points are the single most recognizable interface between the public and public safety agencies. Public safety dispatch is the primary link between first responders, emergency response resources and the public. These are essential services directly related to first responder safety, public safety and the peaceful conduct and welfare of our community.

**History and Design Considerations**

In 2004, Pima County voters authorized a capital improvement bond project to construct an emergency and public safety communications and operations center. In 2006, the County acquired the property at 3434 E. 22nd Street with the intent to renovate the existing building to meet the needs for the new facility. There have been numerous public meetings at which the PCWIN Executive Management Committee, advisory committees and the Board have discussed and made decisions about the purchase of and the future use of the facility. Semiannual bond status reports have updated the community on the project status in a very transparent process. The final design is completed, and the project has been issued building permits. A solicitation for construction bids is completed, and a recommendation for award of a contract is on the Board’s August 2, 2011 agenda.

Based on an extensive list of criteria compiled by both local first responders and Homeland Security, the 22nd Street facility was identified as a good candidate site for the project following an evaluation of then available County and City of Tucson owned parcels and other commercial properties. AECOM, a national wireless communications and building consulting firm, was tasked with evaluating the suitability of the building to meet the defined needs of the project and the feasibility of renovating it to meet current building codes for essential facilities. AECOM concluded the building was suitable to meet the County’s programming needs, could be renovated to meet current building codes and presented a cost effective solution due to its original design as a banking data center with redundant infrastructure. The County expended $6.2 million of 2004 General Obligation Bond Funds to purchase the property.

During the planning and schematic design process, the program needs evolved. Ultimately, it was decided that the Pima County Sheriff’s Department 911 public safety answering point and dispatch services would colocate with county fire district’s 911 and dispatch operations. It was decided the PECOC and City of Tucson Thomas Price Service Center facilities will each include backup capabilities to ensure continuity of 911 and dispatch
operations in the event an emergency disrupts services at one facility or the other. This will result in significantly improved 911 and public safety dispatch capabilities.

The Pima County Office of Emergency Management & Homeland Security and the Emergency Operations Center (EOC) requirements were anticipated in the original 2004 bond issue. As their specific needs were clarified, an EOC design that incorporates command and control space, complemented with multiple breakout rooms to support operational and management needs for large and small events, was specified. This design is very consistent with the design of similar EOCs across the nation and embodies the scalability to handle large and small emergent events. Colocating the EOC with the redundant infrastructure of the dispatch center resulted in numerous system efficiencies and improvements to interoperable communication between emergency planners and operational components in the field.

The total program requires approximately 63,000 square feet of improved office and operational space. This dictates construction of approximately 13,000 square feet of additional space on the site. The plan proposes demolition of a small rotunda building that has no practical planned use.

**All-hazards Risk Avoidance Design for Continuity of Operations**

It is important that EOC and 911/public safety dispatch facilities be sited to minimize the potential impact of natural, technological and terrorism hazards. Choosing an inappropriate site can put these facilities at risk and may put the community at risk if services are disrupted due to a major hazard. Both natural and human-caused (intentional and unintentional) hazards were considered in the site selection for the new facility and in the design development of the proposed renovations. This all-hazards approach is consistent with federal guidance and recognizes the many considerations that must be included in the construction of an essential facility.

Staff visited EOCs and public safety dispatch facilities in California, Washington, Texas, Utah and Arizona to document lessons learned. Several reference documents from the US Department of Homeland Security and other credible sources were reviewed to determine requirements for the PECOC project before beginning the programming and schematic design process to assure that current best practices were incorporated into the project.

Site evaluation included a 2006 assessment of the project site by the Arizona Counter-Terrorism Intelligence Center (ACTIC). ACTIC prepared a Site Protection Plan that included recommendations for improving site security. The recommendations included:

- Remove or trim all trees and vegetation along the exterior security fence and front of the facility for visibility to potential threats;
- Install security barriers to deter vehicle borne improvised explosive devices;
- Install video surveillance system with 24/7 digital recording;
- Fence off access to the office windows on the front (north side) of the facility;
- Control access at the exterior access gates;
- Move at least one of the public safety communications/dispatch functions to another offsite facility;
- Locate communications/dispatch functions away from the north side of the building, away from the arterial roadway;
- Develop a personnel security plan;
- Segregate a portion of the parking lot for employee parking that is secured from the general public;
- Create a separate employee entrance with controlled access.

These security concepts, recommendations from other communities and knowledge of best practices were interjected into the project design. The facility is designed for continuity of EOC business operations. When the building characteristics are coupled with the stand alone 911/public safety dispatch capabilities, first responder agencies will have a highly available solution to meet their needs, even in the worst of times.

**Communications Tower**

In addition to the building construction, it is necessary to construct an antenna tower on the site. The PECOC facility will house the master site for the PCWIN voice radio system. The Motorola radio system is dependent upon the availability, reliability and survivability of its centralized computer controller. Several layers of redundancy have been designed into the system to connect the master site to the remote transmitter sites. Microwave radio and fiber optic connections will provide path and technology redundancy to minimize risk associated with single points of failure. If connectivity to the master site is lost, service for the entire countywide radio system would become degraded. It is not unusual for fiber optic cables to be cut or for microwave radio services to be interrupted by weather; therefore, it is important to include redundant communications paths to sustain operations in the event services from one technology are disrupted. The planned tower will support one and possibly more microwave antennas. One three-foot microwave dish mounted at a centerline height of 75 feet is currently required to achieve an unobstructed line of sight microwave path to the opposite end of the link. As the communication hub for the County, additional microwave links to other locations will most certainly be added over time to accommodate such systems as the Regional Wastewater Reclamation Department’s flow monitoring systems, Regional Flood Control District and Environmental Quality data capture systems, and other critical infrastructure components. The purpose of the facility also dictates we anticipate that future communications needs will include a need for antenna mounting.
The dispatch, backup dispatch and emergency operations services that will be provided from this facility also require access to radio resources. Several antennas will be mounted on the tower to support dispatch console radio control stations.

Finally, the tower is necessary to support the Radio Amateur Civil Emergency Services (RACES) communications requirements. RACES provides emergency radio communications services for the Office of Emergency Management and Homeland Security during emergencies. The RACES group operates a variety of radio communications equipment. They have identified a need to mount numerous antennas at heights ranging from 105 to 125 feet to support communications in the HF/UHF/VHF, 2 Meter, 70 Centimeter and 700/800/900 MHz bands.

The combination of planned and future antennas that must be supported dictated a need for a 125-foot, three legged, self-supporting tower. A prerequisite to constructing the tower at this site, because of its proximity to the Davis-Monthan Air Force Base runway, is requesting an aeronautical study by the Federal Aviation Administration (FAA). In a May 20, 2011 letter, the FAA made a “Determination of no Hazard to Air Navigation.” The FAA also concluded that no marking or lighting is necessary for aviation safety (Attachment 1).

Site Plan

The final site plan resulted from careful consideration of many factors that limited how the site could be developed, including:

- The Davis-Monthan Air Force Base Accident Potential Zone influenced placement of the additional building on the site and the location of various operations within the building (Attachment 2).

- National Fire Protection Association standards (NFPA 1221) were applied to satisfy the accreditation requirements of the Northwest Fire District and because compliance is a factor in determining Fire Department Insurance Services Office (ISO) ratings, which correlate to citizens fire protection insurance rates. NFPA 1221 also specifies standards for building security and protection and other best practices for communications center design.

- International Building Codes for Essential Facilities were applied. These codes apply to buildings that are intended to remain operational in the event of extreme environmental loading from flood, wind or other environmental factors. Characteristics such as survivability, security, sustainability, interoperability and flexibility were considered.

- Department of Defense Minimum Antiterrorism Standards for Buildings, Uniform Facilities Criteria 4-010-01 and 4-141-04 were referenced to determine security and blast protection requirements for protection against manmade hazards.
Site circulation was designed to segregate pedestrian access, vehicular access and service vehicle access and to provide sufficient space to maneuver large vehicles operated by the Office of Emergency Management, delivery trucks, fire apparatus and trash collection vehicles.

The tower structure was sited near the future radio equipment room due to cabling and other technical constraints.

Roadways, site access and mitigation of neighborhood traffic impact determined vehicle traffic patterns and locations for trash pickup and deliveries.

Site circulation patterns and use of existing parking lots were designed to be minimally invasive to the surrounding residential context during normal operations.

Utility connections were protected in secure portions of the site, and buildings were sited where water and sewer connections could be easily made.

Drainage. There are currently minimal provisions on site for stormwater detention or retention. The site design will bring the site in compliance with local requirements for stormwater management. Stormwater management is a key item for sustainable design practices and is identified by the LEED rating system.

LEED Silver certification requirements drove a careful planning process that balanced various design characteristics.

The previous design and use of this facility was for a data center with over 20,000 square feet of raised floor. The programming and location of specific functions throughout the facility was driven by a number of factors, including optimal functional flow and utilization of this existing feature of the building.

Site plan and location of the new structure was sited to provide a lobby space designed to be a secure access control point for the facilities and optimum utilization of staffing, i.e., operational cost as well as optimal security/surveillance of site.

Retain and embellish the existing landscaping as well as improve onsite water retention characteristics of the site by creating a weir system on the north side.

Lessen the heat island effect of the existing asphalt parking lot by introducing additional tree islands.

**Regulatory, Cultural, Biological and Historic Preservation Issues**

**MAPP 50 Most Significant Mid-century Modern Buildings in Tucson.** As previously reported to the Board, MAPP project proponents have objected to the demolition of the rotunda at the front of the building. The basis of their objection is that the building represents an early example of the brutalist architecture style. In 2009, the MAPP project identified the facility as one of the 50 most significant midcentury modern buildings in Tucson. It is important to note that based on MAPP statements, designation was made three years after the County bought the building for the PECOC project. The County was
not notified nor consulted in any way at the time of MAPP’s designation. Had we been consulted as the landowner, we would have objected because the building was, before designation, planned to be used as an essential component of a public safety system and should not be encumbered by an artificial and arbitrary designation.

Cultural Resources and Arizona State Historic Preservation Office Consultation. In early 2010, the Office of Cultural Resources and Historic Preservation commissioned a Class I Cultural Resources study and report of the subject site by SWCA Environmental Consultants. The report, *Pima County Wireless Integrated Network, Regional Emergency Communications and Operations Center Class I Cultural Resources Records Search*, SWCA Environmental Consultants Project No. 16220, prepared by Jerome Hesse on March 3, 2010, indicated the building was identified by MAPP as one of the 50 exceptionally significant modern buildings and an example of the expressionist phase of Modern architecture in Tucson. SWCA recommended that any proposed modifications to the building consider the integrity of the building’s architectural design.

The SWCA Class I report resulted in a finding that no cultural resources have been previously identified in the project site. SWCA concluded that no historic properties are affected and no adverse effect to historic properties for the visual area of potential effect. The Office of Cultural Resources and Historic Preservation concluded the cultural resources requirements for the proposed improvements have been met and recommended a cultural resources clearance for the site (Attachment 3).

Following my May 6, 2011 memorandum to the Board, the Cultural Resources and Historic Preservation Office began a consultation process with the Arizona State Historic Preservation Office (SHPO) regarding the proposed demolition of the rotunda building. We did not request a formal determination of eligibility to the National Register of Historic Places (NRHP) from SHPO; but we notified them we intended to treat the project site as though it were eligible for listing in the NRHP Properties that have achieved significance within the past 50 years. Properties may be considered eligible for the NRHP under NRHP Criteria for Evaluation and Criteria Consideration “G” if they are found to be of “exceptional importance.” We proposed to prepare mitigation documentation of the site following SHPO standards in the event further review was required. On May 20, 2011, SHPO concurred with the proposed mitigation action. SWCA Environmental Consultants was contracted to perform the fieldwork and produce a report – *Documentation of the 1972 Valley National Bank Tucson Operations Center (TOC) East 22nd Street, Tucson, Pima County, Arizona*.

During this same time period, MAPP submitted a formal determination of eligibility to SHPO for their review; and on July 12, 2011, SHPO determined the building to be NOT eligible for listing in the NRHP under Criterion Consideration “G,” and responded, “no mitigation necessary.” SHPO staff reviewing the MAPP submittal commented (1) “Not exceptional example of significance for concrete as proposed as basis for eligibility, nor for
expressionism;" (2) "The argument misses a key point required by Bulletin 15 (p. 42) that to be exceptionally important the property must be the best example within its context. Despite the labored narrative, this building is little more than a common example of its type;" and (3) "The alterations in 1983 are indistinguishable from the original"...Landscaping has changed, two of original courtyards have been enclosed...historic integrity has been diminished." SWCA's final report contains documentation of the building that will be forwarded to SHPO to preserve its history. The report is included in Attachment 4.

Although this building does not meet the 50-year threshold for eligibility, there are exceptions where a property may be determined eligible for inclusion in the NRHP if it can be demonstrated to be of "exceptional importance." James Garrison, State Historic Preservation Officer, received recommendations from staff and determined the building "not eligible" for the National Register on July 11, 2011. Pima County received this determination by SHPO on July 12, 2011.

On July 29, 2011, Chris Evans appealed the SHPO decision to an advisory SHPO committee. After some discussion regarding the merits, the advisory committee then accepted a motion from its Member at Large to recommend to the State Historic Preservation Officer that the Valley National Bank building be considered eligible for listing. The motion passed four to two. This action does not rescind the earlier determination by Mr. Garrison. It is an opinion conflicting with the recommendations of the SHPO staff and will now go back to Mr. Garrison for further review. The nomination on which Mr. Garrison made his earlier determination has not been improved, however. An eligibility determination for the NRHP at the local or state level does not decide this listing. Final decision is made by the National Park Service Keeper of the National Register, who determines whether the property meets the higher standards required for a property younger than 50 years in age. It should be further noted that NRHP eligibility or listing does not prohibit the property from being demolished or modified. Consultation with Stephen G. DeSordo, Federal Preservation Officer, for the Federal Communications Commission, resulted in his conclusion that PECOC is "not a federal undertaking" subject to NEPA and NHPA.

Throughout our consultations with SHPO regarding this matter, the County has treated the building as though it is eligible for listing on the NRHP and has produced documentation that will be submitted to SHPO to preserve its history. Correspondence regarding this subject is included in Attachment 5.

**Biological Clearance.** The Pima County Development Services Department was asked to evaluate the potential for the installation of the PCWIN facilities to impact biological resources. Development Services concluded, in a March 24, 2010 report, that the building construction related activities at this location will not impact the Pima pineapple cactus or contribute to the spread of buffelgrass or other invasive species.
Federal Communications Commission Regulatory Compliance. This site, due to the need for the Federal Communications Commission (FCC) to license frequencies on the tower, is subject to review under the National Environmental Policy Act (NEPA) as well as the National Historic Preservation Act (NHPA) Section 106 process. Such review is in progress and is being conducted according to FCC regulations.

Public Outreach

Following completion of the building design, PCWIN staff began interacting with various interested parties to provide information and address complaints.

Initially, in April 2010, PCWIN and Facilities Management staff met with City of Tucson Council Member Richard Fimbres as well as Board of Supervisors Chairman Ramón Valadez to make them aware of the planned project.

In April 2011, Chairman Valadez' office received an inquiry about the proposed antenna tower from Mr. Mark Mayer, Co-chair of the Julia Keene Neighborhood Association (JKNA). Chairman Valadez asked staff to review issues related to the tower design and to recommend ways to reduce visual impact. Staff concluded that the proposed 125-foot tower is necessary for highly reliable and survivable communications between the master control site and the various transmitter and dispatch sites in the new radio system. Additionally, antennas supporting the Office of Emergency Management RACES communication equipment will be mounted on the tower at heights up to 125 feet. Staff agreed the following actions would be implemented to minimize the visual impact:

Tower Mitigation Actions

- Installation of a Nello brand tower with a smaller footprint than the Valmont brand tower originally planned.
- Review of the tower height to see if reduction is possible after all of the radio engineering work is completed.
- Painting the tower and antennas a color that minimizes visibility against the backdrop of the Arizona sky.
- Placement of the tower between a screen wall and parking structures to minimize visibility of the base of the tower from the south and southeast. The base will not be visible from the north.
- The landscaping plan was modified to retain many large, existing trees in the northeast corner of the property to mitigate the visibility of the tower from 22nd Street and along the west, north and south sides of the property to mitigate visibility from the neighborhoods. Attachment 6 illustrates the site landscaping plan.
The tower location was selected to be as far from the houses in the neighborhood as possible and is located behind an existing 10-foot wall and large trees to the north. The church to the east has perimeter walls that prevent ground level visibility of the site. Attachment 7 identifies the tower site.

- No tower lighting is required by the Federal Aviation Administration and will not be installed.

On April 5, 2011, I forwarded staff's conclusions and mitigation recommendations to Chairman Valadez. A copy of my memorandum is included in Attachment 8.

On April 29, 2011, Mr. Mayer made a request of the PCWIN Office for the following specific information related to the entire PCWIN project:

1. Planned locations of proposed radio sites/communications towers.
2. Engineering plans and other renderings for the proposed towers, particularly those that specify dimensionality.
3. Number, type, size and operating frequencies of antennae proposed to be attached to the towers.
4. Other documentation related to site agreements and the physical infrastructure of the proposed system.

On May 2, 2011, a public open house was held at the Eckstrom-Columbus Library at 4350 E. 22nd Street to present the proposed building modifications. Representatives from the County and our architectural design team were present to provide information and answer questions. Five people attended, including Mark Mayer and Chris Evans. A summary of comments received at the open house was included in my May 6 report. The following comments were addressed:

- **Demolition of the rotunda building.** Staff explained to Messrs. Evans and Mayer and others the several reasons that factored into the decision to remove the building.
- **Amount of traffic transiting Jones Boulevard at shift change.** It was recommended by Mr. Mayer that egress traffic be routed to the traffic signal at Randolph Way. This can be accommodated in the current parking design, and staff agreed to make the recommended egress route standard operating procedure.
- **Landscaping.** Mr. Mayer recommended we retain and replant eucalyptus trees on the west side of the property to block the view of the tower from residences to the west, which includes Mr. Mayer's home. Staff made changes to the landscaping plan to preserve healthy eucalyptus trees that do not interfere with the building construction and other mature trees on the west, south and north sides of the site.
- **Tower height and design.** Mr. Mayer raised objections related to tower height and design that he believed are not in compliance with City of Tucson ordinances.
• **Radio interference.** Staff offered to work with the neighboring church to minimize risk of interference while assuring the representative that the PCWIN radio frequencies were not in the commercial products band.

Immediately following the open house, the Development Services Department was asked to inquire with the City of Tucson about the maximum height allowed for a public safety tower should no exemption be claimed. Craig L. Gross, Deputy Director/Zoning Administrator of the City’s Planning and Development Services Department, replied that antenna towers in C1 zones are allowed on existing structures, in public rights of way or on public property. He reported that maximum height is approximately 40 feet, 50 feet with special exemption or unlimited height with Mayor and Council approval. However, he also stated, “This ordinance is specifically written for cellular telecommunication; it does not address public service or public safety antenna. They are exempt.” (Attachment 9).

The FCC tower registration database contains records for 38 towers 125 feet or higher that are constructed or granted in the Tucson area. A map and listing illustrating the location of these towers is included in Attachment 10. Registration is only required for towers 200 feet or higher, those in the glide path of an airport or those on airports; thus, the record of local towers is not likely complete. As evidenced by the record, it is not uncommon to see towers of the proposed height in the Tucson metropolitan area.

On June 3, 2011, staff provided Mr. Mayer with 241 pages of information in response to these two requests, which included everything but the requested engineering plans, since disclosure would have put public safety sensitive design details in the public domain. A copy of the July 8, 2011 cover letter to Mr. Mayer is Attachment 11. We have continued to have additional interaction with Mr. Mayer on this topic.

On July 1, 2011, Dr. John Moffatt and Captain Paul Wilson met with Mr. Mayer to further discuss his objections to the tower. At that meeting, Mr. Mayer also stated, for the first time, his objection to the removal of the rotunda building. He requested a clean version of the site plan and the rationale behind the location and design of the EOC. The requested information was provided. Mr. Mayer continued to claim that a 125-foot tower was not allowed by the City of Tucson Land Use Code. He is of the opinion that towers constructed on parcels with C1 zoning are limited to 50 feet. He also proposed relocating the EOC building to the southeast corner of the site and stated that current plans have excessive parking. It was his opinion that a site plan retaining the rotunda building at the expense of parking would be desirable to the neighborhood even if it meant that vehicles had to be parked in the residential neighborhood to meet the parking requirements of an EOC deployment.

On July 5, 2011, Chairman Valadez hosted a second meeting with Mr. Mayer and other representatives of the JKNA. A lengthy discussion about the proposed site plan was conducted. At Mr. Mayer’s request, staff agreed to provide additional documentation so
neighbors could assess the proposed site plan and offer their own alternative designs. Staff provided 1,276 pages of reference, planning, programming and design documents to aid the neighbors in their assessment. Chairman Valadez offered that he would be willing to receive alternative design ideas from the neighborhood that did not add significant cost to the project.

On July 27, 2011, Chairman Valadez hosted a follow-up meeting with a group of individuals representing the JKNA, MAPP and the 29th Street Corridor Coalition, including Mr. Mayer, JKNA and Chris Evans of MAPP. The community representatives presented a package of details outlining their objectives and four design options. The neighborhoods objectives are to preserve the existing rotunda, and architectural preservation and neighborhood compatibility. The proposed options are intended to salvage the rotunda. Additionally, the community requests changes to other design elements; specifically, elimination of design features that shield key architectural design elements of the original building from exterior view; retention of current window features, disguise of security bollards; modification of gabion walls to compliment the original architectural theme; steering all egress traffic to the one-way vacated alley; and modification of the roof design so there is no change to the exterior appearance.

**JKNA Design Options**

Three of the four design options presented by the community proposed placing the EOC below grade. These options were dismissed because they would have added significant cost to the project and there were other issues involved with siting this critical infrastructure building.

As noted, there are benefits, when it comes to wind and blast resistance, to placing an EOC facility underground. However, due to our unique hydrological situation in Arizona, Pima County’s greatest disaster threat by far is flooding and is, therefore, the foremost consideration. Referencing United Facilities Criteria (UFC) 4-141-04, Emergency Operations Center Planning and Design, US Department of Defense, July 15, 2008, including change September 1, 2008, the following sections are important to note:

*Section 3-5.1.3: For new building construction, (EOC) first floor elevation shall be set at 500 year flood elevation. For existing buildings or renovated buildings, first floor elevation is required to be set at 100 year flood elevation, but is recommended to be set at 500 year flood elevation.*

*Section 3-5.2.4: When locating EOCs in sub-grade building areas, consider sub-grade water. While designs may be contrived to withstand groundwater pressuring during normal times, damage to the EOC sub-grade structure can allow water under pressure from bomb or earthquake shock, liquefaction, or flooding to enter into the EOC.*
In addition, NFPA 1221, in Section 4.2.2, recommends that all critical communications facilities be placed above the 100-year floodplain. To remediate the risks of flooding when placing an EOC below grade below a retention basin, dramatic changes in site plan, water control, sump-pumping, building construction and more would be required, all of which are prohibitively expensive.

When placing an EOC below grade, additional issues arise that are not dissimilar to placing an EOC on an upper floor of a building. *UFC 4-141-04, Section 3.5.2* specifies that special caution should be given whenever proposed EOC locations are proposed on upper floors of structures. Access can be hindered with elevators out of commission and egress stairs compromised. While the proposal in this instance is not to place the EOC on an upper floor, the proposed underground EOC could suffer from the same vulnerabilities since it would require elevators and stairwells for access.

The merits of the fourth option (Option B), which involves moving the EOC from the northwest part of the site to the southeast, were discussed at length. Chairman Valadez specified the option would need to be amended to create a two-story structure so the Office of Emergency Management administrative and operational spaces were adjacent to one another. Staff was directed to analyze the impact of these proposed changes. Some of the factors reviewed are discussed below.

**JKNA Option B (modified)**

The neighborhood intended that this option would place the EOC above ground in the southeast parking lot in a configuration proposed to a) meet or exceed NFPA 1221 setback compliance; b) remain outside the Davis-Monthan Air Force Base Accident Potential Zone; c) remain outside the 30-foot access/fire lane with required building clearances; and d) maintain the required parking. The additional requirement that the Office of Emergency Management administrative offices also be located in the relocated building would cause the building to become a two-story structure. The JKNA identified the following advantages/disadvantages associated with this option prior to the modification:

**Advantages**

- Reduced construction costs associated with above ground construction, as opposed to the below grade options.
- No additional footprint for entry/exit stairwells and elevators, as opposed to the below grade options.
- No design issues with second exit.

---

Disadvantages

- A separate EOC building would not be contiguous to the existing building or adjacent to the planned EOC administration offices. The administration office adjacency issue would be resolved with the modification.

Staff has reviewed the modified Option B plan to assess its viability to meet the program requirements and to identify operational and cost impacts that will result from implementing the alternate option. In order to illustrate the difference in operational characteristics and identify some of the operational and security issues, a Functional Relationship Diagram of the planned construction and a diagram identifying some of the construction and operational impacts, as well as color coding similar functions as in the original Functional Relationship Diagram for the proposed Option B, are included as Attachment 12.

JKNA Option B (modified) Staff Analysis

Site Circulation and Functional Adjacencies. EOC operations demand easy access to administration offices and to staff support areas. EOC activations can last many hours or days and may require that staff be lodged on site for the duration. The PECOC design accommodated these needs through shared use of common support areas (break room, training/sleeping rooms, restrooms, showers and locker room, etc.) with other building tenants and centrally located these functions in a single security zone within the facility. Option B breaks up the contiguous spaces that are central to the design and efficient EOC operations and separate them by several hundred feet.

During emergency situations, conditions outside the EOC may not be conducive or safe for the EOC staff to travel between buildings. Weather hazards, chemical or biological hazards, terrorist activity (active shooter) and other risks or threats may make it unsafe for operations staff to make their way to the shared functions within the main PECOC building. Beyond basic life safety, this separation would reduce overall efficiency of EOC operations as EOC staff would simply need more time to go to and from the break room and other general support areas. As situations change, EOC staff needs to be readily accessible to provide their expertise in a timely manner.

Security. The PECOC design restricts public access to a single point of entry and security control. The lobby design creates a double sally port where security risks can be identified and isolated before a person is allowed to enter deeper into the building. The public entrance is on the periphery of the building. Option B relocates the lobby entrance to the south, bringing the public inside the envelope of the primary building footprint and may allow pedestrian access into the secure parking areas. Because building separation will naturally generate more exterior pedestrian traffic between buildings, security monitoring
and control becomes more difficult. It will be difficult to identify unauthorized intruders on the site. Overflow parking is outside the secure parking area, and visitor parking is within the NFPA 1221 designated building setback area. The north courtyard is exposed and becomes a weak point for security. The proposal weakens security and results in a site plan that is more vulnerable to intentional attack. The neighborhood’s proposed retention of the rotunda and elimination of the security barrier walls designed for placement on the north side of the facility, along with relocating the EOC, eliminates the physical barriers to the site on the north side, which is an unacceptable risk.

If the EOC were to be separately located on the site, it is advisable to also colocate staff support areas with the operations spaces for a variety of security reasons. A secure and controlled access point is critical. Per Uniform Facility Code (UFC) 4-141-04, an EOC should be centrally located and away from the activity perimeter so that movement is screened from public view. Also, an EOC should be constructed so that assigned personnel can operate without being observed.

Controlled access is currently shared with the main PECOC facility, increasing efficiency. The newly proposed EOC location would necessitate further planning to ensure that access to the EOC is controlled and may require an expansion of the current 11,000 square foot footprint to allow for control of traffic coming into the EOC facility during activation. This would increase cost and further reduce parking at the facility. Additionally, revised security measures are required around the remaining rotunda area to meet security requirements.

The following section related to security is from UFC 4-141-04:

- Section 3-1.1.8: *(The EOC should be)* secure with controlled access.

The separation and new location does not just conflict with programmatic needs that have been identified by the County, as it also conflicts with recommendations/regulations set forth by UFC 4-141-04, Emergency Operations Center Planning and Design, US Department of Defense, July 15, 2008, including change September 1, 2008. In particular, I reference the following sections:

- Section 3-1.1.3: *(The EOC should be)* centrally located and away from the activity perimeter so that movement to and from the center is screened from public view.
- Section 3-1.1.4: *(The EOC should be)* constructed so that assigned personnel can operate without being observed.

In the current plan, foot traffic in and out of the EOC is through the secure, screened courtyard. The JKNA proposed location of the EOC allows for full public view of ingress/egress and observation of activated EOC staff as they travel to and from necessary shared functions within the main PECOC building.
While the newly proposed EOC location does indeed place the EOC more directly adjacent to the planned parking area for EOC vehicles, which is a benefit, there are also several major parking and storage related drawbacks. These are discussed below.

- The current EOC location meets all necessary requirements in NFPA 1221 for set back from the adjacent arterial streets and any set back requirements from parking, both uncontrolled and controlled.

- The newly proposed location in Option B does not, however, meet setback requirements noted in UFC 4-010-01, Table B-1, which mandate that any new construction critical facility should have a 10-meter setback from any controlled parking. This setback would further reduce available parking within the controlled staff parking area beyond what would already be affected by the placement of the 11,000 square foot addition in the middle of the parking lot.

- Additionally, in order to achieve the number of parking spaces required for the facility, the EOC activation overflow parking is proposed to move to the far northeast corner of the lot outside of the secure fenced area. This location requires staffs who are responding to an EOC activation to walk along Palo Verde, a public roadway, and then through a secure gate on the east side of the property when coming from or going to their vehicles. This, along with the increased walk through the elements during potentially hazardous disaster or post-disaster conditions, creates substantial safety issues for those responding to staff the EOC.

- Currently, the EOC storage, which is used for critical supplies such as water, meals-ready-to-eat (MREs), caches of communications equipment, etc. is controlled but still easily accessible for loading/unloading of such supplies. The newly proposed location does not appear to be as conducive to the ingress/egress of large trucks/trailers, such as our mobile communications trailer, which is 40 feet in length, or a semi-truck loaded with supplies. I believe further review would be needed to determine whether more parking spaces would need to be eliminated to accommodate such traffic.

**Unused Shell Space/Compatible Uses**

The modification to Option B creates spaces in the facility and the exterior rotunda with no planned use. We assume we would relocate other County offices to fill the vacant space. It would be inappropriate to bring commercial tenants into the facility, and any future use would have to be compatible with the public safety functions and security requirements. One possibility would be to relocate the County Wireless Services Shop from the Mission Road complex. Wireless Services is responsible for maintaining the radio system, dispatch consoles and mobile and portable radio equipment. Given their support role for the system, this would be a good operational fit; however, they will require vehicle bays and other “automotive shop” amenities, which is not compatible with the design objectives of
the JKNA. From a cost perspective, unused space will add to the annual operations and maintenance budget as the site will be overdeveloped for the programmed needs. The introduction of other full-time staff offices will increase the daily parking needs and traffic beyond the current program.

Cost Impacts

Any option that requires revisions to the architectural design will increase capital cost to the project. Delayed construction will delay build out of the emergency communications and operations center as well as the regional communications system. Additional design work to implement Option B is estimated to take between nine and 12 months. A detailed analysis of the cost impact is not completed; however, several of the major costs we can reasonably expect to incur have been identified in Attachment 13. The total anticipated cost for implementation of Option B involving the redesign of the site along with increased cost for schedule delays due to Motorola for the delayed implementation beyond their contract is $5,690,000. The Option B solution will be very dysfunctional and significantly increases the overall cost of the project.

Bid Protest

On June 30, 2011, the Procurement Department issued a Notice of Recommendation for Award to Sundt Construction, Inc. for the contract under Solicitation No. 1103210 for construction of the building and site improvements. On July 8, 2011, D.L. Withers Construction LC submitted a bid protest contending that post bid opening changes proposed by Sundt to its Subcontractor and Small Business Enterprise lists render Sundt’s bid nonresponsive. On July 14, 2011, the Procurement Director dismissed the protest. D.L. Withers Construction may now appeal the decision to the Board; however, no appeal has been received as of the date of this report.

Board Action

An award of contract for building and site improvements is on the August 2, 2011 agenda for the Board’s consideration. Neighborhood representatives have recommended the Board not award the contract and direct staff to redesign the facility to meet their design objectives. It should be noted the architectural design team, in consultation with professional and public safety staff, have designed the optimally performing public safety communications facility over a three-year period; hence, I recommend against such action. An award will need to be made at the August 2, 2011 meeting to avoid jeopardizing the low bid, which is valid only through August 26, 2011. To achieve our building objectives, it was understandably necessary to balance program, design and budget to produce the best overarching result for the community. We have conducted our due diligence, project design is completed, permits have been issued, and required authorizations to proceed have been obtained. To the greatest extent practical, we have offered a plan to mitigate
the visual impact of the proposed tower. There no longer appears to be reasonable justification for taking extraordinary measures to salvage the rotunda building. It is not listed as an historic building, and we have no reason to believe its status will change in the near future.

Consequences of Delays

When the Board began receiving inquiries from MAPP, Mr. Reid Spaulding and Dr. John Moffatt made a presentation to the Tucson Historical Commission (THC) regarding the proposed improvements. A May 20, 2011 memorandum (Attachment 14) describes the consequences to both the project funding and implementation schedule of suggestions made by THC members. Two of the recommended actions were to retain the rotunda building and relocate the EOC to the south parking lot as is similarly suggested by Mr. Mayer and his neighbors. It was estimated that said recommendations would result in a nine to 12 month delay in the project and unwarranted cost increases for additional architectural design, permits, and material costs. Anticipating a delay will be proposed, I asked that affected parties identify the impact of a nine month delay in the award of a construction contract. A summary of the cost analysis was identified in the Cost Impacts section of this report and can be seen in Attachment 13.

Any delay is unacceptable for multiple reasons, including the building is the master site for the public safety radio system. A delay in the completion of this building has a one-to-one relationship to the implementation schedule and cutover for the radio system. A nine month delay would extend the cutover date for the critically needed radio system from April 2014 to January 2015. This is unacceptable for reasons that include the following:

- The FCC has mandated that UHF/VHF systems are narrow banded by January 1, 2013. This may require agencies operating these systems to replace base station radios and subscriber equipment. We plan to submit a regional request to extend the deadline for PCWIN participants, but a delay to 2015 is likely beyond what the FCC will allow.

- Legacy radio equipment will continue to deteriorate. The City of Tucson operates 30 year old systems that are in desperate need of replacement. The majority of the Sheriff’s Department subscriber equipment is several years beyond its estimated life expectancy. They are trying to maintain the equipment until it can be replaced by the capital project. Postponing implementation of the new system will likely mean that proprietary replacement equipment will have to be purchased to sustain radio communications in the interim period.

- A delay will result in additional costs for radio system implementation, including increased cost for Motorola to retain staff on the project, extending the storage period for equipment at system staging, extending equipment warranties on shipped/stored equipment, extending performance bonds, increased material and/or
supplier costs, and mobilization and demobilization costs. Motorola has estimated that a nine month delay could add as much as $2.5 million to the cost of the radio project.

- Drexel Heights Fire District (DHFD) is the lead agency in an effort to consolidate dispatch services for multiple fire districts. The organizational development is dependent upon providing facilities, communications systems and personnel to support the new operations. DHFD Division Chief Gary Bynum reports that a delay would, “lead to an unsuccessful launch of the combined fire dispatch and set it up to fail.”

A delay to redesign the PECOC facility will have detrimental consequences, both operationally as well as financially. As one of the two major components of the 2004 Public Safety Bond Issue, the completion of this building in a timely manner is critical to completion of the other major component, which is the Integrated Radio System.

**Recommendation**

I recommend the Board of Supervisors award the contract for the Pima Emergency Communications and Operations Center to Sundt Construction, Inc. in the amount of $14,584,994.20, which is $2,418,105.80 below the Architect’s Estimate.

Respectfully submitted,

C.H. Huckelberry  
County Administrator

CHH/mjk – August 1, 2011

Attachments

c: Dr. John Moffatt, Director, Strategic Planning Office  
  Paul Wilson, Captain, Sheriff’s Department  
  Reid Spaulding, Director, Facilities Management
**DETERMINATION OF NO HAZARD TO AIR NAVIGATION**

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Antenna Tower - PECOC
Location: Tucson, AZ
Latitude: 32-12-22.60N NAD 83
Longitude: 110-55-06.50W
Heights: 125 feet above ground level (AGL)
          2627 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking and/or lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 11/20/2012 unless:

(a) extended, revised or terminated by the issuing office.
(b) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.
This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (310) 725-6558. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2011-AWP-2250-OE.

Signature Control No: 141431571-143117958 (DNE)
LaDonna James
Technician

Attachment(s)
Frequency Data
Map(s)

cc: FCC
<table>
<thead>
<tr>
<th>LOW FREQUENCY</th>
<th>HIGH FREQUENCY</th>
<th>FREQUENCY UNIT</th>
<th>ERP</th>
<th>ERP UNIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>806</td>
<td>824</td>
<td>MHz</td>
<td>500</td>
<td>W</td>
</tr>
<tr>
<td>851</td>
<td>866</td>
<td>MHz</td>
<td>500</td>
<td>W</td>
</tr>
<tr>
<td>10895</td>
<td>10895</td>
<td>MHz</td>
<td>20</td>
<td>dBm</td>
</tr>
</tbody>
</table>
MEMORANDUM
Pima County Administration
Office of Cultural Resources & Historic Preservation
201 North Stone Avenue, 6th Floor
Tucson, Arizona 85701-1207

DATE: March 3, 2010
TO: Anthony Casella, PCWIN Project Manager
FROM: Courtney Rose, Ph.D., Cultural Resources Program Coordinator

SUBJECT: Pima County Wireless Integrated Network (PCWIN) Regional Emergency Communications and Operations Center (RECOC)

A Class I Cultural Resources report was submitted by SWCA Environmental Consultants to the Office of Cultural Resources & Historic Preservation in support of the PCWIN Regional Emergency Communications and Operations Center (RECOC) proposed tower improvement site. The RECOC site is located on Pima County parcel no.130-08-381A at 3434 East 22nd Street in T14S, R14E, Section 21. The proposed improvements to the facility include adding a new, 3-legged, self-supporting 125-foot tower in a paved parking lot and upgrading equipment in an existing building.

I have reviewed the cultural resources document, titled Pima County Wireless Integrated Network, Regional Emergency Communications and Operations Center Class I Cultural Resources Records Search, SWCA Environmental Consultants Project No. 16220, prepared by Jerome Hesse on March 3, 2010.

The Class I report documents that the RECOC building (Valley National Bank Operations Center) has been identified as one of the 50 exceptionally significant Modern buildings and an example of the expressionist phase of Modern architecture in Tucson (Hesse 2010:5). SWCA recommends that any proposed modifications to the RECOC building (which is currently outside the PCWIN project’s Area of Potential Effect for direct effect) should consider the integrity of the building’s architectural design.

The SWCA Class I resulted in a finding that no cultural resources have been previously identified in the PCWIN project Area of Potential Effect (APE) for direct effect. SWCA recommends No Historic Properties Affected for the project APE and No Adverse Effect to Historic Properties for the visual APE. I agree with the SWCA findings and concur with their recommendations. The cultural resources requirements for the PCWIN Regional Emergency Communications and Operations Center proposed tower and improvements to equipment in the existing building have been met. The Office of Cultural Resources & Historic Preservation recommends a cultural resources clearance for the PCWIN RECOC site subject to the following caveats:

1) All work must be within the area as shown within the proposed project plans as submitted for cultural
resources review.

2) A caution must be noted concerning human burials. Archaeological clearance recommendations do not exempt the construction and other ground-disturbing activities from compliance with State burial protection laws. In the event that human remains, including human skeletal remains, cremations, and/or ceremonial objects and funerary objects are found during excavation or construction, ground disturbing activities must cease in the immediate vicinity of the discovery. State laws ARS 41-865 and ARS 41-844, require that the Arizona State Museum be notified of the discovery at (520) 621-4795 so that cultural groups who claim cultural or religious affinity to them can make appropriate arrangements for the repatriation and reburial of the remains. The human remains will be removed from the site by a professional archaeologist pending consultation and review by the Arizona State Museum and the concerned cultural groups.

3) Should a federal nexus become identified at a later stage in the PCWIN project, this project will fall under Section 106 (National Historic Preservation Act) requirements and additional cultural resources requirements involving the consultation process shall apply.

Cc: Captain Paul Wilson, PCWIN Project Administrator, Pima County Sheriff’s Department
    Dr. John Moffat, Pima County Office of Strategic Technology Planning
    Larry Sayers, PCWIN, Pima County Information Technology
    David Smith, PCWIN Assistant Project Manager, Pima County Information Technology
    Greg Foster, Pima County Real Property Services
    Sherry Ruther, Pima County Environmental & Long Range Planning Group Manager
    Christina Biggs, Director, Pima County Real Property Services
Documentation of the
1972 Valley National Bank –
Tucson Operations Center
3434 East 22nd Street, Tucson,
Pima County, Arizona

Prepared for
Pima County Office of Sustainability & Conservation,
Cultural Resources & Historic Preservation Division

Prepared by
SWCA Environmental Consultants

July 2011
CONTENTS

INTRODUCTION ..................................................................................................................................... IV
  Previous Inventories........................................................................................................................ iv
  Eligibility for National and Arizona Registers of Historic Places ................................................ iv
  Eligibility for Pima County Historic Property Designation............................................................. v
  Historic Context................................................................................................................................ v
  National Register of Historic Places, Arizona Register of Historic Places, and Pima County
  Register of Historic Places Criteria and Integrity ........................................................................... v
  National Register of Historic Places/Arizona Register of Historic Places Criterion C, Pima
  County Register of Historic Places Criterion 5: Architecture..................................................... vi

PART I. HISTORICAL INFORMATION ............................................................................................... 3

PART II. ARCHITECTURAL INFORMATION ................................................................................... 7

PART III. SOURCES OF INFORMATION ............................................................................................ 9

PART IV. PROJECT INFORMATION ................................................................................................ 12

SWCA PHOTOGRAPHIC DATA SHEET ............................................................................................ 13

HISTORIC PROPERTY INFORMATION FORM (HPIF) (FOLLOWING) ....................................... 14

REDUCED COPIES OF MEASURED DRAWINGS (FOLLOWING) ...................................................... 15

ARIZONA STATE HISTORIC PRESERVATION OFFICE RECOMMENDATION OF
ELIGIBILITY, 5/14/11 (FOLLOWING) ............................................................................................ 16

Figures

1. Map showing project location at 3434 East 22nd Street. ................................................................. vii
2. Overview aerial photograph of 1972 VNB – Tucson Operations Center (arrows show direction
   and location of exterior photodocumentation). .................................................................................. viii
3. Floorplan of 1972 VNB – Tucson Operations Center (arrows show direction and location of
   interior photodocumentation). .......................................................................................................... ix
INTRODUCTION

Previous Inventories


Pima County acquired the building about 2002 and produced existing-condition drawings of its County Division of Elections Office, occupying the former VNB - TOC, in 2008 and 2009. For that effort, contracting architects Durrant and SmithGroup, both of Phoenix, in 2008 produced elevation, floorplan, and structural drawings in anticipation of conversion of the facility to the Regional Emergency Communications and Operations Center Facility (now Pima County Wireless Integrated Network [PCWIN]). Structural engineers Schneider Associates produced schematics of the building’s systems, including the “rotunda”—the concrete-ribbed roof system in the former cafeteria. And surveyor Hersey Aerni and Associates of Tempe, Arizona, documented vegetation, elevations, building footprints, and other site conditions as of 2009. Samples of these drawings are appended to this modified Historic American Buildings Survey (HABS) documentation report.

In anticipation of PCWIN plans for the property in 2011, Pima County commissioned SWCA Environmental Consultants to perform mitigation documentation recommended by Pima County’s Office of Sustainability & Conservation, Cultural Resources and Historic Preservation Division for submission to the Arizona State Historic Preservation Office (SHPO), to meet Arizona SHPO documentation standards (SHPO 2002). These documentation requirements approach but are not as extensive as those of HABS. The modified-HABS documentation follows Figures 1–3 in this report.

Eligibility for National and Arizona Registers of Historic Places

The 1972 Valley National Bank building and associated features on the subject property were evaluated for their eligibility for listing in the Arizona Register of Historic Places (ARHP) and the National Register of Historic Places (NRHP). Under guidelines established by the National Park Service (NPS) (36 Code of Federal Regulations 60.4) and reflected in the Arizona Historic Preservation Act (Arizona Revised Statutes [ARS] 41-861 et seq.), the property should possess three elements to demonstrate eligibility: 1) age of greater than 50 years or demonstration of exceptional importance if less than 50 years old (NPS 2011c); 2) integrity, meaning that the property retains its essential form and construction, and continues to exist in the setting it was intended to occupy; and 3) historical significance, meaning that the property meets one or more of the NRHP and ARHP criteria listed below, as conveyed through a historic context organized by theme, place, and time (NPS 2011a):

The quality of significance in American or Arizona history, architecture, archaeology, engineering, and culture is present in the NRHP property types of district, building, structure, site, and object that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and

A. is associated with events that have made a significant contribution to the broad patterns of our history; or

B. is associated with the lives of persons significant in our past; or

C. is embodied in the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
D. yields or is likely to yield information important in history or prehistory. (NPS 2011b; Evans and Jeffery 2005)

**Eligibility for Pima County Historic Property Designation**

As summarized in Pima County Development Services (2011), the Pima County Register of Historic Places (PCRHP) identifies those cultural resources that are most deserving of listing on local, state, and national registers of historic places and that honor places of importance to our common heritage. The PCRHP gives formal acknowledgment to those places determined to be special to the history and culture of its citizens, and provides a level of local recognition. PCHRP registration acknowledges the exceptional importance of each of these historic properties and places and gives formal sanction through historic designation to their conservation and protection. Historic sites, buildings, objects, and districts subject shall be considered eligible for inclusion in the PCRHP that:

1) Reflect significance in Pima County history, architecture, archaeology, engineering, or culture; and
2) Possess integrity of location, design, setting, materials, workmanship, feeling, and association; and
3) Are associated with events that have made a significant contribution to the broad patterns of our history; or
4) Are associated with the lives of persons significant in our past; or
5) Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant or distinguishable entity whose components may lack individual distinction; or
6) Have yielded or may be likely to yield information important in prehistory or history.

**Historic Context**


**National Register of Historic Places, Arizona Register of Historic Places, and Pima County Register of Historic Places Criteria and Integrity**

The building and its immediate designed landscape retain integrity aspects of location, design, materials, workmanship, feeling, setting, and association.

The VNB – TOC operation is not a significant "event" under NRHP/ARHP Criterion A or PCHRP Criterion 3. No significant singular association was found with individuals for NRHP/ARHP Criterion B, PCRHP Criterion 4 (other than the designer, who is covered under Criterion C, discussed below). VNB president in 1972—and family member of bankers and architectural patrons—Earl L. Bimson is well represented by other buildings of the post-World War II Arizona real estate/banking/boom era. Pima County and the University of Arizona hold original plan sets, and as-built drawings from 2008, and the building has been accessible for as-is physical documentation; therefore, NRHP/ARHP Criterion D, PCRHP Criterion 6 is not appropriate.
National Register of Historic Places/Arizona Register of Historic Places Criterion C, Pima County Register of Historic Places Criterion 5: Architecture

The building was recommended as NRHP/ARHP–eligible under Criterion C, at the Local Level, during the Period (Construction Completion Date) 1972, in the Area of Architecture (NPS 2011b) as distinctive of the Modern Movement of Architecture in Tucson, and the work of a master architect. Pima County also recommended that VNB – TOC also met NRHP Criteria Consideration G as a property that has achieved significance within the past 50 years, as an exceptionally important building that is a significant local example of the Brutalist style popular in the United States primarily during the 1960s. By 1972 in Tucson, the local architects ironically used Brutalism with this building to express an appropriate desert-culture and -climate masonry design while providing physical and implied security for the large volumes of bank data delivered to the facility and processed inside. The Arizona State Historic Preservation Office (SHPO) (2011) disagreed (see attached determination report), and determined the property not NRHP- or ARHP-eligible.

However, the Pima County Cultural Resources and Historic Preservation office considers the 1972 Valley National Bank – Tucson Operations Center eligible for inclusion in the PCRHP under its Criteria 1, 2, and 5. Therefore, Pima County has treated the property as most deserving of listing on its local register of historic places (PCRHP) and gave formal acknowledgment that the property is special to the history and culture of Pima County citizens, through local recognition. Pima County acknowledged the exceptional importance of the property and recommended documentation (this modified-HABS report) as mitigation for proposed changes to the property’s integrity.
Figure 1. Map showing project location at 3434 East 22\textsuperscript{nd} Street.
Figure 2. Overview aerial photograph of 1972 VNB – Tucson Operations Center (arrows show direction and location of exterior photodocumentation).
Figure 3. Floorplan of 1972 VNB – Tucson Operations Center (arrows show direction and location of interior photodocumentation).
1972 VALLEY NATIONAL BANK – TUCSON OPERATIONS CENTER
3434 East 22nd Street
Tucson
Pima County
Arizona

PHOTOGRAPHS
WRITTEN HISTORICAL AND DESCRIPTIVE DATA
REDUCED COPIES OF MEASURED DRAWINGS

HISTORIC AMERICAN BUILDINGS SURVEY (AS MODIFIED FOR ARIZONA SHPO)
Arizona State Historic Preservation Office
1300 Washington Street
Phoenix, Arizona 85007
HISTORIC AMERICAN BUILDINGS SURVEY
(as Modified for Arizona SHPO)

Location: The one-story building is roughly centered on 8-acre Block A of the Citation Park Addition, bounded by 22nd Street on the north, Jones Boulevard on the west, and alley easements on the east and south. USGS Tucson, Arizona, 7.5-minute Quadrangle, 1992. UTM 12 492382E 3563316N (NAD83/WGS84) Section 21, Township 14S, Range 14E, on platted Tucson lands.


Present Owner: Pima County, after 2002.

Present Use: Abandoned, recently Pima County Division of Elections Office.

Significance: The building is an excellent local example of the Brutalist architectural style popular in the United States primarily in the 1960s through early 1970s. Architect John A. Morrison used Brutalism with this building to express an appropriate desert-culture masonry design, while providing physical and implied security for the large volumes of bank data delivered from branch banks to the facility and processed inside. Contractor M.M. Sundt produced patterns and molds for the cast-in-place concrete wall panels, which reflect Brutalism’s hallmark details of exposed concrete with roughly-textured surfaces, along with Morrison’s deeply shadowed penetrations of the building mass.

Project Information: Pima County commissioned SWCA Environmental Consultants (SWCA) in 2011 to assist in mitigating proposed adverse effects to this Pima County Register of Historic Places (PCRHP)-eligible property through HABS documentation standards modified by the Arizona SHPO, and as required by Pima County Cultural Resources and Historic Preservation Office, in compliance with the Arizona Historic Preservation Act, ARS 41-861 et seq.

SWCA architectural historian James Steely served as historian and photographer for the documentation project. Jerome Hesse was project manager and geographic information system (GIS) cartographer Chris Query produced the locational and site maps, and photo-location annotated floor plans accompanying the Photographic Data Sheet.
PART I. HISTORICAL INFORMATION

A. Physical History:

1. **Date of construction:** 1971–1972.
2. **Architect:** Cane Nelson Wares Cook & Associates, John A. Morrison, project architect.
3. **Original and subsequent owners:** Valley National Bank (VNB) through about 1993; Pima County after 2002 (Pima County Assessor’s Office 2011).
4. **Original and subsequent occupants:** VNB Tucson Operations Center; Pima County Division of Elections Office.
6. **Original Plans and Construction:** Campus configuration for single-story Brutalist style building and associated wings, structures, and lush irrigated landscape.
7. **Alterations and Additions:** The building interior likely changed frequently with technological changes in banking computerization and record-keeping, according to the architect John Morrison (2011); at some point the landscape then changed from lush irrigated greenery to desert plants and rock (washes); Pima County’s acquisition of the building in 2002 led to minor partition changes inside, and additional light fixtures through exposed conduits; rental of the west office area and cafeteria rotunda to the Mosaic United Methodist Church in recent years caused minor changes in partitions and lighting.

B. Historic Context:


Tucson’s architectural landscape is fortunate to be the subject of a number of fully developed Historic Contexts (each encompassing theme, place, and time; NPS 2011a) with which to evaluate properties in the city for historical significance and eligibility for listing in the Arizona and National Registers of Historic Places. In 2004 and 2005, the office of Chris Evans, Architect, and the University of Arizona’s Preservation Studies program under R. Brooks Jeffery collaborated to produce the draft Historic Context “Architecture of the Modern Movement in Tucson, Arizona, 1945-1975.” The effort combined a general literature review on modern architecture locally and globally; a building survey resulting in the “modern 50” list, of which the 1972 VNB – TOC is No. 45; oral histories with local architects and builders practicing during 1945–1975; and a methodology for interpreting and analyzing this information “to identify modern properties and their significance” (Evans and Jeffery 2011; MAPP 2011b).

Arizona famously boomed after 1945, with phenomenal growth in housing epitomized by single-family homes as pre-war neighborhoods-infill and vast new automobile subdivisions in and adjacent to Tucson and Phoenix. In the 2007 fully developed Historic Context “Tucson Post World War II Residential Subdivision Development” (Akros and Wilson 2007:18), Debbie Abele and Liz Wilson confirmed that along with automobiles, “The lending industry was another important force that shaped the physical pattern of development of residential subdivisions after WW II in Tucson.”

Somewhat surprisingly, very few banks operated in the Tucson area. In 1946 and as late as 1950, only two banks were listed in the local telephone directory as providing general lending services: the Valley National Bank, the state’s preeminent financial institution [and in Tucson since 1934], and the Southern Arizona Bank and Trust Co. By 1955 the Bank of Douglas had established operations in Tucson. While over the next fifteen years the Arizona Bank, the Bank of Tucson, First National Bank of Tucson and Union Bank became active, this was a
relatively small number of institutions to serve the rapidly growing population and expanding [housing and commercial] development industry. (Akros and Wilson 2007:18–19)

Valley National Bank’s president and chairman Walter Bimson, based in Phoenix since 1932 and banking in Tucson since 1934, had influenced creation of the Federal Housing Administration (FHA) and facilitated FHA mortgage-loan guarantees throughout Arizona (Stocklin et al. 2010:99–100). Bimson strongly supported homebuilding and commercial growth in Arizona throughout the Great Depression and World War II. After the war, Walter along with his brother and fellow banker Carl Bimson, and Walter’s sons Earl and Lloyd, also supported their host communities as art patrons, including boldly modern, cutting-edge architectural designs for their prominent street-corner branch banks, according to Donna Reiner in *Midcentury Marvels, Commercial Architecture of Phoenix 1945-1975* (Stocklin et al. 2010).

Walter Bimson of Valley National Bank, the leading force behind the construction of these architecturally interesting branch banks in Phoenix and Arizona, promoted the idea that architectural design was an important aspect of the Valley National Bank’s statewide image. (Stocklin et al. 2010:99–100)

Earl L. Bimson, Walter’s son, headed Valley National Bank by 1969 when he issued his “President’s Annual Report for the year 1969,” including a description of VNB’s planned new Tucson Operations Center (TOC) (Bimson 1969). The $2.5 million, 54,728-square-foot facility would replace a “nearly windowless building” hosting 120 employees at 610 East 22nd Street downtown (*Tucson Citizen* 1972).

This new…center will reflect a benchmark in our computer-area [sic; era?] philosophy. Quite often a boring, hectic and routinized daily job for many operators, it creates employment turnover that plagues most computer centers in the country.

After considerable study we discovered that many employees resent being confined by security walls in windowless rooms – no matter how precisely and comfortably air-conditioned.

So we are attempting a new approach: an attractive, open, garden-type area – “A village of work spaces” – with plantings and patios and providing expansive, relaxing vistas to relieve the tedium and the pressure of the many repetitive tasks.

If work must be routinized, at least we can make herculean efforts to make the environment not only attractive, but restful and welcoming! (Bimson 1969)

Bimson went on to tell employees and stockholders that VNB’s large size and resources offered opportunities “to provide a variety of correspondent services…computer; investment; and even management counseling to [other, smaller] banks throughout the Southwestern states.” He indicated that the new Tucson “computer center” would be a part of these services, which staged the TOC to be another revenue producer for VNB as it computerized records for other financial institutions in addition to its own. “Our size demands a sophistication of equipment and services,” he continued, “that hundreds of smaller banks in the Southwest territory can neither afford or install of support by themselves” (Bimson 1969).

The Bimsons selected the Tucson architectural firm CNWC & Associates to design their new Tucson Operations Center, and architect John A. Morrison headed CNWC’s TOC design team. Morrison, now retired and living in Scottsdale (in 2011), recalled to this report’s author that the Bimsons indeed placed design priorities on their employee’s productivity through comfortable surroundings, but also
on security from physical assault on the facility. “In [19]68 and ’69, California had troubles with arsonists targeting banks,” Morrison remembered, “and bankers were scared that their information centers would be attacked.” Consequently, the TOC’s distance from adjacent streets, two back-up power sources including batteries, raised main floor, cast-in-place exterior concrete panels, and Lexan (polycarbonate resin thermoplastic) glazing throughout, according to Morrison, addressed the Bimsons’ security concerns. “They also had trouble hiring people to work” in the downtown windowless computer center, he added, so his assignment included adapting this Brutalist-style formula to Earl Bimson’s anticipated “attractive, open, garden-type” workspaces (Morrison 2011; Bimson 1969).

With this design program for the Bimsons and the tumultuous times, Morrison produced a textbook example of Brutalist style as described by the late Arizona architectural historian Marcus Whiffen. The TOC’s exterior is exposed concrete, “rough-surfaced, showing the marks of the wooden formwork,” structural concrete frame, and “broad, quiet wall surfaces…interrupted by deep-shadowed penetrations of the building mass” (Whiffen 1981:275). A Guide to Tucson Architecture (Nequette and Jeffery 2002:295) describes local examples as exhibiting “variety in form as a result of the plasticity of cast-in-place concrete, exposed structural concrete with very rough texture, and expression of infill panels, often in another material such as brick,” in VNB – TOC’s case, Lexan windows. Morrison employed the “Vierendeel truss”—generally a truss with rectangular voids, and here a 110-foot pre-cast beam with horizontal voids strengthened by stainless steel rods—as the primary structural beam and ornamental motif (Morrison 2011).

Morrison mentioned his CNWC Cherrybell Post Office of 1972 as a similar commission in period and style (Morrison 2011). And he is credited in the Tucson Modern Movement historic context with “a significant contribution to regional modern architecture with his designs for the Tucson Music Hall and Little Theater (1971).”

The [Music Hall] complex of buildings utilizes split-faced colored concrete block that reflects the rugged terrain of the Sonoran Desert. Even in an urban setting, it is an effort to contextualize modernism. (Evans and Jeffery 2005:28)

For Valley National Bank’s fortified but functional computer center, Morrison described his search with this commission for a “contemporary style appropriate for the Southwest… considering expense [of construction]…getting away from Mission Style and Spanish Colonial…[otherwise] not a severe approach to modern architecture.” The textured pattern of vertical lines on the cast-in-place wall panels, which Morrison remembered as a “catalog item” form liner assembled in contractor Bob Sundt’s carpenter shop, resembles wood board-and-batten walls of early railroad-era Tucson buildings. Morrison further described the perimeter Vierendeel trusses as “sun screens,” an additional nod to traditional Southwest architecture, along with a general impression that exposed concrete represented updated mud-plaster or stucco of historical local masonry finishes (Morrison 2011; Tucson Citizen 1972).

A popular post-World War II modern-architecture juxtaposition of independent but adjacent rectangular and round building footprints—highly publicized in the late 1950s with construction of Brazil’s modernist capital city of Brasília—appears with the Tucson Operations Center’s rectangular main building block and adjacent round cafeteria. Bank president Bimson wanted a “first class” break area for his computer center employees, Morrison recalled, and the resulting 50-foot-diameter “rotunda” cafeteria “cost a fortune” because of its cast-in-place spoked-rib roof (Morrison 2011). The 100 × 119 feet computer room addition expanded services in 1986, according to Pima County tax records (Pima County Assessor’s Office 2011).
The center’s generous landscaping, installed in 1972 by John A. Harlow Associates of Tucson, originally reflected Bimson’s described “garden-type area.” The Tucson Citizen described Harlow’s work in 1972 as “undulating turf dotted with eucalyptus trees, Aleppo pines, rhus lancea [African sumac], tree privet and ornamental fruit trees. In addition, every work area in the facility faces on one of the seven planted courtyards that are integral to the design” (Tucson Citizen 1972; Bimson 1969). At a later date, not found during this report’s research, the landscaping on the north and west changed to undulating Sonoran desert and wash surfaces with some of the original irrigated trees and vine-covered “courtyards”—light-well penetrations and the patio leading to the rotunda cafeteria—surviving. Numerous large tree stumps in 2011 indicated that mature trees died in recent years probably due to cutbacks in irrigation. The large parking lot on the south side—designed for 500 cars, according to Morrison and indicating room to double the pre-1972 computer-center employment, to accommodate shift changes of 250 employees per shift, three shifts per day—survives along with paved surfaces leading to the east-side loading docks.

The 1972 VNB—TOC matches the description of the “Brutal” phase of modern-movement architecture in Tucson in Evans and Jeffery (2005), through “bolder, more dramatic and monumentally scaled architecture,” functional “importance…equaled with scale,” “security issues play[ing] a role,” and through “a brutal expression…often tied to an expression of structure.” Other Tucson examples by other architects of Brutalist style on the MAPP (2011a) list of “modern 50” are Union (now Compass) Bank on Grant Avenue (1972), Western Savings on Campbell Avenue (1973), Pima Community College (1973), Police Department (1974), Museum of Art (1974), and the University of Arizona Main Library (1977). CNWC and Morrison also produced the Cherrybell Post Office in 1972 (Evans and Jeffery 2005:33; Morrison 2011).

This building has been treated by the Pima County’s Cultural Resources and Historic Preservation office as meeting registration requirements for listing in the NRHP as presented in “Architecture of the Modern Movement in Tucson, Arizona, 1945-1975” (Evans and Jeffery 2005:51). Pima County considers that it meets NRHP/ARHP Criterion C, as described here, by embodying “distinctive characteristics of the type, period, and method of construction;” representing “the work of a master;” and possessing “high artistic value.” And it meets Pima County Register of Historic Places Criteria 1 and 5 as distinctive of the Modern Movement of Architecture in Tucson, and the work of a master architect (Pima County Development Services 2011).

Pima County’s Cultural Resources and Historic Preservation office also considers that the property meets NRHP Criteria Consideration G as a building less than 50 years of age by being “an exceptional representative of the building characteristics identified in the context study;” displaying “multiple characteristics from the period;” being “innovative” for its banking computer-records functions; being “exceptional” by possessing “high artistic value” through its concrete Vierendeel trusses and textured cast-in-place wall panels; and being “the work of a master” through John A. Morrison’s design skills and client-program realization (Evans and Jeffery 2005:51). Evans and Jeffery (2005:52) included the building on their Tucson “modern 50” survey as a “modern building of significance” because they determined that 1) the resource represents the modernist-architecture facet of local history; 2) this facet of history is important to local history; 3) the building is “a type of property that has relevance and importance in illustrating the historic context”; 4) the property illustrates that history through its Brutalist architectural design by a master architect; and 5) “the property possesses the physical features necessary to convey the aspect of history with which it is associated.”

Evans and Jeffery (2005:52) also presented the criteria—or “set of appraisals that analyze the building or landscape through different lenses, each of which is an attribute of modern design”—of the world organization DOcumentation and COnservation of the MOdern MOvement (DOCOMOMO). The VNB—TOC meets five of these criteria: 1) Technological merit through its
cast-concrete details and computer-accommodating infrastructure, 2) Social merit through the
designer’s improvement of working conditions, 3) Artistic and Aesthetic merit through the handling
of composition, scale, materials, and detail, 4) Canonie merit through recognition of the work as
iconic in Tucson modernist context, and 6) Integrity through its retention (in 2011) of design intent,
materials, structure, and site.

Architect Morrison described (2011) a number of VNB requirements for the TOC during its planning.
“We studied lots of schemes,” he recalled, all personally shown to Earl Bimson in his brand new
VNB “Valley Center,” a 40-story tower in downtown Phoenix. For the TOC, Morrison and Bimson
arranged a circulation path where “trucks brought in boxes of cancelled checks,” which were recorded
by employees “pounding the keyboards” of accounting registers, and photocopied by large-drum
copiers. The *Tucson Citizen* (1972) article on the TOC’s opening pictured banks of computer cabinets
with glass doors protecting reel-to-reel tapes, state of the art computing for the period. But, Morrison
added, he designed the building for constant changes and upgrades through its huge free-span rooms
and “computer floors” raised above the main slab with accessible panels for changing the complex
wiring below (Morrison 2011). Valley National Bank abandoned the building about 1988, and VNB
became part of the national Bank One group in 1993 (Pima County Assessor’s Office 2011).

Pima County retained all of these features when its Division of Elections moved into the facility
about 2002. These features, along with the empty cafeteria rotunda most recently utilized by a church
for its sanctuary, remained intact in 2011, as Pima County’s Facilities Management Department
planned a major remodeling of the facility to house its Pima County Wireless Integrated Network
(PCWIN) operations.

**PART II. ARCHITECTURAL INFORMATION**

**A. General Statement:**

1. **Architectural character:** Brutalist Style, single-story exposed-concrete building in a campus
   setting of associated wings, structures, and extensive landscape.

2. **Condition of fabric:** Good; the building retains integrity of location, design, materials,
   workmanship, feeling, setting, and association.

**B. Description of Exterior:**

1. **Overall dimensions:** Roughly a T-plan footprint, 291 feet on its north elevation (facing East
   22<sup>nd</sup> Street), by 226 feet (extending north to south through the stem of the T).

2. **Foundations:** Concrete.

3. **Walls:** Concrete, poured-in-place; Lexan glazing with anodized aluminum framing.

4. **Structural system, framing:** Post and Beam through concrete posts and pre-cast “Vierendeel”
   trusses, spanned by pre-cast T-profile ceiling beams; cafeteria rotunda is cast-in-place ribbed
   ceiling supported by cast-in-place textured concrete panels.

5. **Chimneys:** n/a.
6. Openings:


b. Windows and shutters: Aluminum-framed, Lexan glazed, units in patterns reflecting interior functions; glass-blocks as clerestory windows on south elevation of 1986 addition (Pima County Assessor’s Office 2011).

7. Roof:

a. Shape, covering: Flat, based on pre-cast T-profile ceiling beams.

b. Cornice, eaves: “Vierendeel” trusses serve as visible “cornices.”

c. Dormers, cupolas, towers: n/a.

C. Description of Interior:

1. Floor plans: Executive offices generally in the west one-third of the plan; data operations (originally) in the middle one-third and along East 22\textsuperscript{nd} Street; mechanical and truck-receiving systems in the east one-third. Round “rotunda” building originally an open-space cafeteria with incorporated kitchen.


3. Flooring: Specialized “computer floor” systems in data operations areas; concrete slabs elsewhere, some covered with various carpets and tiles.

4. Wall and ceiling finishes: Textured concrete cast-in-place panels, 6 inches in maximum thickness (Morrison 2011), on lower modules where outside walls are also inside walls; framed drywall partitions elsewhere. Ceilings are dropped acoustical in most spaces; rotunda ceiling is exposed cast-in-place concrete ribs.

5. Openings

a. Doorways and doors: Solid-core fine-wood finished office and data room doors.

b. Windows: Exterior-facing windows are aluminum-framed, Lexan glazed, units in patterns reflecting interior functions; glass-blocks as clerestory windows on south elevation of 1986 addition (Pima County Assessor’s Office 2011).

6. Decorative features and trim: Wood doors, some exposed-concrete panels.

5. Hardware: Heavy bronze-finish door handles and hinges.

6. Mechanical equipment:

a. Heating, air conditioning, ventilation: Water-circulating, forced-air system, possibly with on-site well.

b. Lighting: Florescent originally; some incandescent fixtures added.

D. Site:

1. Historic landscape design: Installed in 1972 by John A. Harlow Associates of Tucson, originally reflecting the bank president’s desired “garden-type area.” Described in 1972 (Tucson Citizen) as “undulating turf dotted with eucalyptus trees, Aleppo pines, rhus lancea [African sumac], tree privet and ornamental fruit trees. The large parking lot on the south side, designed for 500 cars (Morrison 2011) with integrated nodes with trees, survives along with paved surfaces leading to the east-side loading docks.

2. Outbuildings: “Rotunda” 50-foot-diameter cafeteria of poured-in-place concrete construction, window infills are typical aluminum-framed Lexan-glazed units. A smaller, circular building adjacent to the rotunda houses mechanical equipment for the former cafeteria. A single vehicle entry bridge structure accesses the parking lot from Jones Boulevard across the large open drainage ditch; the bridge is cast-in-place concrete with textured-panel flanking barriers that match the building’s Brutalist motif.

3. General setting and orientation: The setting is heavily landscaped for both beautification and protection of the building; its north elevation faces the Reid Park complex, across East 22nd Street, of open spaces, zoo, and golf course. The building is oriented along cardinal directions within the existing street grid; its main entrance is in the southwest area of the building, facing south onto the parking lot.

PART III. SOURCES OF INFORMATION

A. Original Architectural Drawings: University of Arizona Special Collections, Arizona Architectural Archives, inventoried with office-set drawings donated by Cane Nelson Wares Cook & Associates (in un-cataloged storage at the time of this report, thus unavailable for review).

B. Early Views:

Tucson Citizen
1972 The VNB-TOC is a ‘People Place.’ Copy of facility-opening article, with statistics, designers, and photographs, supplied by Chris Evans of MAPP. March 18, 1972. Pages 14-15 (Sunday supplement?). No author credited.

C. Interviews:

Morrison, John A.
D. Bibliography:

1. Primary and unpublished sources

Bimson, Earl L.

Evans, Chris, and R. Brooks Jeffery

Modern Architecture Preservation Project (MAPP)


Pima County Assessor’s Office
2011 Tax valuation records, with descriptions, floorplans, and notes on dates of construction, occupancy, and addition.

Tucson Citizen
1972 The VNB-TOC is a ‘People Place.’ Supplied by Chris Evans of MAPP. March 18, 1972. No author.

2. Secondary and published sources

Akros, Inc., (Akros) and Wilson Preservation (Wilson)

Beal, Tom

Collins, William S.

Doti, Lynne Pierson, and Larry Schweikart
National Park Service (NPS)


Nequette, Anne M., and R. Brooks Jeffery

Pima County Development Services

State Historic Preservation Office (SHPO)

Stocklin, Barbara, Kevin Weight, Don W. Ryden, J. Erik Ryden, Paul Sikorski, Donna Reiner, et al.

Whiffen, Marcus

E. Likely Sources not yet Investigated: As noted in III.A. above, the VNB - TOC original drawings are known to exist, but were unavailable for review during this evaluation project. These drawings, and preliminary proposals if available, will greatly inform the design process between architect and client.

F. Supplemental Material: The Tucson Modern Architecture Preservation Project (http://mapptucson.org) provides both a database and ongoing resource for the study of the Modern Movements results and effects on Tucson and Arizona.
PART IV. PROJECT INFORMATION

Prepared by: James Steely, Historian, Photographer

SWCA Environmental Consultants, Phoenix

July 18, 2011
### SWCA PHOTOGRAPHIC DATA SHEET

Project Name/ Number: PCWIN, Valley National Bank Tucson Operations Center, SWCA Project No. 16220

Digital images at 14 Megapixels with Pentax K-7 camera and 18~250mm zoom lens; JPEG and RAW exposures of each, converted to TIFF and copied on disk with same Image Numbers, 000 prefixes.

<table>
<thead>
<tr>
<th>Date</th>
<th>Image Number</th>
<th>Photographer</th>
<th>Facing</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/4/11</td>
<td>1</td>
<td>James Steely</td>
<td>N</td>
<td>South elevation, west ¼, facing main entry</td>
</tr>
<tr>
<td>5/4/11</td>
<td>2</td>
<td>James Steely</td>
<td>N</td>
<td>South elevation, middle ¼, facing 1986 addition</td>
</tr>
<tr>
<td>5/4/11</td>
<td>3</td>
<td>James Steely</td>
<td>N</td>
<td>South elevation, east ½, facing loading dock</td>
</tr>
<tr>
<td>5/4/11</td>
<td>4</td>
<td>James Steely</td>
<td>W</td>
<td>East elevation, south ½, facing loading dock</td>
</tr>
<tr>
<td>5/4/11</td>
<td>5</td>
<td>James Steely</td>
<td>W</td>
<td>East elevation, middle ½, facing mechanical screen wall</td>
</tr>
<tr>
<td>5/4/11</td>
<td>6</td>
<td>James Steely</td>
<td>W</td>
<td>East elevation, north ½, facing employee entries</td>
</tr>
<tr>
<td>5/4/11</td>
<td>7</td>
<td>James Steely</td>
<td>SW</td>
<td>Oblique of northeast corner, 22nd Street elevation at right</td>
</tr>
<tr>
<td>5/4/11</td>
<td>8</td>
<td>James Steely</td>
<td>S</td>
<td>North elevation, east ¼</td>
</tr>
<tr>
<td>5/4/11</td>
<td>9</td>
<td>James Steely</td>
<td>S</td>
<td>North elevation, east light-well penetration</td>
</tr>
<tr>
<td>5/4/11</td>
<td>10</td>
<td>James Steely</td>
<td>S</td>
<td>North elevation, east-middle ¼, showing landscaping</td>
</tr>
<tr>
<td>5/4/11</td>
<td>11</td>
<td>James Steely</td>
<td>E</td>
<td>North elevation, from middle light-well penetration</td>
</tr>
<tr>
<td>5/4/11</td>
<td>12</td>
<td>James Steely</td>
<td>S</td>
<td>North face of Cafeteria Rotunda</td>
</tr>
<tr>
<td>5/4/11</td>
<td>13</td>
<td>James Steely</td>
<td>S</td>
<td>North elevation, west-middle ¼, opposite Rotunda</td>
</tr>
<tr>
<td>5/4/11</td>
<td>14</td>
<td>James Steely</td>
<td>N</td>
<td>South face of Cafeteria Rotunda, entry faces main bldg.</td>
</tr>
<tr>
<td>5/4/11</td>
<td>15</td>
<td>James Steely</td>
<td>E</td>
<td>West face of Cafeteria Rotunda, and west loading dock</td>
</tr>
<tr>
<td>5/4/11</td>
<td>16</td>
<td>James Steely</td>
<td>SE</td>
<td>Oblique of northwest features, original 22nd St. sign</td>
</tr>
<tr>
<td>5/4/11</td>
<td>17</td>
<td>James Steely</td>
<td>S</td>
<td>North elevation, west ¼, facing executive offices</td>
</tr>
<tr>
<td>5/4/11</td>
<td>18</td>
<td>James Steely</td>
<td>E</td>
<td>West elevation, north ½, Rotunda on left</td>
</tr>
<tr>
<td>5/4/11</td>
<td>19</td>
<td>James Steely</td>
<td>E</td>
<td>West elevation middle ½, facing executive offices</td>
</tr>
<tr>
<td>5/4/11</td>
<td>20</td>
<td>James Steely</td>
<td>E</td>
<td>West elevation, south ½, facing executive offices</td>
</tr>
<tr>
<td>5/4/11</td>
<td>21</td>
<td>James Steely</td>
<td>NE</td>
<td>Oblique of southwest corner features, desert landscaping</td>
</tr>
<tr>
<td>5/4/11</td>
<td>22</td>
<td>James Steely</td>
<td>NE</td>
<td>Oblique of main entry plaza and landscaping</td>
</tr>
<tr>
<td>5/4/11</td>
<td>23</td>
<td>James Steely</td>
<td>N</td>
<td>Facing main entry plaza, 1986 addition at right</td>
</tr>
<tr>
<td>5/4/11</td>
<td>24</td>
<td>James Steely</td>
<td>NW</td>
<td>Interior of entry lobby, Rotunda through doors at right</td>
</tr>
<tr>
<td>5/4/11</td>
<td>25</td>
<td>James Steely</td>
<td>NW</td>
<td>Executive offices in NW corner of main building</td>
</tr>
<tr>
<td>5/4/11</td>
<td>26</td>
<td>James Steely</td>
<td>NE</td>
<td>Central work space, facing atrium and main hallways</td>
</tr>
<tr>
<td>5/4/11</td>
<td>27</td>
<td>James Steely</td>
<td>NW</td>
<td>“Computer Floor” carpet panel removed to show subfloor</td>
</tr>
<tr>
<td>5/4/11</td>
<td>28</td>
<td>James Steely</td>
<td>NW</td>
<td>Central work space from south hallway, atrium on right</td>
</tr>
<tr>
<td>5/4/11</td>
<td>29</td>
<td>James Steely</td>
<td>N</td>
<td>Atrium from south hallway looking toward north hallway</td>
</tr>
<tr>
<td>5/4/11</td>
<td>30</td>
<td>James Steely</td>
<td>W</td>
<td>North hallway, lobby entry at far glass doorways</td>
</tr>
<tr>
<td>5/4/11</td>
<td>31</td>
<td>James Steely</td>
<td>NW</td>
<td>Work room in northeast corner of main building</td>
</tr>
<tr>
<td>5/4/11</td>
<td>32</td>
<td>James Steely</td>
<td>N</td>
<td>Guard station at employee entries on east elevation</td>
</tr>
<tr>
<td>5/4/11</td>
<td>33</td>
<td>James Steely</td>
<td>SW</td>
<td>Mechanical room in east end of main building</td>
</tr>
<tr>
<td>5/4/11</td>
<td>34</td>
<td>James Steely</td>
<td>N</td>
<td>Interior of Cafeteria Rotunda, showing concrete ceiling</td>
</tr>
</tbody>
</table>
STATE OF ARIZONA

HISTORIC PROPERTY INVENTORY FORM

PROPERTY IDENTIFICATION

Site No: 45
Survey Area: Tucson’s “modern 50” post-World War II buildings

Historic Name(s): Valley National Bank – Tucson Operations Center

Address: 3434 East 22nd Street
City or Town: Tucson vicinity
County: Pima
Tax Parcel No.: 130-08-3810

Elevation: 2501’
Township: 14S Range: 14E Section: 21 Quarter Section:
Acreage: c. 8 acres
Block: A Lot(s):
Plat (Addition): Citation Park
Year of Plat:

UTM reference: Zone: 12 Easting: 492382E Northing: 3563316N USGS 7.5’ quad map: Tucson

Architect: CNWC, John A. Morrison
Builder: M.M. Sundt Company
Construction Date: 1971-1972

STRUCTURAL CONDITION:
☑ Good (Well-maintained; no serious problems apparent)

☐ Fair (Some problems apparent) Describe: ____________________________

☐ Poor (Major problems; imminent threat) Describe: __________________________

☐ Ruin/Uninhabitable

USES/ FUNCTIONS
COMMERC/ TRADE/financial institution/bank/computer center

Sources: See Bibliography, (Steely, et al. 2011).

PHOTO INFORMATION
Date of photo: 4 May 2011
View Direction (looking): northwest

Southwest corner of main building block, executive offices (most recently offices and meeting rooms of former tenant Mosaic United Methodist Church). Freestanding “Vierendeel” trusses serving as sun shades. Desert landscaping.

Negative No.: See Photographic Data Sheet
SIGNIFICANCE

A. ☐ HISTORIC EVENTS/TRENDS
B. ☐ PERSONS
C. ☒ ARCHITECTURE/ENGINEERING (See continuation sheet describing how the property embodies the distinctive characteristics of a type, period, and method of construction, or represents the work of a master.)
D. ☐ INFORMATION

INTEGRITY

1. LOCATION ☒ Original Site

2. DESIGN (Describe alterations from the original design, including dates—known or estimated—when alterations were made)
   Brutalist Style as completed in 1972; 1986 south addition continued materials, scale, and finishes.

3. SETTING (Describe the natural and/or built environment around the property)
   Character of place is retained to the period of significance, 1972, as a freestanding building in a mid-block, park-like setting.
   (Describe how the setting has changed since the property’s period of significance)
   Landscaping specifics, formerly lush irrigated and now semi-arid desert, may have changed at unknown date.

4. MATERIALS (Describe the materials used in the following elements of the property)
   Walls (structure): Concrete. Foundation: Concrete. Roof: Concrete, with membrane.
   Windows: Lexan in aluminum frames.
   Wall Sheathing: Textured (vertical “board and batten” pattern) cast-in-place concrete panels.

5. WORKMANSHIP (Describe the distinctive elements of craftsmanship or method of construction)
   Concrete work and finishes are the works of skilled craftsmen.

NATIONAL REGISTER STATUS (if listed, check the appropriate box)
☐ Individually listed ☐ Contributing ☐ Non-contributor to Historic District

PERIOD OF SIGNIFICANCE 1972
   Date Listed: ___________________ ☐ Determined eligible by keeper of National Register date: ___________________

RECOMMENDATIONS OF ELIGIBILITY (opinion of survey consultant)
   Property ☒ is eligible individually. (Treated by owner Pima County as eligible during 2011 planning for remodeling.)

FORM COMPLETED BY
   Name and Affiliation: James W. Steely, SWCA Environmental Consultants Date: 22 July 2011
   Mailing Address: 3033 North Central Avenue, Phoenix, Arizona 85012 Phone No.: 602-274-3831
SIGNIFICANCE


C. ☑ ARCHITECTURE/ENGINEERING

This building meets registration requirements for listing in the National Register of Historic Places (NRHP) as presented in “Architecture of the Modern Movement in Tucson, Arizona, 1945-1975” (Evans and Jeffery 2005:51). It meets NRHP/ARHP Criterion C, as described here, by embodying “distinctive characteristics of the type, period, and method of construction”; representing “the work of a master”; and possessing “high artistic value.” And it meets Pima County Register of Historic Places Criteria 1) and 5) as distinctive of the Modern Movement of Architecture in Tucson, and the work of a master architect (Pima County Development Services 2011). See Steely et al. (2011) and associated photographs for additional information, description, and eligibility justification.

“Rotunda” a 50-foot-diameter cafeteria of poured-in-place concrete construction, window infills are aluminum-framed Lexan-glazed units. A smaller, circular building adjacent to the rotunda houses mechanical equipment for the former cafeteria. A single vehicle entry bridge structure accesses the parking lot from Jones Boulevard across the large open drainage ditch; the bridge is cast-in-place concrete with textured-panel flanking barriers that match the building’s Brutalist motif.

BIBLIOGRAPHY

Evans, Chris, and R. Brooks Jeffery

Pima County Assessor’s Office
2011 Tax valuation records, with descriptions, floorplans, and notes on dates of construction, occupancy, and addition.

Pima County Development Services

Steely, James, India Hesse, and Paul Rawson

Tucson Citizen
1972 The VNB-TOC is a ‘People Place.’ Copy of Tucson Citizen newspaper article supplied by Chris Evans of MAPP. March 18, 1972. No author.

SEE 2011 Mapping of Property and Resource footprints, (SWCA 2011), Chris Query, digital cartographer)
state of Arizona
Historic Property Inventory Form
Continuation Sheet

name of property: Valley National Bank – Tucson Operations Center
3434 East 22nd Street, Tucson

Continuation Sheet No. 2

PHOTO INFORMATION
Date of photo: 4 May 2011
View Direction (looking): northeast

Public entry plaza from parking lot into lobby doors (under “Vierendeel” truss marked “A”).

Negative No. See Index to Photographs
name of property: Valley National Bank – Tucson Operations Center
3434 East 22nd Street, Tucson

PHOTO INFORMATION
Date of photo: 4 May 2011
View Direction (looking): southeast

1972 cast-in-place address sign with later numbering, as seen from vehicles passing east along West 22nd Street. “Rotunda” former cafeteria is in background.

Negative No.: See Index to Photographs
name of property  Valley National Bank – Tucson Operations Center
3434 East 22nd Street, Tucson

PHOTO INFORMATION
Date of photo:  4 May 2011
View Direction (looking):  east

Shaded plaza between main building (foreground, entry at right) and “rotunda” former cafeteria (on left).

Negative No.:  See Index to Photographs
name of property: Valley National Bank – Tucson Operations Center
3434 East 22nd Street, Tucson

PHOTO INFORMATION
Date of photo: 4 May 2011
View Direction (looking): northwest

Interior of central area of main building from south arterial hallway; enclosed light and plantings atrium at right.

Negative No.: See Index to Photographs
PHOTO INFORMATION
Date of photo: 4 May 2011
View Direction (looking): north

Interior of “rotunda” former cafeteria, showing series of vertical cast-in-place concrete wall-panel bracing, and cast-in-place ribs of ceiling.

Negative No.: See Index to Photographs
REDUCED COPIES OF MEASURED DRAWINGS (FOLLOWING)
ALTA/ACSM SURVEY

A PORTION OF THE NORTHWEST QUARTER OF SECTION 21, TOWNSHIP 14 SOUTH, RANGE 14
EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, PIMA COUNTY, ARIZONA.
ARIZONA STATE HISTORIC PRESERVATION OFFICE
RECOMMENDATION OF ELIGIBILITY, 5/14/11 (FOLLOWING)
Arizona State Historic Preservation Office
RECOMMENDATION OF ELIGIBILITY

PROPERTY NAME: Valley National Bank Operations Center

PROPERTY ADDRESS: 3434 E. 22nd Street
Tucson, AZ

STATE INVENTORY FORM COMPLETED: □ N □ Y Date: 5/14/11
DRAFT NAT'L REGISTER FORM COMPLETED: □ N □ Y Date: 5/14/11

TYPE OF RESOURCE: □ Site □ District □ Object □ Building □ Structure

AREAS OF SIGNIFICANCE: □ A (History) □ B (Person) □ C (Design) □ D (Archaeology)

CRITERIA CONSIDERATION: □ A (Religious) □ B (Moved) □ C (Birthplace or Grave)
□ D (Cemetery) □ E (Reconstructed) □ F (Commemorative) □ G (Less than 50 years)

SUGGESTED LEVEL OF SIGNIFICANCE: □ LOCAL □ STATE □ NATIONAL

INTEGRITY: □ GOOD □ FAIR □ POOR

We, the undersigned staff of the Arizona SHPO, hereby provide the following recommendations on the eligiblity of the subject property for the National and State Registers of Historic Place. This recommendation is based on the information provided.

STAFF COMMENTS: □ ELIGIBLE □ NOT ELIGIBLE □ MORE INFORMATION NEEDED

NOT EXCEPTIONAL EXAMPLE OF SIGNIFICANCE FOR CONCRETE AS PROPOSED AS BASIS FOR ELIGIBILITY, NOR FOR EXPRESSIVISM

BY: [Signature] DATE: 7/11/11

STAFF COMMENTS: □ ELIGIBLE □ NOT ELIGIBLE □ MORE INFORMATION NEEDED

BY: [Signature] DATE: 7/1/11

STAFF COMMENTS: □ ELIGIBLE □ NOT ELIGIBLE □ MORE INFORMATION NEEDED

BY: [Signature] DATE: 7/11/11

I, the Arizona SHPO, □ AGREE □ DISAGREE with the above recommendation.

[Signature] Schedule for review by Historic Sites Review Committee

BY: [Signature] DATE: 7/11/11
July 1, 2011

Mr. James Garrison, State Historic Preservation Officer
Arizona State Historic Preservation Office
Arizona State Parks
1300 West Washington
Phoenix, Arizona 85007

RE: SHPO-2011-0642 (91540)
   Pima County Wireless Integrated Network (PCWIN)
   Pima Emergency Communications and Operations Center /3434 E. 22nd street--
   Valley National Bank Operations Building
   Completion of Fieldwork

Dear Mr. Garrison:

This letter continues consultation with the State Historic Preservation Office (SHPO) regarding cultural resource compliance for the Pima County Wireless Integrated Network (PCWIN) project for the proposed Pima Emergency Communications and Operations Center, addressed 3434 E. 22nd Street in Tucson, Pima County, T14S, R14E, Section 21. The building that will be impacted by the project was formerly the Valley National Bank Operations building, constructed in 1972 and designed by architect Cain Nelson Ware and Cook (CNWC). The building was recognized by the Modern Architecture Preservation Project (MAPP) as representative of the Brutalist phase of Modern architecture in Tucson, and Pima County considers this building to be eligible for listing in the National Register of Historic Places under Criteria Consideration Exception “g.”

The scope of the PCWIN Pima Emergency Communications and Operations Center includes retaining the original main, rectilinear structure but demolition of the distinctive round building, which is located north of the main building. The majority of the current landscaping will remain and will continue to be incorporated into the overall setting of the main building as was originally intended. The existing courtyard on the north side of the building (currently serving as access to the round building) will be preserved. A rectangular addition will replace the footprint of the round building.

James Steely, SWCA Environmental Consultants, has fully completed the fieldwork documentation for mitigation and research on the Valley National Bank Operations buildings during the months of May – June, 2011 in accordance with the State Historic Preservation Office standards (SHPO 2002) as approved by your office on May 20, 2011. Enclosed is a letter from James Steely stating the documentation has been completed and an outline of the document that is currently being prepared for County review and SHPO consultation – Documentation of the 1972 Valley National Bank Tucson Operations Center (TOC) East 22nd Street, Tucson, Pima County, Arizona prepared by SWCA Environmental Consultants (July 2011).
I request concurrence that the completion of this documentation is sufficient for the Pima County Emergency Communications and Operations Center project to proceed without further fieldwork requirements. A signature line for concurrence is provided below. A complete draft of the report presenting the results of the full documentation mitigation will be submitted to our office by July 11, 2011. Upon County approval, I will be forwarding the completed mitigation report to the State Historic Preservation Office with a request for concurrence approval of the document and conclusion of the project.

Your attention to this project is greatly appreciated.

Signature for SHPO Concurrence

Date

Sincerely,

[Signature]

Courtney Rose, Ph.D., Program Coordinator
Office of Sustainability & Conservation
Cultural Resources & Historic Preservation Division
Pima County Public Works Center
201 N. Stone Ave., 6th Floor
Tucson, Arizona 85701-1207

Cc. Bob Frankeberger, State Historic Preservation Office, Architect

Attachments:
- Completion of Fieldwork Letter (SWCA Environmental Consultants, July 1, 2011).
Arizona State Historic Preservation Office
RECOMMENDATION OF ELIGIBILITY

PROPERTY NAME: Valley National Bank Operations Center

PROPERTY ADDRESS: 3434 E. 22nd Street
Tucson, AZ

STATE INVENTORY FORM COMPLETED: □ N □ Y Date: 5/14/11
DRAFT NAT'L REGISTER FORM COMPLETED: □ N □ Y Date:

TYPE OF RESOURCE: □ Site □ District □ Object x Building □ Structure

AREAS OF SIGNIFICANCE: □ A (History) □ B (Person) □ C (Design) □ D (Archaeology)

CRITERIA CONSIDERATION: □ A (Religious) □ B (Moved) □ C (Birthplace or Grave)
□ D (Cemetery) □ E (Reconstructed) □ F (Commemorative) □ G (Less than 50 years)

SUGGESTED LEVEL OF SIGNIFICANCE: x LOCAL □ STATE □ NATIONAL

INTEGRITY: x GOOD □ FAIR □ POOR

We, the undersigned staff of the Arizona SHPO, hereby provide the following recommendations on the eligibility of the subject property for the National and State Registers of Historic Place. This recommendation is based on the information provided.

STAFF COMMENTS: ELIGIBLE x NOT ELIGIBLE □ MORE INFORMATION NEEDED

NOT EXCEPTIONAL EXAMPLE OF SIGNIFICANCE FOR CONCRETE AS PROPOSED AS BASIS FOR ELIGIBILITY, NOR FOR EXPRESSIONISM

BY: [Signature] DATE: 11 JUL 11

STAFF COMMENTS: □ ELIGIBLE & NOT ELIGIBLE □ MORE INFORMATION NEEDED

The argument raised a key point required by Bulletin 15 (p. 92) that to be exceptionally important the property must be the best example within its context. Despite the labor narrative, this building is little more than a common example of its type.

BY: [Signature] DATE: 7/11/11

STAFF COMMENTS: □ ELIGIBLE X NOT ELIGIBLE □ MORE INFORMATION NEEDED

The alterations in 1988 are indistinguishable from the original — see #9 standards for rehabilitation). Landscaping has changed, two of original courtyards have been encroached. Historic integrity has been diminished.

BY: [Signature] DATE: 7/11/11

I, the Arizona SHPO, □ AGREE □ DISAGREE with the above recommendation.
□ Schedule for review by Historic Sites Review Committee

BY: [Signature] DATE: 7/11/11
May 10, 2011

Mr. James Garrison, State Historic Preservation Officer
Arizona State Historic Preservation Office
Arizona State Parks
1300 West Washington
Phoenix, Arizona 85007

RE: Pima County Wireless Integrated Network (PCWIN)
Pima Emergency Communications and Operations Center / 3434 E. 22nd Street –
Valley National Bank Operations Building
“Adverse Effect”

Dear Mr. Garrison:

This correspondence initiates consultation with the State Historic Preservation Office (SHPO) on the Pima County Wireless Integrated Network (PCWIN) project regarding the proposed Pima Emergency Communications and Operations Center, addressed 3434 E. 22nd Street in Tucson, Pima County, T14S, R14E, Section 21. The Pima County Information Technology Department and Pima County Sheriff’s Department have joined with a number of public safety entities to develop and put to use a regional public safety radio system (PCWIN) in order to improve public safety services. The project is being funded by Pima County 2004 Bond Funds. At present, there is no Federal nexus for the PCWIN project. This location and building structures are owned by Pima County and were chosen for both the emergency operations center and a PCWIN radio tower.

The PCWIN proposed tower sites have been reviewed for cultural resources and a report, *Pima County Wireless Integrated Network, Regional Emergency Communications and Operations Center Class I Cultural Resources Records Search/SWCA Project No. 16220*, prepared by Jerome Hesse, March 3, 2010, was submitted to our office. No archaeological sites were identified in the vicinity of the project area. At the time the Class I review was submitted, however, the impacts to the standing structure were still unknown.

The building that will be impacted by the project was formerly the Valley National Bank Operations building, constructed in 1970 and designed by architect Cain Nelson Ware and Cook (CNWC). The building is an example of the Brutalist phase of Modern architecture in Tucson. The architectural components include the main, rectilinear building (approximately 58,000 square feet) that includes a courtyard, patio, atrium, and insets with windows serving to bring outdoor naturalistic elements to the interior environment. The landscaping and access to the outdoors provided a balance to the massive walls and heaviness embodied by this style of modern architecture. Another distinctive characteristic of the Valley National Bank is a 500 square foot round structure located on the north side of the main building (facing E 22nd Street) once used as a cafeteria for the bank employees. The round building was accessed by exiting the main building and crossing a landscaped courtyard.

The scope of the PCWIN Pima Emergency Communications and Operations Center includes retaining the original main, rectilinear structure but demolition of the distinctive round building. The existing rectilinear building will be re-used. The majority of the current landscaping will remain and will continue to be incorporated into the overall setting of the building as was originally intended. The existing courtyard on the north side of the building (currently serving as access to the round building) will be preserved. A rectangular addition (approximately 10,800 square feet) will replace the footprint of the round building. This new addition has been designated as an “Essential Building” in emergency operations because it will house critical security dispatch operations. Although alternative locations for placement of the rectangular addition were considered, it was found that the north side of the building was the only workable solution. The designation as an Essential Building introduced other limiting factors in design, such as setbacks and restrictions on location because the property is partly within an Approach-Departure Corridor for the Davis-Monthan Air Force Base.

The Valley National Bank (3434 E. 22nd Street) may be recommended as Register eligible under Criteria Consideration G as an example of Modern Architecture in Tucson that is less than fifty years old, or under Criterion C; however, no formal determination has yet been made. The demolition and replacement of the round building proposed in the PCWIN plan may be considered an Adverse Effect. As no reasonable alternatives to the replacement of the round structure could be identified by the planners and architects, our office is treating the property as if it has achieved significance in the last fifty years. Architectural historian, Jim Steely (SWCA) was contracted to undertake the mitigation documentation of the 22nd Street building/Valley National Bank following State Historic Preservation Office standards. The complete assessment and mitigation of the 22nd Street building will follow in subsequent consultation with the SHPO on this project.

[Signed]
Signature for SHPO Concurrence

[Date]

Sincerely,

Courtney Rose, Ph.D., Program Coordinator
Office of Sustainability & Conservation
Cultural Resources & Historic Preservation Division
Pima County Public Works Center
201 N. Stone Ave., 6th Floor
Tucson, Arizona 85701-1207

Cc. Bob Frankeberger, State Historic Preservation Office, Architect

Attachments:
- Valley National Bank Operations description from mapptucson.org (1 page)
- Photos showing PCWIN building perspectives, distributed at May 2, 2011 public meeting (2 pages)
- Photos showing round structure and architectural form (3 pages)
- Newspaper article, Tucson Citizen – March 18, 1972, on the round building (1 page)
MEMORANDUM

Date: April 5, 2011

To: The Honorable Ramón Valadez, Chairman
    Pima County Board of Supervisors

From: C.H. Huckelberry
    County Administrator

Re: Pima County Communications and Operations Center for Public Safety Interoperable Communications

As you know, the County acquired the property at 3434 E. 22nd Street some years ago for development of a public safety communications center. We are nearing retrofit construction and modification of the existing facilities to accommodate this function.

A public open house has been scheduled for 6:00 PM on May 2, 2011 at the Eckstrom-Columbus Library at 4360 E. 22nd Street to present the proposed modifications. This meeting will demonstrate to interested parties the proposed building modifications to convert the former bank computer center to the Regional Public Safety Communications and Operations Center. A number of existing buildings will be modified and expanded to accommodate increased size demands due to the regional nature of the facility.

The facility is also needed to ensure the system is integrated, functional and covers not just the urban area, but all of Pima County where these communications systems are necessary.

In a recent communication, you requested an analysis of whether the radio communication tower to be constructed in association with the center was necessary and whether there were any alternative locations for the tower. In almost all cases, we have conducted extensive alternative analyses for locating communications towers. The best examples of such analyses are the long, complex discussions for locating facilities on Tumamoc Hill and our alternatives analysis with federal agencies, including the Bureau of Land Management, regarding Confidence Peak; as well as a number of other sites. The 22nd Street site underwent a similar analysis, and this location is somewhat coupled with the existing Thomas O. Price Service Center, since the City of Tucson chose to expand the Price Center to provide an emergency backup system for both communications centers should something happen to one or the other.

I am enclosing a summary memorandum from Dr. John Moffatt regarding the radio communications tower at the 22nd Street site and the evaluation of possible alternatives. As you can see from Dr. Moffatt’s analysis, there are no viable alternatives.

CHH/mjk
Attachment

c: Dr. John Moffatt, PCWIN Project Director
MEMORANDUM
Strategic Planning Office

To: Chuck Huckleberry
   County Administrator

Subject: Pima Emergency Communications Operations Center Tower

Date: April 4, 2011

From: John H. Moffatt, Ph.D.
   PCWIN Project Director

As requested by Supervisor Valadez, the PCWIN staff reviewed the issues related to the tower planned to be located on the Northeast corner of the building located at 3434 East 22nd Street. The information provided herein identifies the rationale behind selection of this facility and then explains the need for the tower to be located at this location and mitigation steps to be taken to address Supervisor Valadez’ concerns.

PCWIN Project Background:

In May, 2004, the voters of Pima County approved a Public Safety Bond Issue calling for the implementation of an interoperable public safety radio system for 32 public fire and police agencies as well as the Pima County Office of Emergency Management. Additionally, the Bond issue called for a consolidated Communications and Emergency Operations Center that would be the Master control center of the new radio system. The interoperable radio system design calls for radio tower locations throughout the County with microwave and fiber used for network connectivity between locations. The need for redundant communication centers, in case something happened to the new site, drove the requirement for communications between two redundant sites. The City of Tucson Thomas Price Service Center will also house a primary transmitter and dispatch facility. The two facilities will act as mutual emergency radio and dispatch backup sites for the other.

The interoperable radio system requires what is called a “Master Site” which has to be highly reliable as it is the heart of the entire system. This site must have redundant communication paths to all of the communications towers and dispatch centers, as well as reliable power and telecommunications and business networking service. These high availability needs are consistent with the needs of the County’s Emergency Operations Center where the coordinated response to various community emergencies will be managed with a wide range of agencies.

Site Selection:

This building was acquired by Pima County following an extensive study of locations and buildings throughout the community. The Technical Subcommittee of the PCWIN Executive Management Committee established a number of criteria that the selected location met. As mentioned above, the City of Tucson already has a dispatch location at the Thomas Price Service Center (TOPSC), located at Park and Ajo Way. The focus of the new site selection process was to identify suitable locations that met the defined requirements in combination with the City of Tucson Communications center. Some of the criteria were:

- Different power grid from TOPSC
- Different telephone central office (CO) from TOPSC
- Location does not require access across major rivers
- Location is geographically diverse from TOPSC
• Access to emergency fuel supplies during prolonged Emergency Operations Center activations.
• Availability of multiple path communication service to the building.
• Building had to be a minimum of 50,000 Sq. Ft. with appropriate parking to support normal operations and a full Emergency Operations Center activation.
• Location is accessible from central Tucson and other critical infrastructure agencies within a 15 minute drive in congested traffic.

The building located at 3434 East 22nd Street was built to be a backup data center for Valley National Bank and was built with many of the very same criteria in mind. Additionally, the building incorporated the structural integrity to meet many of the NFPA standards for such an emergency communications center, which has minimized the amount of modification required to the structure of the building. The acquisition price for the building was approximately $6 million; well below the cost to build the shell of a comparable new building, not including the value of the land. Most importantly, after researching sites throughout the valley, it was the only site that met all of the criteria mentioned above.

System Requirements

The Communications Center on 22nd Street is the Master site of the PCWIN radio system described above. As such, communications from this site to many of the other tower locations as well as the TOPSC and Pima County Sheriff’s Office (backup Emergency Operations Center) is required via Microwave. The hub of those microwave communications is the tower planned for this site. The tower will support microwave communications links to several locations throughout the valley. Due to system and cabling constraints, the tower must be located where the Master Site is located and close to the radio and microwave equipment.

The tower height and antenna location on the tower is a function of having a clear line-of-sight to the various other locations where the microwave links will be terminated. The presence of tall trees on the north side of 22nd Street as well as other obstructions in the community impacts these paths and thus the height of the tower. The towers are all designed with a growth factor built in to avoid costly reconstruction should additional capability be needed in the future. Finally, the tower will not contain PCWIN radio transmission equipment, but will contain radio antennas for the RACES group which is a volunteer ham radio group that supports Emergency Operations Center field deployments and dispatch control station radios.

Mitigation issues:

In response to Supervisor Valadez’ request for consideration of ways to reduce visual impact, the following steps will be taken to try to minimize the visual impact:

• Antenna structure specified will be changed from Valmont to Nello. The Valmont tower is a much wider tower both at the base as well as throughout its full height. The Nello Tower has a much less wide footprint as well as a narrower cross section throughout the height of the tower. It is slightly more dense in order to support the same weight, but is clearly less visible than the Valmont model. Photos of the two tower styles are attached to this memorandum to illustrate the differences.
• Antenna height will most likely not be able to be reduced from the planned 125 feet, but once all of the PCWIN sites are finalized, we will review the height to see if reduction is possible. The tower will not be built until just prior to the completion of the remodel of the building, so we have time to complete this analysis.
• Unless mandated by FAA requirements, antenna contractors and manufacturers will be required to identify a color that blends best with Arizona skies to minimize visibility and paint the tower that color.
• Microwave dish covers will also be sky colored (not white) in order to minimize visibility. The tower will be placed inside the secured parking area and north of covered vehicle parking structures which will block visibility of the base of the tower from the south and southeast.
The tower will be placed behind an existing 10 foot high wall facing 22nd Street to screen the base.

- Landscaping (many large existing trees) in the Northeast corner of the property will remain to mitigate the visibility of the tower from 22nd Street.
- Trees along the west, north, and south sides of the property (unless in the way of specific construction) will remain in place to mitigate visibility from the neighborhoods.
- The tower location was selected to be as far from the houses in the neighborhood as possible. The church to the east has perimeter walls that prevent ground level visibility of the site.
- Unless mandated by the FAA, there will not be a light anywhere on the tower.

The PCWIN team will have an open house at the Eckstrom – Columbus Library at 4350 East 22nd Street on Monday May 2, 2011 at 6:00 PM to inform the neighbors as to the plans for the site and show photos of the old and new tower style as well as the site and landscaping plan that will mitigate some of the visibility from the neighborhood. At that time, we will take comments from the neighbors. Those comments will be considered for further mitigation assuming they are feasible.

In summary, I regret that we cannot relocate the tower off site; but, it is an integral part of the radio Master Site. It is unlikely that we will be able to reduce the height, but we are committed to continuing to evaluate the planned and future uses of the tower once we finalize all of the microwave paths. As requested by Supervisor Valadez, we have committed to a number of changes to mitigate the visibility factor. If the neighbors wish to meet sooner than the May 2nd meeting to discuss this topic in greater depth, the PCWIN team will gladly do so.
Would this be it?

-----Original Message-----
From: Thomas Drzazgowski
Sent: Tuesday, July 05, 2011 10:23 AM
To: Alicia Montoya
Subject: FW: Question about Zoning in City of Tucson

John,
Please see comment from Craig Gross who works at the City.
Tom D.

-----Original Message-----
From: Craig Gross [mailto:Craig.Gross@tucsonaz.gov]
Sent: Monday, May 09, 2011 11:54 AM
To: Thomas Drzazgowski
Subject: Re: Question about Zoning in City of Tucson

Tom, the property at 3434 E. 22nd is split zoned. The majority is zoned C-1 with the east 150' zoned R-1. I am not sure where the tower is or is proposed. In the C-1 zone antenna are allowed on existing structures in public ROW or on public property. Maximum height is about 40 feet. With a special exception the maximum height in C-1 is 50 feet or an unlimited height with M&C approval.

This ordinance is specifically written for cellular telecommunication, it does not address public service or public safety antenna. They are exempt.

Craig L. Gross
Deputy Director/Zoning Administrator
Planning & Development Services Department City of Tucson

Interested in receiving email news from the Development Services Department? Sign up for the new Tucson_DSD_News Listserv. Communications could include notices of public meetings and hearings, requests for comments, notices that new codes or standards are being proposed or implemented, classes, and general DSD news. Click on the link below:

http://www.tucsonaz.gov/dsd/What_s New/DSD News/dsd news.html

>>> "Thomas Drzazgowski" <Thomas.Drzazgowski@dsc.pima.gov> 05/09/2011
Craig,

My name is Tom Drzazgowski. Arlan Colton gave me your email address because I have a question about zoning heights for communication towers in the City of Tucson. We have a site that owned by Pima County at the address 3434 E. 22nd St. This site is proposed to have a 125 foot tower on it as part of the PCwin project, which is a county wide communication network for emergency personnel. While we believe that we can claim an exemption for the site, Pima County is meeting with neighbors to present the project to them. At one of the meetings a neighbor stated that the maximum height allowed is 80 feet. Could you tell me the maximum height allowed should no exemption be claimed. Thanks Tom Drzazgowski
740-6922

-----Original Message-----
From: John Moffatt
Sent: Monday, May 02, 2011 8:22 PM
To: Thomas Drzazgowski
Cc: Paul Wilson
Subject: PECOC

Just concluded public meeting. One attendee claimed city has a tower height limitation of 80 feet. Do you know of any limit would apply to our 125 foot tower at 3434 E 22nd St.?
FCC ASR Registration Search Results
Structure State = Arizona
City Like ‘Tucson’
Overall Height Above Ground (AGL) from 38.1 to 304.8 meters
<table>
<thead>
<tr>
<th>Registration</th>
<th>Owner and Contact</th>
<th>Structure Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Registration: 1000260</td>
<td>Owner: KVOA COMMUNICATIONS INC DBA = KVOA TV (520)792-2270</td>
<td>Structure Type: TOWER</td>
</tr>
<tr>
<td>File Number: A0000324</td>
<td></td>
<td>Elevation of Site (meters): 2603.0</td>
</tr>
<tr>
<td>Status: Constructed</td>
<td></td>
<td>Overall Height Above Ground (AGL) (meters): 68.0</td>
</tr>
<tr>
<td>FAA Study: 96-AWP-2926-0E</td>
<td></td>
<td>Overall Height Above Sea Level (meters): 2671.0</td>
</tr>
<tr>
<td></td>
<td>Located in: TUCSON, AZ</td>
<td>Lat/Long: 32-24-56.0N 110-42-51.0W</td>
</tr>
<tr>
<td></td>
<td>FAA Chapters 3, 4, 5, 13</td>
<td>Paint and Light in Accordance with FAA Circular Number 70/7460-13</td>
</tr>
<tr>
<td>2 Registration: 1001582</td>
<td>Owner: NEW CINGULAR WIRELESS PCS, LLC (469)229-7471</td>
<td>Structure Type: TOWER</td>
</tr>
<tr>
<td>File Number: A0676217</td>
<td></td>
<td>Elevation of Site (meters): 851.6</td>
</tr>
<tr>
<td>Status: Constructed</td>
<td></td>
<td>Overall Height Above Ground (AGL) (meters): 50.9</td>
</tr>
<tr>
<td>FAA Study: 2008-AWP-2809-0E</td>
<td></td>
<td>Overall Height Above Sea Level (meters): 902.5</td>
</tr>
<tr>
<td></td>
<td>Located in: TUCSON, AZ</td>
<td>Lat/Long: 32-06-34.1N 110-50-55.8W</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Painting and Lighting Specifications: None</td>
</tr>
<tr>
<td>3 Registration: 1001595</td>
<td>Owner: NEW CINGULAR WIRELESS PCS, LLC (469)229-7471</td>
<td>Structure Type: POLE</td>
</tr>
<tr>
<td>File Number: A0676219</td>
<td></td>
<td>Elevation of Site (meters): 771.5</td>
</tr>
<tr>
<td>Status: Constructed</td>
<td></td>
<td>Overall Height Above Ground (AGL) (meters): 46.3</td>
</tr>
<tr>
<td>FAA Study: 2004-AWP-4660-0E</td>
<td></td>
<td>Overall Height Above Sea Level (meters): 817.8</td>
</tr>
<tr>
<td></td>
<td>Located in: TUCSON, AZ</td>
<td>Lat/Long: 32-11-54.7N 110-54-20.8W</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Painting and Lighting Specifications: None</td>
</tr>
<tr>
<td>4 Registration: 1002135</td>
<td>Owner: Citadel Broadcasting Company (702)804-5200</td>
<td>Structure Type: TOWER</td>
</tr>
<tr>
<td>File Number: A0714750</td>
<td></td>
<td>Elevation of Site (meters): 708.7</td>
</tr>
<tr>
<td>Status: Constructed</td>
<td></td>
<td>Overall Height Above Ground (AGL) (meters): 75.0</td>
</tr>
<tr>
<td>FAA Study: 79-AWE-365-0E</td>
<td></td>
<td>Overall Height Above Sea Level (meters): 783.6</td>
</tr>
<tr>
<td></td>
<td>Located in: TUCSON, AZ</td>
<td>Lat/Long: 32-16-37.0N 110-58-52.0W</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Painting and Lighting Specifications: None</td>
</tr>
<tr>
<td>5 Registration: 1002391</td>
<td>Owner: TUCSON, CITY OF (520)791-4950</td>
<td>Structure Type: 3TA1</td>
</tr>
<tr>
<td>File Number: A0002660</td>
<td></td>
<td>Elevation of Site (meters): 789.0</td>
</tr>
<tr>
<td>Status: Constructed</td>
<td></td>
<td>Overall Height Above Ground (AGL) (meters): 103.6</td>
</tr>
<tr>
<td>FAA Study: 93-AWP-0450-0E</td>
<td></td>
<td>Overall Height Above Sea Level (meters): 929.6</td>
</tr>
<tr>
<td></td>
<td>Located in: TUCSON, AZ</td>
<td>Lat/Long: 32-17-28.0N 110-53-44.0W</td>
</tr>
<tr>
<td></td>
<td></td>
<td>FAA Chapters 3, 4, 5, 13</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Paint and Light in Accordance with FAA Circular Number 70/7460-1H</td>
</tr>
<tr>
<td>6 Registration: 1002392</td>
<td>Owner: TUCSON, CITY OF (520)791-4950</td>
<td>Structure Type: 3TA2</td>
</tr>
<tr>
<td>File Number: A0002661</td>
<td></td>
<td>Elevation of Site (meters): 792.0</td>
</tr>
<tr>
<td>Status: Constructed</td>
<td></td>
<td>Overall Height Above Ground (AGL) (meters): 103.6</td>
</tr>
<tr>
<td>FAA Study: 93-AWP-0450-0E</td>
<td></td>
<td>Overall Height Above Sea Level (meters): 935.6</td>
</tr>
<tr>
<td>Registration</td>
<td>Owner</td>
<td>File Number</td>
</tr>
<tr>
<td>--------------</td>
<td>-------</td>
<td>-------------</td>
</tr>
<tr>
<td>1003193</td>
<td>TUCSON, CITY OF</td>
<td>A0002662</td>
</tr>
<tr>
<td>1003261</td>
<td>Los Robles Communications, LLC</td>
<td>A0326470</td>
</tr>
<tr>
<td>1003690</td>
<td>Capstar Radio Operating Company</td>
<td>A0317548</td>
</tr>
<tr>
<td>1003691</td>
<td>Capstar Radio Operating Company</td>
<td>A0317551</td>
</tr>
<tr>
<td>1003692</td>
<td>Capstar Radio Operating Company</td>
<td>A0317030</td>
</tr>
<tr>
<td>1003693</td>
<td>GOOD MUSIC, INC.</td>
<td>A0635670</td>
</tr>
</tbody>
</table>

Legend:
- **Structure Type:**
  - 3TA3
  - TOWER
  - 3TA1
  - 3TA2
  - 3TA3
  - 2TA1
  - 2TA2

- **Location:** TUCSON, AZ
- **Lat/Long:** Various locations
- **FAA Chapters:** 3, 4, 5, 13

Paint and Light in Accordance with FAA Circular Number 70/7460-1H.
<table>
<thead>
<tr>
<th>File Number</th>
<th>Contact</th>
<th>Status</th>
<th>FAA Study</th>
<th>Location</th>
<th>Elevation of Site (meters)</th>
<th>Overall Height Above Ground (AGL) (meters)</th>
<th>Overall Height Above Sea Level (meters)</th>
<th>Lat/Long</th>
<th>Registration</th>
<th>Structure Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>A0635671</td>
<td>Swanson, Erik C</td>
<td>Constructed</td>
<td>2009-AWP-1825-OE</td>
<td>Tucson, AZ</td>
<td>755.9</td>
<td>79.9</td>
<td>835.8</td>
<td>32-12-01.DN 111-01-05.6W</td>
<td>1003694</td>
<td>TOWER</td>
</tr>
<tr>
<td>A0294608</td>
<td>Ross, David C</td>
<td>Constructed</td>
<td></td>
<td>Tucson, AZ</td>
<td>651.7</td>
<td>116.7</td>
<td>768.4</td>
<td>32-22-21.DN 111-05-54.0W</td>
<td>1003921</td>
<td>TOWER</td>
</tr>
<tr>
<td>A0744011</td>
<td>Bernstein, Mike</td>
<td>Constructed</td>
<td>96-AWP-3460-OE</td>
<td>Tucson, AZ</td>
<td>789.1</td>
<td>77.5</td>
<td>866.6</td>
<td>32-09-07.DN 110-55-33.0W</td>
<td>1004011</td>
<td>TOWER</td>
</tr>
<tr>
<td>A0540916</td>
<td>Fitz, William H</td>
<td>Constructed</td>
<td></td>
<td>Tucson, AZ</td>
<td>2606.0</td>
<td>61.5</td>
<td>2667.5</td>
<td>32-24-56.DN 110-42-52.0W</td>
<td>1007178</td>
<td>TOWER</td>
</tr>
<tr>
<td>A0198944</td>
<td>Haneval, James R</td>
<td>Constructed</td>
<td></td>
<td>Tucson, AZ</td>
<td>794.0</td>
<td>60.9</td>
<td>854.9</td>
<td>32-09-43.DN 110-54-22.0W</td>
<td>1007193</td>
<td>TOWER</td>
</tr>
<tr>
<td>A0092110</td>
<td></td>
<td>Constructed</td>
<td></td>
<td>Tucson, AZ</td>
<td>760.0</td>
<td>58.8</td>
<td>818.8</td>
<td>32-12-35.DN 110-55-04.0W</td>
<td>1007731</td>
<td>TOWER</td>
</tr>
<tr>
<td>A009810</td>
<td>Goodkind, Arthur B</td>
<td>Constructed</td>
<td></td>
<td>Tucson, AZ</td>
<td>750.0</td>
<td>58.8</td>
<td>818.8</td>
<td>32-12-35.DN 110-55-04.0W</td>
<td>1009810</td>
<td>TOWER</td>
</tr>
<tr>
<td>FAA Study: 71-WE-0193-OE</td>
<td>Elevation of Site (meters): 728.4</td>
<td>Overall Height Above Ground (AGL) (meters): 86.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Located in: TUCSON, AZ</td>
<td>Overall Height Above Sea Level (meters): 815.3</td>
<td>Lat/Long: 32-15-11.0N 110-57-46.0W</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Registration: 1011612</th>
<th>Owner: Verizon Wireless (VAW) LLC</th>
<th>Structure Type: TOWER</th>
</tr>
</thead>
<tbody>
<tr>
<td>File Number: A0566132</td>
<td>Contact: Janjua, Jerri L</td>
<td></td>
</tr>
<tr>
<td>Status: Constructed</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FAA Study: 85-AWP-484-OE</th>
<th>Elevation of Site (meters): 778.8</th>
<th>Overall Height Above Ground (AGL) (meters): 50.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Located in: TUCSON, AZ</td>
<td>Overall Height Above Sea Level (meters): 828.8</td>
<td>Lat/Long: 32-09-41.0N 110-55-52.0W</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Registration: 1011786</th>
<th>Owner: Verizon Wireless (VAW) LLC</th>
<th>Structure Type: TOWER</th>
</tr>
</thead>
<tbody>
<tr>
<td>File Number: A0610572</td>
<td>Contact: Janjua, Jerri L</td>
<td></td>
</tr>
<tr>
<td>Status: Constructed</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FAA Study: 02-AWP-0111-OE</th>
<th>Elevation of Site (meters): 725.4</th>
<th>Overall Height Above Ground (AGL) (meters): 68.3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Located in: TUCSON, AZ</td>
<td>Overall Height Above Sea Level (meters): 793.7</td>
<td>Lat/Long: 32-13-26.0N 110-58-10.0W</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Registration: 1059483</th>
<th>Owner: IT Support, Pima County</th>
<th>Structure Type: BANT</th>
</tr>
</thead>
<tbody>
<tr>
<td>File Number: A0590012</td>
<td>Contact:</td>
<td></td>
</tr>
<tr>
<td>Status: Constructed</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FAA Study: 2003-AWP-2616-OE</th>
<th>Elevation of Site (meters): 726.6</th>
<th>Overall Height Above Ground (AGL) (meters): 111.9</th>
</tr>
</thead>
<tbody>
<tr>
<td>FAA Chapters 4, 8, 12</td>
<td>Painting and Lighting Specifications: None</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Registration: 1055425</th>
<th>Owner: T-Mobile West Corporation</th>
<th>Structure Type: POLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>File Number: A0718604</td>
<td>Contact:</td>
<td></td>
</tr>
<tr>
<td>Status: Constructed</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FAA Study: 99-AWP-0787-OE</th>
<th>Elevation of Site (meters): 765.7</th>
<th>Overall Height Above Ground (AGL) (meters): 45.7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Located in: TUCSON, AZ</td>
<td>Overall Height Above Sea Level (meters): 831.4</td>
<td>Lat/Long: 32-10-40.0N 110-51-51.0W</td>
</tr>
<tr>
<td>FAA Chapters 4, 8, 12</td>
<td>Painting and Lighting Specifications: None</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Registration: 1203991</th>
<th>Owner: ZAPPIA, HENRY</th>
<th>Structure Type: BTWR</th>
</tr>
</thead>
<tbody>
<tr>
<td>File Number: A0099747</td>
<td>Contact: Zappia, Henry K</td>
<td></td>
</tr>
<tr>
<td>Status: Constructed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registration</td>
<td>Owner</td>
<td>Structure Type</td>
</tr>
<tr>
<td>--------------</td>
<td>------</td>
<td>---------------</td>
</tr>
<tr>
<td>27 1711488</td>
<td>Arizona Board of Regents for the University of Arizona</td>
<td>TOWER</td>
</tr>
<tr>
<td>28 1216735</td>
<td>Raytheon Missile Systems</td>
<td>TOWER</td>
</tr>
<tr>
<td>29 2318276</td>
<td>T-Mobile West Corporation</td>
<td>TOWER</td>
</tr>
<tr>
<td>30 1275450</td>
<td>American Towers, Inc</td>
<td>TOWER</td>
</tr>
<tr>
<td>31 1271602</td>
<td>NEW CINGULAR WIRELESS PCS, LLC</td>
<td>POLE</td>
</tr>
<tr>
<td>32 1271602</td>
<td>Clear Channel Broadcasting, Inc</td>
<td>TOWER</td>
</tr>
<tr>
<td>Registration</td>
<td>Owner</td>
<td>File Number</td>
</tr>
<tr>
<td>-------------</td>
<td>-------</td>
<td>-------------</td>
</tr>
<tr>
<td>33</td>
<td>Tucson City of</td>
<td>A0327985</td>
</tr>
<tr>
<td>34</td>
<td>Journal Broadcast Group, Inc.</td>
<td>A0640168</td>
</tr>
<tr>
<td>35</td>
<td>Journal Broadcast Group, Inc.</td>
<td>A0640185</td>
</tr>
<tr>
<td>36</td>
<td>Triton Partners Inc.</td>
<td>A0590148</td>
</tr>
<tr>
<td>37</td>
<td>Verizon Wireless (VAW) LLC</td>
<td>A0664247</td>
</tr>
<tr>
<td>38</td>
<td>SBA Towers III LLC</td>
<td>A0700225</td>
</tr>
</tbody>
</table>
July 8, 2011

Mr. Mark Mayer  
3361 E. 23rd Street  
Tucson, AZ 85713-2355

Dear Mr. Mayer:

This letter serves to follow up on the July 5th meeting that representatives of the Julia Keene Neighborhood Association had with District 2 Supervisor Valadez and staff of the Pima County Wireless Integrated Network (PCWIN) Project.

First, I would like to advise you that the award of contract for construction services at 3434 E. 22nd Street will not be placed on the July 12th Board of Supervisors agenda. The Pima County Procurement Department requires some additional time to clarify the bids. We expect the construction contract to be considered by the Board at the August 2nd meeting instead. This will provide a little bit of time for you to prepare any alternative design proposals for the facility that you would like the County to consider.

Per our meeting earlier this week, we agreed to provide you with information that would assist with your evaluation of the planned design for the Pima Emergency Communications & Operations Center (PECOC). To that end, we have compiled a number of documents for your consideration. The following are enclosed:

1) Portions of the PCWIN User Needs Assessment report relating to the dispatch/EOC components including the individual questionnaires and interview responses from OEM, PCSD, DHFD, TFD, TPD. This report was prepared AECOM. (339 pages)

2) Section 6.0 from the PCWIN Conceptual Architecture Planning Report. Section 6 describes programming details and concepts of how to deliver the needed dispatch facilities. I have redacted a couple of diagrams that are considered public safety sensitive. This report was prepared AECOM. (58 pages)

3) Section 5 of the PCWIN System Alternatives & Recommendations Report. This section relates to decisions about co-locating dispatch facilities, etc. This report was prepared AECOM. (35 pages)

4) Section 7 of the AECOM PCWIN System Alternatives & Recommendations Report. This section relates to decisions about the radio system backhaul communications network. Topics are relative to the tower issue. This report was prepared AECOM. (22 pages)
5) PCWIN Programming Report. This is the original programming effort done by Durrant. The document contains a lot of good background information, not specific design details. I have tabbed pages related to parking, site circulation, drainage, etc. (376 pages)

6) PCWIN RECOC Building Evaluation. This documents Durrant’s initial evaluation of the building’s suitability for a dispatch/EOC facility and their conclusions. Among other things, it describes a need to improve the buildings to meet building codes for essential facilities. (23 pages)

7) Guidance documents from various sources were relied upon. I have attached DoD UFC 4-141-04 Emergency Operations Center Planning and Design; U.S Department of Homeland Security Siting Criteria for Emergency Operations Centers; ASTM Standard Guide for Emergency Operations Center Development; and, State of Florida Guidance Publication Emergency Operations Center Project Development and Capabilities Assessment. (286 pages)

8) Building security and setback information. I have documented cites to the DMAFB Land Use Study and City of Tucson Land Use Code that were used in evaluating risks associated with the DMAFB ADC, and to NFPA 1221 and the DoD Unified Facilities Criteria 4-010-01 which were relied upon for making decisions about setbacks, blast protection, security and other related matters. (7 pages)

9) Conceptual Site Plans. Several conceptual site plan drawings are included. These illustrate some of the concepts that were considered. (7 pages)

10) Parking. Pages C1.1 and A0.52 from the document set and a copy of a memorandum are included for reference. (3 pages)

11) Pages A9.41-A9.43 which detail the furniture plan are included because they help to illustrate the number of staff offices, workstations, EOC positions, and training spaces that have to be supported with adequate parking. (3 pages)

12) LEED Silver certification approach. (9 pages)

Additionally, I have included the following pages from the design document set per your request: A0.01 Cover Sheet, C3.1 Grading & Drainage Plan, C3.2 Details and Typical Sections, C3.3 Grading & Drainage Plan Enlargements, C1.1 General Notes Sheet (References parking details), and A0.52 Overall Site Plan. I have not provided the landscaping plans. Each of the design documents that I have provided are from the 95% Construction Document set. We are having the permitted document set copied today so that we can provide you with the final landscaping documents. I know there were changes to those documents before they were completed. I didn’t want to provide you with inaccurate information. We will provide the landscaping pages as soon as possible.

As you might expect, the final plan evolved as specific details and requirements were documented and discussed. The final plan to house the Pima County Sheriff’s Department and Fire District Dispatch operations in one building was not originally conceived and documented as an option in the programming document. Operationally, it presented the best option when all other factors were identified and considered. The primary design requirements and characteristics that were identified in the planning process were however carried over into the final design.

To assist with your evaluation of design alternatives, I prepared a list of major programming parameters that a final design will have to incorporate. Please see the attached sheet.

We hope that this information is suitable to evaluate alternative design options. Please let us know if other specific information is required.
Sincerely,

[Signature]

Captain Paul Wilson
PCWIN Project Administrator

Attachments

cc: Honorable Ramon Valadez, District 2 Supervisor
    Dr. John Moffatt, Strategic Planning Office
    Mr. Reid Spaulding, Pima County Facilities Management Department Director
Pima Emergency Communications & Operations Center
Major Programming Parameters

1) Retain features that make the building “unnoticed” – south parking behind building, landscaping on the north side, and maximum building setbacks where possible on the north and west sides.
2) Retain as much of the landscaping as possible.
3) Minimize disruptions to church operations on the east side.
4) Essential operations (911/dispatch and EOC) to be housed outside the Davis Monthan Approach Departure Corridor (Accident Potential Zone).
5) Dispatch supervisory and management staff require adjacent access to dispatch operations.
6) Program requirements for large vehicle parking, delivery, trash pickup and fire department response must be retained.
7) Maintain egress to 22nd Street from N/S driveway exit.
8) Maintain east/west ingress and egress through the parking lot.
9) Maintain crash barriers and security gates at vehicle entrances and at the perimeter of the property.
10) Apply NFPA 1221 Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems.
11) Apply DoD Minimum Antiterrorism Standards for Buildings, Unified Facilities Criteria 4-010-01 to the facility and site design.
12) Any new walls or building structures on-site cannot obstruct existing drainage flow patterns as the patterns presently exist without the expressed review and approval of the City of Tucson.
13) Achieve LEED Silver certification.
14) Maintain a single central plant to support all buildings on the property.
15) Minimize single points of failure for building support systems and telecommunications.
16) Master program will allow for future expansion of the facility to support expanded operations.
17) Maintain separate public and secure parking areas
18) Segregate public, EOC and dispatch operations and provide controlled access.
19) Program to minimally meet 20-year needs.
20) EOC building height must be maintained to support A/V requirements.
21) Maintain separate public and employee entrances
22) Maintain access to employee support areas without violating other security zones within the building.
23) Maintain ease of access to employee support areas for all operations conducted within the facility.
24) Maintain a secure lobby/sallyport to prevent unauthorized access into staff support areas, staff offices, EOC and dispatch operations.
25) Make best use of raised floor surfaces to support dispatch operations and EOC/breakout rooms.
- OEM LOADING AREA
- NEW PARKING AREA ($$)
- UNUSED SPACE
- DUPLICATE SUPPORT
- OPER. ADMIN
- CRITICAL INFRASTRUCTURE
- 911 OPERATIONS CENTER
- CENTRAL PLANT
- NEW SEWER LINE AND DMAFB FLIGHT APPROACH / DEPARTURE ZONE BOUNDARY
- CURRENT OEM SETBACK LIMIT FROM SECURED PERIMETER (IF LESS, WILL REQUIRE HIGHER BLAST REQUIREMENTS $$)
- 7,000SF 2ND FLOOR
- EOC
- 911 OPERATIONS SECURITY STAFF PARKING
- EXISTING PAVED AREA REQUIRED TO BE RE-GRDED & PAVED DUE TO NEW BUILDING LOCATION AND PARKING CHANGES ($$)
- RE-CONFIGURE FOR TRUCK MANEUVERING THIS AREA WILL LOOSE 6-8 PARKING SPACES
- PROPOSED MAPP/COMMUNITY NEW OEM LOCATION / PARKING CHANGES
- PARKING VIOLATES DOD STDS.
- DUPLICATE SUPPORT (YELLOW)
- PARKING VIOLATES DOD STDS.
- CITATION WASH
- OVERFLOW PARKING 32
- DMAFB NOISE CONTROL ZONE BOUNDARY
- DMAFB FLIGHT APPROACH / DEPARTURE ZONE BOUNDARY
- oudoor COURTYARD EASEMENT FROM PALO VERDE ROAD ($$)
- RE-CONFIGURE FOR TRUCK MANEUVERING THIS AREA WILL LOOSE 6-8 PARKING SPACES
- PROPOSED MAPP/COMMUNITY NEW OEM LOCATION / PARKING CHANGES
- PARKING VIOLATES DOD STDS.
- DUPLICATE SUPPORT (YELLOW)
DATE: July 29, 2011

TO: Chuck Huckelberry, County Administrator

FROM: Reid Spaulding, R.A., Facilities Management Director

SUBJECT: PCWIN Alternative Layouts – Cost Analysis

Below please find Project Cost and Schedule Impact analysis of the various alternatives as proposed by the Neighborhood Association. Please note these estimates for both cost and schedule are exclusive of any potential impact to the radio communications component of the PCWIN Implementation:

**Alternative A**
Scope: Relocation of proposed EOC square footage to underground northeast quadrant with additional 4,000sf to accommodate OEM Administration:

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compusult (Professional cost estimator) overall construction cost impact to basic facility including structure, mechanical systems, required elevators (X2), stairwells (X2)</td>
<td>Add: $1,250,000</td>
</tr>
<tr>
<td>Relocation of existing sanitary sewer</td>
<td>Add: $ 60,000</td>
</tr>
<tr>
<td>Additional 4,000 sq. ft. of construction</td>
<td>Add: $1,200,000</td>
</tr>
<tr>
<td>Secure north courtyard</td>
<td>Add: $ 30,000</td>
</tr>
<tr>
<td>Retention and landscape modifications</td>
<td>Add: $ 50,000</td>
</tr>
<tr>
<td>A/E Redesign Fees</td>
<td>Add: $ 750,000</td>
</tr>
<tr>
<td>Re-permitting fees</td>
<td>Add: $ 50,000</td>
</tr>
<tr>
<td>Less rotunda demolition and 4,000 TI's</td>
<td>Less: $ 290,000</td>
</tr>
<tr>
<td>Construction cost escalation</td>
<td>Add: $ 387,000</td>
</tr>
<tr>
<td>Construction cost impact:</td>
<td>Add: $3,487,000</td>
</tr>
<tr>
<td>Motorola Radio Impact:</td>
<td>Add: $2,500,000</td>
</tr>
<tr>
<td>Total Project Impact:</td>
<td>Add: $5,987,000</td>
</tr>
</tbody>
</table>

Schedule Delay: (9) month for A/E + (3) months permitting/bidding = 1 year
**Alternative B**
Scope: Relocation of proposed EOC square footage to above ground stand alone with additional 7,000sf. to accommodate OEM Administration and Support Services:

- 7,000 s.f. of new construction  
  Add: $1,400,000
- One elevator and stairwell  
  Add: $250,000
- New sanitary sewer and easement – 300 l.f.  
  Add: $40,000
- Additional site grading  
  Add: $80,000
- Secure north courtyard  
  Add: $30,000
- Sewer connection fee  
  Add: $35,000
- Parking lot @ northeast  
  Add: $40,000
- A/E Redesign fees  
  Add: $1,200,000
- Re-permitting fees  
  Add: $50,000
- Less rotunda demolition and 4,000 s.f. TI’s  
  Less: $290,000
- Construction cost escalation  
  Add: $355,000
- Construction cost impact:  
  Add: $3,190,000
- Motorola Radio Impact:  
  Add: $2,500,000
- Total Project Impact:  
  Add: $5,690,000

Schedule Delay: (9) months A/E + (3) months permitting and bidding = 1 year
DATE: May 20, 2011

TO: Chuck Huckelberry, County Administrator

FROM: Reid Spaulding, RA, FM Director

SUBJECT: PCWIN – Tucson Historical Commission Meeting

On Wednesday, May 11, 2011 John Moffat and I made a presentation to the Tucson Historical Commission (THC) regarding the proposed improvements to the facility located at 3434 E. 22\textsuperscript{nd} Street, formerly the Valley National Bank Operations Center. While the existing vacant facility is not listed on any officially recognized historic preservation list including either the State of Arizona (SHPO) nor National Historic Register, it has been designated by the Modern Architecture Preservation Project (MAPP) as a Top 50 Modern Architecture designee. As such, both THC and MAPP have raised concerns as to the County’s planned improvements.

The improvements as designed and permitted, were based upon a number of criteria primarily facility security and operational efficiency. The very nature of a Regional Communications Center requires that the facility meet heightened National Fire Protection Association (NFPA) standards in addition to the enhanced International Building Code (IBC) requirements for a facility designated as an Essential Facility. Also, the original building originally constructed in the 1970’s requires multiple upgrades in order to fulfill the County’s requirement as a LEED Silver facility consistent with the BOS Sustainability Initiative.

It is the opinion of both Pima County Facilities Management and our consultant, Durrant Architects, that the proposed improvements are minimally invasive, consistent with the original design, and preserve those features symbolic of the architectural character represented by the original façade. It should also be noted that the planned removal of the round cafeteria structure fronting E. 22\textsuperscript{nd} Street represent less than 6% of the total building square footage.

All design and engineering has been completed with permit sets submitted in early May. The project is scheduled for competitive bid in mid-June, 2011 with the construction effort taking approximately one year for completion.

The attached spreadsheet summarizes several of the concerns and suggestions raised at the Tucson Historical Commission meeting along with a preliminary estimate of the consequences to both the project funding and implementation schedule.
<table>
<thead>
<tr>
<th>Proposed County Improvement</th>
<th>Basis for Design</th>
<th>Commission Alternative</th>
<th>Consequence of Alternative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add 6” tapered insulation to roof and matching parapet.</td>
<td>Positive drainage, energy savings, LEED Silver certification, water harvesting.</td>
<td>Waive LEED requirement.</td>
<td>Continued and increased roof leaks, significant increased operating cost due to energy loss, continued site drainage issues.</td>
</tr>
<tr>
<td>Replace existing windows with matching Low E glazing and store front frames.</td>
<td>Energy savings, LEED Silver certification.</td>
<td>Existing windows to remain; waive LEED requirement.</td>
<td>Significant increased operating cost due to energy loss.</td>
</tr>
<tr>
<td>Demolish existing “rotunda building” and replace with new 13,000 s.f. Emergency Operations Center (E.O.C.)</td>
<td>Maintains existing parking, out of DM flight path, usable footprint configuration, operational efficient location.</td>
<td>Maintain “rotunda building.” <strong>Option A:</strong> Construct E.O.C. in southeast portion of existing parking lot and replace lost parking with structured parking garage.</td>
<td>See Attachment A. Per national Parking Association (9/2010), structured parking averaging $20,000 per stall. Additional construction cost would be $3.0M plus $300,000 in A/E fees and soft cost. Redesign of proposed E.O.C. would result in $825,000 A/E fee increase. Plus, overall 9 month delay in bidding project, increased security and operational cost as well as dysfunctional operational flow of building occupants.</td>
</tr>
<tr>
<td>Demolish existing “rotunda building” and replace with new 13,000 s.f. Emergency Operations Center (E.O.C.)</td>
<td>Maintains existing parking, out of DM flight path, usable footprint configuration, operational efficient location.</td>
<td>Maintain “rotunda building.” <strong>Option B:</strong> Bury new E.O.C. below grade on southern portion of site.</td>
<td>Per local professional estimating firm, additional cost to construct new E.O.C. below grade adds approximately $1.0M to construction cost. In addition, re-design is estimated at $1.0M A/E fee increase with the delay in bidding project estimated at 12 months. Relocation would also result in increased security and operational cost as well as dysfunctional operational flow of building occupants.</td>
</tr>
<tr>
<td>Demolish existing “rotunda building” and replace with new 13,000 s.f. Emergency Operations Center (E.O.C.)</td>
<td>Maintains existing parking, out of DM flight path, usable footprint configuration, operational efficient location.</td>
<td>Maintain “rotunda building.” <strong>Option C:</strong> Place new E.O.C. inside existing interior courtyard.</td>
<td>Existing interior courtyard is 4,500 s.f., new E.O.C. program requires 13,000 s.f. This alternative is physically impossible.</td>
</tr>
<tr>
<td>The proposed improvements are in compliance with and reflective of NFPA 1221 which address security enhancements and setbacks from vehicular bomb threats as well as the isolation and placement of critical building components, i.e., air handling systems and electrical systems.</td>
<td>NFPA 1221 standards.</td>
<td>Security concern is overstated with demise of Osama bin Laden.</td>
<td>Jeopardize Public Safety and facility’s threat resistance. Inability to qualify for future federal or state funding grants. Non-compliance to NFPA 1221 standards would substantially impact insurance costs, loss of certification and have detrimental operational implication to County Fire dispatch.</td>
</tr>
</tbody>
</table>