



U.S. Department of Housing and Urban  
Development  
451 Seventh Street, SW  
Washington, DC 20410  
[www.hud.gov](http://www.hud.gov)  
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## **Environmental Assessment Determinations and Compliance Findings for HUD-assisted Projects 24 CFR Part 58**

### **Project Information**

**Project Name:**

**Stone Point Apartments**

**Responsible Entity:**

**City of Tucson Housing and Community Development Department**

**Preparer:**

**Glenn Fournie, Project Coordinator**

**Certifying Officer Name and Title:**

**Sally Stang, Director Housing and Community Development Department**

**Direct Comments to:**

**Glenn Fournie, 520-837-5408 [glenn.fournie@tucsonaz.gov](mailto:glenn.fournie@tucsonaz.gov)**

**Date:**

**May 2016**

**Project Location:**

3552 N. Stone Avenue, Tucson Pima County AZ 85705. Pima County Assessor Parcel # 106-03-0030.

**Statement of Purpose and Need for the Proposal:** [40 CFR 1508.9(b)]

The project is consistent with the City of Tucson Consolidated Plan policies to develop supportive housing including: 1) New construction and/or rehabilitation of rental units for target populations; 2) Complexes serving special target populations where, in this case, 100% of the units are designated for low-income households; 3) The preservation of existing lower income housing and/or increasing the supply of lower income housing; and 4) Self-sufficiency in lower income households. This project also supports the strategy for helping people make the transition to permanent housing and independent living; increasing the capacity of non-profit organizations; and facilities and services for homeless, veteran and special needs persons.

The target population of the project will be low income persons experiencing homelessness and/or domestic violence in our community.

**Description of the Proposal:** Include all contemplated actions which logically are either geographically or functionally a composite part of the project, regardless of the source of funding. [24 CFR 58.32, 40 CFR 1508.25]

This project consists of complete interior and exterior rehabilitation of 26 units of City of Tucson owned affordable housing units. The property has been vacant for 6 months and will continue in the same use with no increase in the number of units or building footprint. The work will be handled in 2 phases.

Phase I consists of removal of rooftop HVAC units, complete roof replacement, mold and asbestos abatement, demolition of all plumbing fixtures and removal of exterior security gates.

Phase II includes new HVAC systems, replacement of all windows and exterior doors with energy efficient models, repair and painting of exterior, rehabilitation of common areas, laundry facilities and repaving of parking lot, landscaping and associated work. The interior work in each units will include complete replacement of all flooring materials, installation of low water use plumbing fixtures, energy efficient appliances and fixtures, recirculating range hoods, new finishes and associated work.

City of Tucson Public Housing Authority will lease the completed units to a local non-profit, Southern Arizona Aids Foundation to provide low income housing and case management services to persons living with HIV/Aids. The units are affordable housing under the FDIC Affordable Housing Disposition Program (AHDP).

The 16 one-bedroom and 10 studio units are in two 2-story buildings totaling approximately 12,633 sq. ft. Two units will be handicap accessible. There will be no change in the building footprint or number of units from the current configuration. Specific green building elements to be utilized will include hard surface flooring, smoke-free units and common areas, Energy Star windows and doors, low water use toilets, thermal permance windows, highly-reflective roofs, Energy Star high efficiency and low water usage appliances.

**Existing Conditions and Trends:** Describe the existing conditions of the project area and its surroundings, and trends likely to continue in the absence of the project. [24 CFR 58.40(a)]

The current buildings have been vacant for 6 months and are suffering from years of deferred maintenance. Asbestos and mold abatement are required due to a deteriorating roof. The property is permanently fenced and secured.

**Funding Information**

Grant Number	HUD Program	Funding Amount
B-14-MC-040-505	CDBG	\$250,000.00
M-14-DC-040-229	HOME	\$1,000,000.00

**Estimated Total HUD Funded Amount: \$1,250,000.00**

**Estimated Total Project Cost (HUD and non-HUD funds \$1,250,000.00)**

**Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities**

Record below the compliance or conformance determinations for each statute, executive order, or regulation. Provide credible, traceable, and supportive source documentation for each authority. Where applicable, complete the necessary reviews or consultations and obtain or note applicable permits of approvals. Clearly note citations, dates/names/titles of contacts, and page references. Attach additional documentation as appropriate.

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
<b>STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 and 58.6</b>		
<b>Airport Hazards</b> 24 CFR Part 51 Subpart D	Yes No <input type="checkbox"/> X	The project is not within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ) Approach Protection Zone. Map on file. <a href="http://maps.tucsonaz.gov/hcd/index_old.html">http://maps.tucsonaz.gov/hcd/index_old.html</a>
<b>Coastal Barrier Resources</b> Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes No <input type="checkbox"/> X	There are no coastal barrier resources in HUD Region IX. Map on file. <a href="http://www.fws.gov/cbra/Maps/Mapper.html">http://www.fws.gov/cbra/Maps/Mapper.html</a>
<b>Flood Insurance</b> Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes No <input type="checkbox"/> X	The site is not in a designated flood zone, flood insurance not required. FEMA Zone X 4019C-1688 L 6/11. Map on file. <a href="http://maps.tucsonaz.gov/hcd/index_old.html">http://maps.tucsonaz.gov/hcd/index_old.html</a>
<b>STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 &amp; 58.5</b>		
<b>Clean Air</b> Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes No <input type="checkbox"/> X	Other than a brief period of construction, the project will have no negative impact on air quality issues or community pollution levels. No EPA/ADEQ Air restrictions for the site. Control of dust during construction is required under the Pima County Fugitive dust map. Permits for activity will not be issued until compliance is certified. This project and the City Tucson is in compliance with SIP maintenance plan. <a href="http://www.epa.gov/region9/air/actions/az.html">http://www.epa.gov/region9/air/actions/az.html</a>
<b>Coastal Zone Management</b> Coastal Zone Management Act, sections 307(c) & (d)	Yes No <input type="checkbox"/> X	Arizona has no coastal zones. Map on file.
<b>Contamination and Toxic Substances</b> 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes No <input type="checkbox"/> X	The project site and adjacent properties are free of hazardous materials, contamination, toxic chemicals, gasses and radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the subject property. Phase I environmental site assessment dated 7/17/15 by SCS Engineers and site visit by HCD staff 12/14/15. Maps on file. <a href="http://maps.tucsonaz.gov/hcd/index_old.html">http://maps.tucsonaz.gov/hcd/index_old.html</a>

		<a href="http://nepassisttool.epa.gov/">http://nepassisttool.epa.gov/</a>
<b>Endangered Species</b>  Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes    No <input type="checkbox"/> <input checked="" type="checkbox"/>	The project will have no effect on any federally protected (listed or proposed) Threatened or Endangered Species, nor adversely modify designated critical habitats. Site is a completely paved property in a fully developed urban neighborhood. Phase I environmental site assessment dated 7/17/15 by SCS Engineers and site visit by HCD staff 12/14/15. Maps, photos and memo in file. <a href="http://nepassisttool.epa.gov/">http://nepassisttool.epa.gov/</a>
<b>Explosive and Flammable Hazards</b>  24 CFR Part 51 Subpart C	Yes    No <input type="checkbox"/> <input checked="" type="checkbox"/>	The project will expose neither people nor buildings to any above-ground explosive or flammable fuels or chemicals. Map and aerial map on file. Phase I environmental site assessment dated 7/17/15 by SCS Engineers and site visit by HCD staff 12/14/15. Maps on file. <a href="http://maps.tucsonaz.gov/hcd/index_old.html">http://maps.tucsonaz.gov/hcd/index_old.html</a>  <a href="http://nepassisttool.epa.gov/">http://nepassisttool.epa.gov/</a>
<b>Farmlands Protection</b>  Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes    No <input type="checkbox"/> <input checked="" type="checkbox"/>	The City of Tucson has no protected farmland including prime or unique farmland, or other farmland of statewide or local importance. Site is in a fully developed urban environment per USGS Topo Map. Map on File.
<b>Floodplain Management</b>  Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes    No <input type="checkbox"/> <input checked="" type="checkbox"/>	The project does not involve property acquisition, management, construction or improvements within a floodplain identified by FEMA maps. Map on file.  FEMA Zone X 4019C-1688 L 6/11. <a href="http://maps.tucsonaz.gov/hcd/index_old.html">http://maps.tucsonaz.gov/hcd/index_old.html</a>
<b>Historic Preservation</b>  National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes    No <input type="checkbox"/> <input checked="" type="checkbox"/>	There are no historic properties affected per 36 CFR 800.4. Reviewed and approved per programmatic agreement by City of Tucson HPO office. City of Tucson HPO work review on file.
<b>Noise Abatement and Control</b>  Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes    No <input type="checkbox"/> <input checked="" type="checkbox"/>	The project is not within line-of-sight of a major or arterial roadway or railroad or within the LDN zones of the TIA or DM Airport Noise Contour maps. Other than a brief period of construction there should be no increase in noise levels. Maps on file. <a href="http://maps.tucsonaz.gov/hcd/index_old.html">http://maps.tucsonaz.gov/hcd/index_old.html</a>
<b>Sole Source Aquifers</b>  Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes    No <input type="checkbox"/> <input checked="" type="checkbox"/>	The project need not be referred to EPA for evaluation according to the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of Understanding of 1990. The project is located in the Upper Santa Cruz & Avra Basin aquifer. The location is currently served by a municipal water and sewer system and will have no impact on the aquifer. Memorandum and map on file. <a href="http://www.epa.gov/region9/water/groundwater/ssa.html">http://www.epa.gov/region9/water/groundwater/ssa.html</a>
<b>Wetlands Protection</b>  Executive Order 11990, particularly sections 2 and 5	Yes    No <input type="checkbox"/> <input checked="" type="checkbox"/>	The project does not involve new construction within or adjacent to wet lands, marshes, wet meadows, mud flats or natural ponds. Maps on file. <a href="http://nepassisttool.epa.gov/">http://nepassisttool.epa.gov/</a>
<b>Wild and Scenic Rivers</b> Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes    No <input type="checkbox"/> <input checked="" type="checkbox"/>	The project is not located within one mile of a listed Wild and Scenic River. Tucson and Southern Arizona have no wild and scenic rivers. Map on file. <a href="http://www.americanrivers.org/initiatives/wild-and-">http://www.americanrivers.org/initiatives/wild-and-</a>

<b>ENVIRONMENTAL JUSTICE</b>		
<b>Environmental Justice</b>  Executive Order 12898	Yes    No <input type="checkbox"/> <input checked="" type="checkbox"/>	The proposed site is suitable for its proposed use and will NOT be adversely impacted by adverse environmental conditions. The project is a continuation of the current use.  <a href="https://geomap.ffiec.gov/FFIECGeocMap/GeocodeMap1.aspx">https://geomap.ffiec.gov/FFIECGeocMap/GeocodeMap1.aspx</a>

**Environmental Assessment Factors** [24 CFR 58.40; Ref. 40 CFR 1508.8 &1508.27] Recorded below is the qualitative and quantitative significance of the effects of the proposal on the character, features and resources of the project area. Each factor has been evaluated and documented, as appropriate and in proportion to its relevance to the proposed action. Verifiable source documentation has been provided and described in support of each determination, as appropriate. Credible, traceable and supportive source documentation for each authority has been provided. Where applicable, the necessary reviews or consultations have been completed and applicable permits of approvals have been obtained or noted. Citations, dates/names/titles of contacts, and page references are clear. Additional documentation is attached, as appropriate. **All conditions, attenuation or mitigation measures have been clearly identified.**

**Impact Codes:** Use an impact code from the following list to make the determination of impact for each factor.

- (1) Minor beneficial impact
- (2) No impact anticipated
- (3) Minor Adverse Impact – May require mitigation
- (4) Significant or potentially significant impact requiring avoidance or modification which may require an Environmental Impact Statement

Environmental Assessment Factor	Impact Code	Impact Evaluation
<b>LAND DEVELOPMENT</b>		
Conformance with Plans / Compatible Land Use and Zoning / Scale and Urban Design	2	Zoned C-2. The current buildings and use are in conformance with zoning, neighborhood and land use plans. There will be no change in use, building size or footprint or the number of units. <a href="https://www.tucsonaz.gov/pdsd">https://www.tucsonaz.gov/pdsd</a>
Soil Suitability/ Slope/ Erosion/ Drainage/ Storm Water Runoff	2	No evidence of erosion, drainage/storm water runoff on site visit by HCD staff 12/14/15. The property is fully paved and developed. <a href="https://www.tucsonaz.gov/pdsd">https://www.tucsonaz.gov/pdsd</a>
Hazards and Nuisances including Site Safety and Noise	2	No evidence of onsite hazards or nuisances, Phase I environmental site assessment dated 7/17/15 by SCS Engineers and site visit by HCD staff 12/14/15. Reports on file.
Energy Consumption	1	No increase in energy consumption. No increase in the number of units. Tucson Electric Power currently supplies electricity and will continue service. All utilities are currently on site. Energy efficient and low water use appliances and HVAC should provide a minor decrease in energy use. HOME application on file. <a href="http://WWW.TEP.com">WWW.TEP.com</a>

Environmental Assessment Factor	Impact Code	Impact Evaluation
<b>SOCIOECONOMIC</b>		
Employment and Income Patterns	2	The target population for the project will be low income HIV positive persons experiencing homelessness and/or domestic violence in our community. The project is currently and will continue as low income affordable housing. The site is within a 10 minute commute on public transit of the downtown core and its expanding job opportunities, including many new entry level or service jobs in the hotel, restaurant and retail businesses. It is estimated that the contractors will utilize approximately 10 subcontractors during the demolition and construction phases of the project. The project will follow Section 3 in all of employment and construction/subcontracting activities. HOME application and maps on file.

		<a href="https://geomap.ffiec.gov/FFIECGeocMap/GeocodeMap1.aspx">https://geomap.ffiec.gov/FFIECGeocMap/GeocodeMap1.aspx</a>
Demographic Character Changes, Displacement	2	<p>Project area is a low income, minority population (70% minority), mixed use area with approximately 85% of the housing units currently being used as rentals. The target population for the project will be low income HIV positive persons experiencing homelessness and/or domestic violence in our community. This is a continuation of the current use of the facility as low income housing PHA units.</p> <p>This is a rehabilitation of an existing PHA multi-family property that is currently vacant, so no change of use or displacements will occur. HOME application on file and maps on file.  <a href="https://geomap.ffiec.gov/FFIECGeocMap/GeocodeMap1.aspx">https://geomap.ffiec.gov/FFIECGeocMap/GeocodeMap1.aspx</a></p>

Environmental Assessment Factor	Impact Code	Impact Evaluation
<b>COMMUNITY FACILITIES AND SERVICES</b>		
Educational and Cultural Facilities	2	The target population for the project are HIV positive persons experiencing homelessness and/or domestic violence in our community. The projected client of mostly adults in the studio and one bedroom units will have little to no impact on the K-12 education systems. The project site is within 3 miles and an easy commute on public transportation of a number of colleges and adult education resources including public libraries, Pima Community College, University of Arizona and other education and self-enrichment opportunities. Maps on file.
Commercial Facilities	2	Site is within 1 mile on public transportation of major grocery stores, pharmacies, retail and service businesses, discount stores, medical providers and thrift stores. The project is directly on the Suntran #19 bus route connecting to transit hubs and the Sunlink streetcar line. Maps on file.
Health Care and Social Services	2	The project site is within 7 miles of 4 major medical centers, including the Southern Arizona VA Health Care campus and the El Rio Health Center. Numerous emergency facilities, clinics, and physician services are within an easy commute on public transit. Private and local non-profit service providers and programs are within an easy commute on public transit. Support services and referrals are also provided by SAAF on site. The approximately 26 residents will not have an adverse impact on the available services, since most of the prospective clients are already in the community and receiving services. Maps on file.
Solid Waste Disposal / Recycling	2	The City of Tucson Environmental Services Department currently provides onsite waste disposal and recycling services. The City of Tucson provides extensive recycling options, including construction debris handling and recycling, landfills, green waste recycling and household hazardous waste disposal services. <a href="https://www.tucsonaz.gov/environmental-services">https://www.tucsonaz.gov/environmental-services</a>
Waste Water / Sanitary Sewers	2	Pima County Wastewater currently provides wastewater and sewer service to project under contract agreement with City of Tucson PHA and will continue services.
Water Supply	2	City of Tucson water currently supplies water to project site under contract agreement City of Tucson PHA and will continue services.
Public Safety - Police, Fire and Emergency Medical	2	<p>The project is a rehabilitation of an existing PHA low income multifamily housing complex and will have no change in the number of units, occupancy or building footprint. The site is less than 2 miles from the Rillito Police Station. Response time varies depending on the type of call, but the average time for emergency response is 5 minutes or less.  <a href="http://WWW.tucsonaz.gov/police">WWW.tucsonaz.gov/police</a> .</p> <p>The project is within 1/2 mile of Tucson Fire Station 8. Average response time for TFD is 4 minutes or less. <a href="http://www.tucsonaz.gov/fire">www.tucsonaz.gov/fire</a> .</p>

		The project site is within 7 miles of major medical centers with emergency medical care including Carondelet St. Mary's hospital, Banner UMC Medical Center, Southern Arizona VA Health Care Center and numerous urgent care facilities. Maps on file.
Parks, Open Space and Recreation	2	The project is within 1 1/2 mile of 2 regional recreation centers including the Jacobs/City YMCA, sports fields, swimming pools, fitness programs, recreation classes, senior lunches and other senior programs, basketball courts, tennis courts, splash pads and open space. There are a number of small parks and open space areas within a reasonable walk of the project site. Maps on file.
Transportation and Accessibility	2	The site is directly on Suntran #19 route with connection to major transit hubs, Greyhound Bus Line and the Sunlink streetcar line. The site is fully accessible by car and has adequate street access and off street parking. SAAF will provide some transportation services and the residents have access to the City of Tucson Sun Shuttle and other medical transportation providers. Maps and photos on file. <a href="http://www.suntran.com/PDF/routes/FEB_16_rt_19.pdf">http://www.suntran.com/PDF/routes/FEB_16_rt_19.pdf</a>

Environmental Assessment Factor	Impact Code	Impact Evaluation
<b>NATURAL FEATURES</b>		
Unique Natural Features, Water Resources	2	The site has no unique natural features or water resources. The site is a fully paved and developed lot with existing buildings. Site visit by HCD staff 12/14/15. Photos and maps on file. <a href="http://maps.tucsonaz.gov/hcd/index_old.html">http://maps.tucsonaz.gov/hcd/index_old.html</a>
Vegetation, Wildlife	2	The site is a fully paved and developed lot with existing buildings. Site visit by HCD staff 12/14/15. Photos and maps on file. <a href="http://maps.tucsonaz.gov/hcd/index_old.html">http://maps.tucsonaz.gov/hcd/index_old.html</a>
Other Factors		

**Additional Studies Performed:**

Phase I Environmental Site Review by SCS Engineers 7/17/15  
Phase I Environmental Site Review by EEC 1/3/94  
Physical & Structural Assessment by Property Profile Inc. 10/14/94  
Real Estate evaluation on property value 3/16/16 by CBRE

**Field Inspection** (Date and completed by):

12/14/15 by Glenn Fournie, HCD staff.

**List of Sources, Agencies and Persons Consulted** [40 CFR 1508.9(b)]:

City of Tucson Housing and Community Development Department  
City of Tucson Planning and Development Services  
City of Tucson Department of Transportation  
City of Tucson Suntran  
City of Tucson Office of Integrated Planning  
Tucson Fire Department  
Tucson Police Department  
City of Tucson Department of Environmental Quality  
Tucson Water  
Pima County Wastewater Management  
City of Tucson Historic Preservation Officer Dr. Jonathan Mabry  
Southern Arizona Aids Foundation  
City of Tucson Public Housing Authority  
PHA HOME application  
Poster, Frost, Mirto Architects

**Cumulative Impact Analysis [24 CFR 58.32]:**

The project is a continuation of use and will not have a net effect on the area.

**Alternatives [24 CFR 58.40(e); 40 CFR 1508.9]**

Anything less than a major rehabilitation would result in permanent loss of 26 units of affordable housing. A smaller rehabilitation project on the property would not make the units habitable. The building could not be sold by the PHA without the demolition and remediation of the asbestos and mold.

**No Action Alternative [24 CFR 58.40(e)]:**

26 units of desperately needed low income housing would not be replaced, resulting in a decrease in available housing. Goals of the City of Tucson Consolidated Plan would not be fulfilled. The building will continue to deteriorate as a result of deferred maintenance, resulting in probable demolition by neglect.

**Summary of Findings and Conclusions:**

The proposed rehabilitation will not adversely affect environment or the neighborhood. There will be no change in use, number of housing units or building footprint. The activity is compatible with the existing uses in the area and is a continuation of current use as low income affordable housing units. There will be little to no impact on existing resources or services in the area. The project is a positive step in meeting City of Tucson goals for ending homelessness. The project will provide safe, energy efficient, permanent housing for low income persons with HIV/Aids.

**Mitigation Measures and Conditions [40 CFR 1505.2(c)]**

Summarize below all mitigation measures adopted by the Responsible Entity to reduce, avoid, or eliminate adverse environmental impacts and to avoid non-compliance or non-conformance with the above-listed authorities and factors. These measures/conditions must be incorporated into project contracts, development agreements, and other relevant documents. The staff responsible for implementing and monitoring mitigation measures should be clearly identified in the mitigation plan.

**No mitigation measures required.**

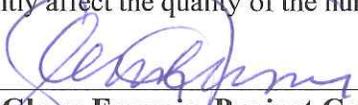
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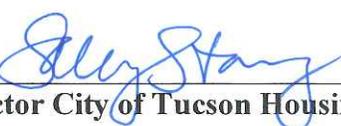
**Finding of No Significant Impact [24 CFR 58.40(g)(1); 40 CFR 1508.27]**

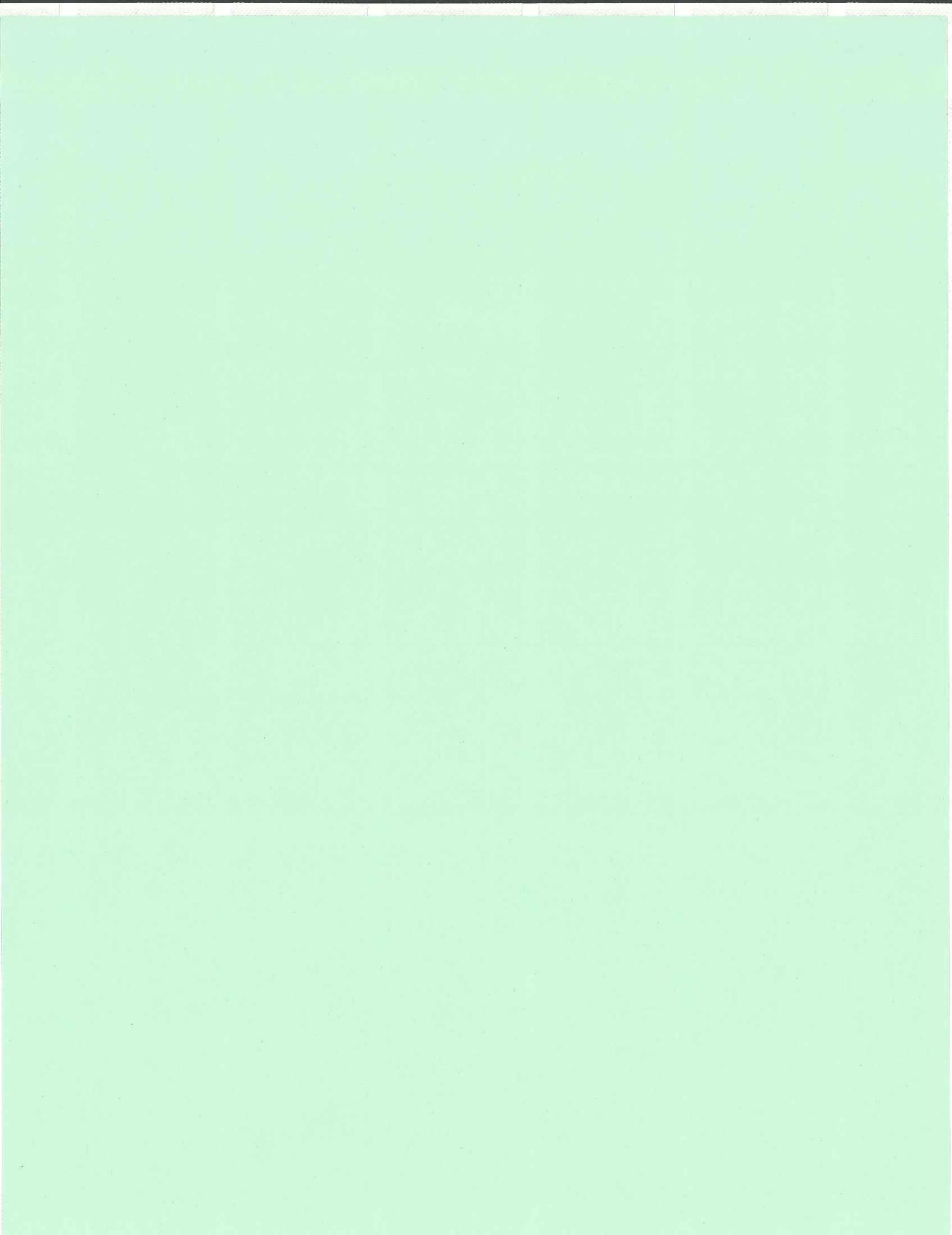
The project will not result in a significant impact on the quality of the human environment.

**Finding of Significant Impact [24 CFR 58.40(g)(2); 40 CFR 1508.27]**

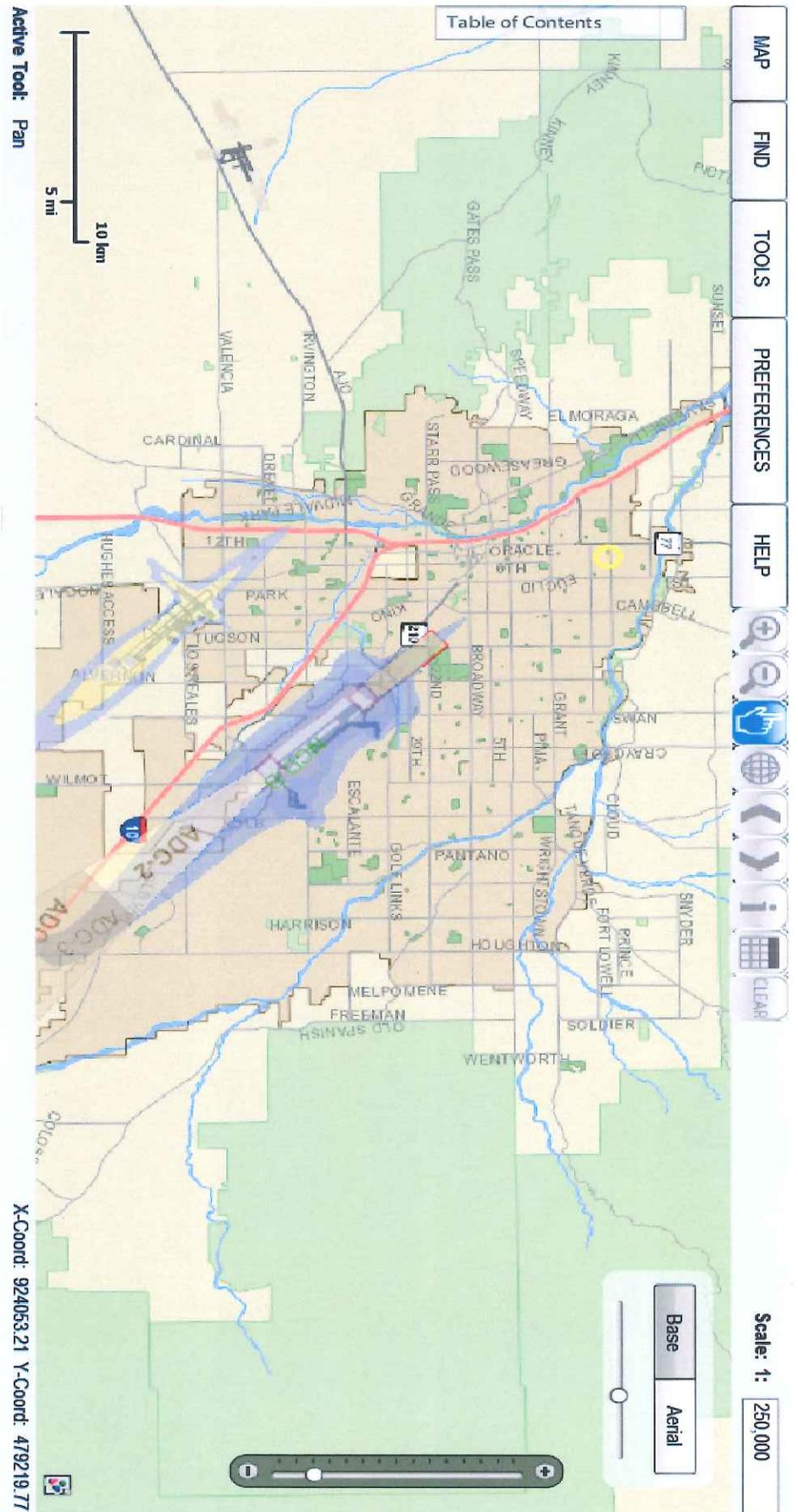
The project may significantly affect the quality of the human environment.

Preparer Signature:  Date: 4/25/16  
Name/Title/Organization: **Glenn Fournie, Project Coordinator City of Tucson Housing and Community Development Department**

Certifying Officer Signature:  Date: 4/25/16  
Name/Title: **Sally Stang, Director City of Tucson Housing and Community Development Department**



# AIRPORT HAZARDS



# FLOOD INSURANCE

MAP FIND TOOLS PREFERENCES HELP

Scale: 1: 6,000

Base Aerial



X-Coord: 990360.50 Y-Coord: 464496.38

Active Tool: Pan

# CONTAMINATION AND TOXIC SUBSTANCES

MAP FIND TOOLS PREFERENCES HELP

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  - Assessor's Effective Ci
  - Cert of Occupancy /20
  - EPA - Point Source
  - Underground Storage T
  - Development Plans
  - Downtown
  - FEMA Floodplain: CUR
- Base Maps and Aerial Imagery

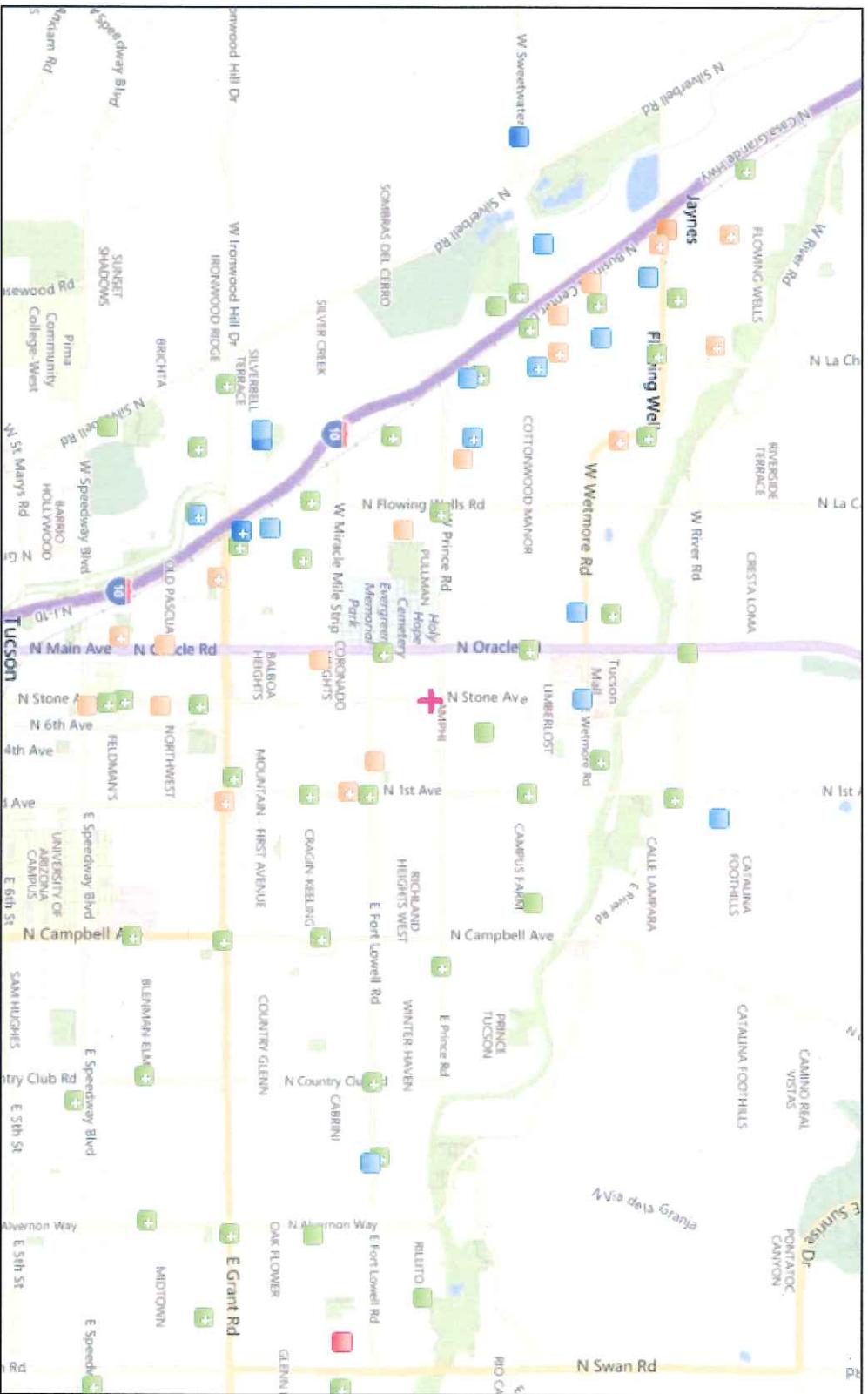
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Base Aerial

Active Tool: Pan

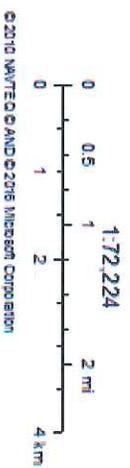
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# Stone Point EPA Facilities



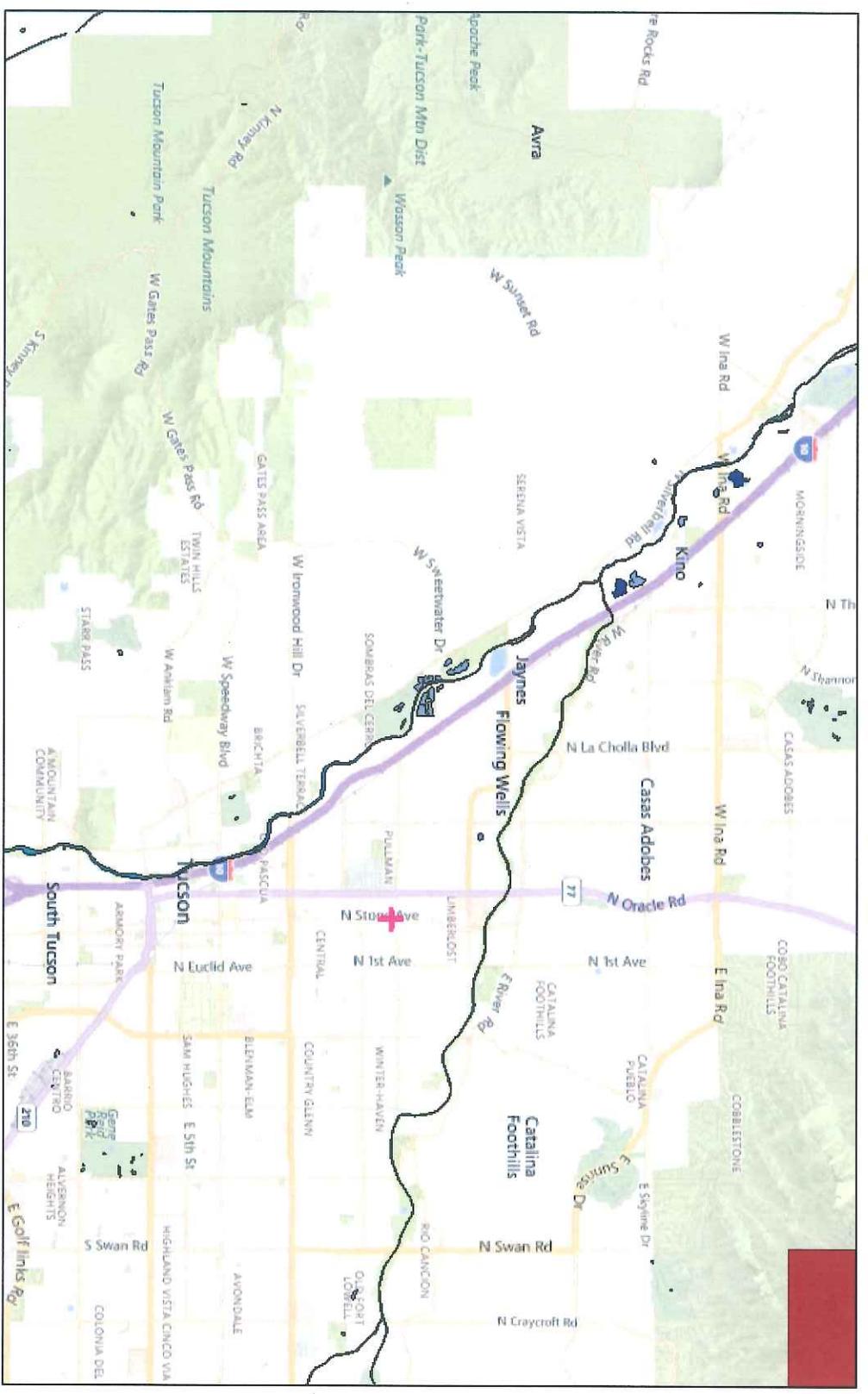
April 26, 2016

- TSCA (single)
- ACRES (clustered)
- ACRES (single)
- CERCLIS (single)
- TRI (clustered)
- TRI (single)
- PCS (single)
- ARS (clustered)
- ARS (single)
- RCRAINFO (clustered)
- + Search Result (point)



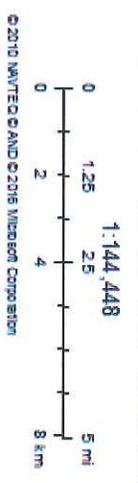
© 2010 NAVTEQ © AND © 2016 Microsoft Corporation

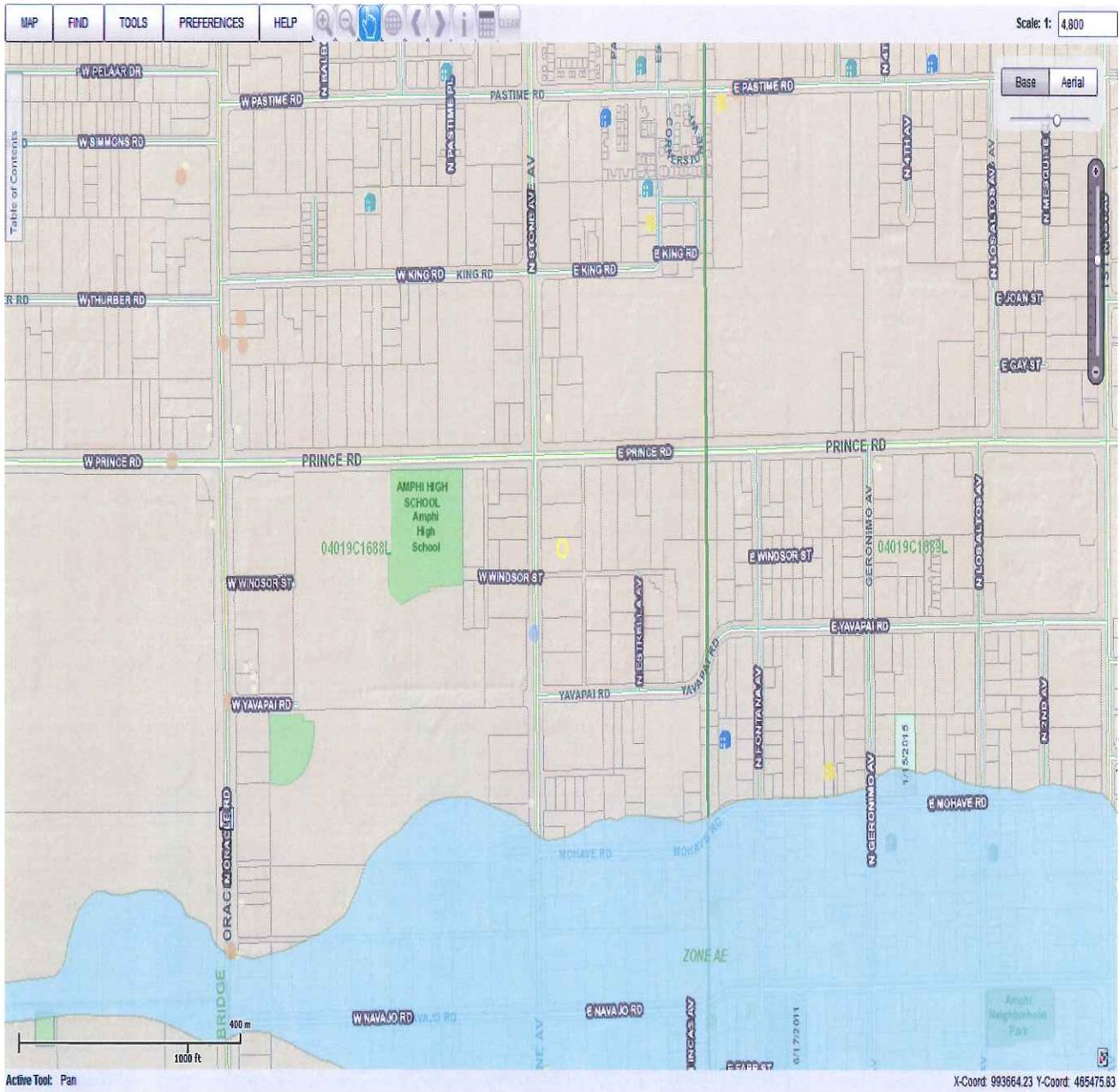
# Stone Point Endangered Species, Critical Habitat



- April 26, 2016
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  - Critical Habitat - Final - Linear Features
  - Critical Habitat - Proposed - Linear Features

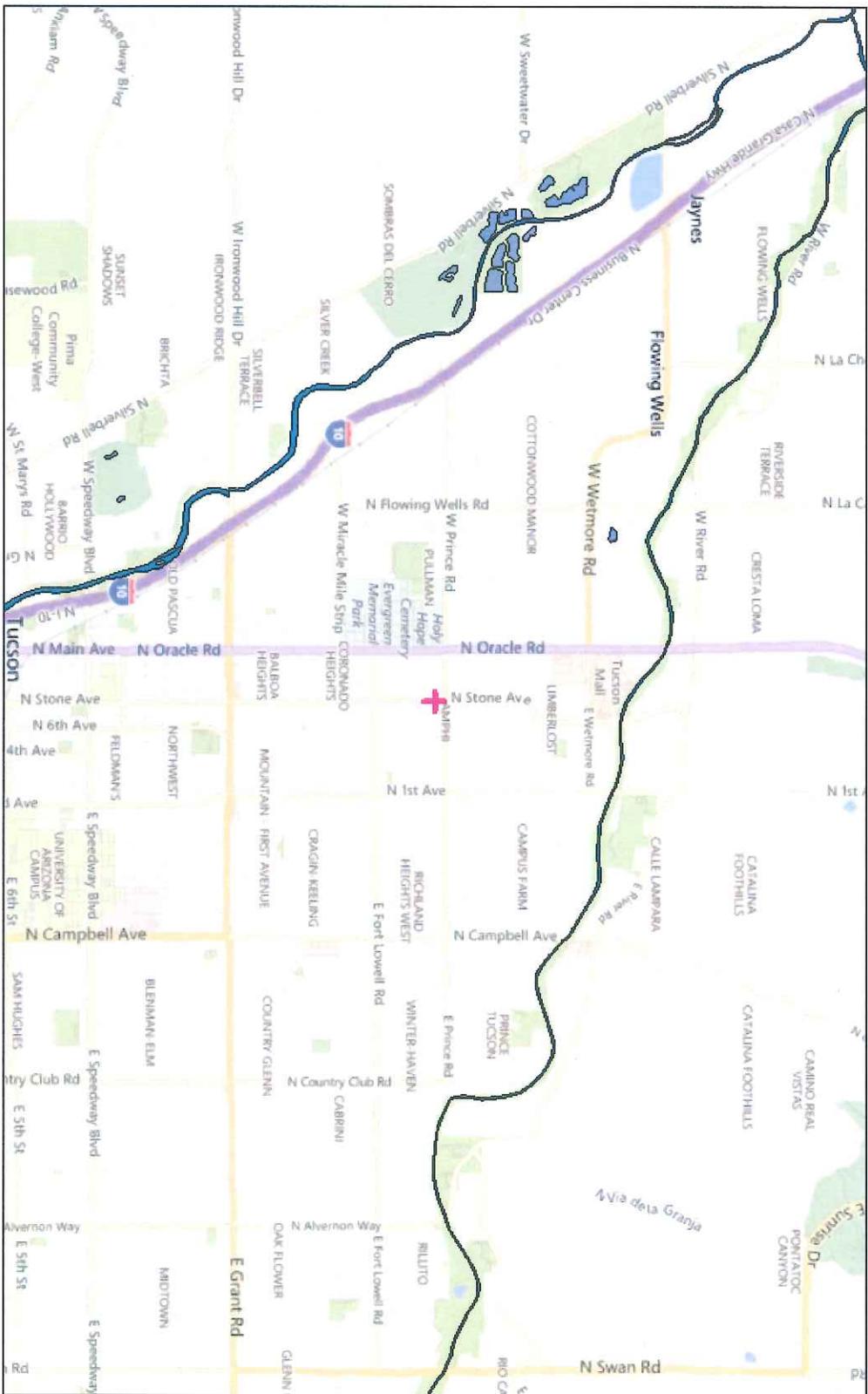
- Critical Habitat - Final - Polygonal Features
- Critical Habitat - Proposed - Polygonal Features





FLOOD PLAIN MANAGEMENT

# Stone Point Wetlands



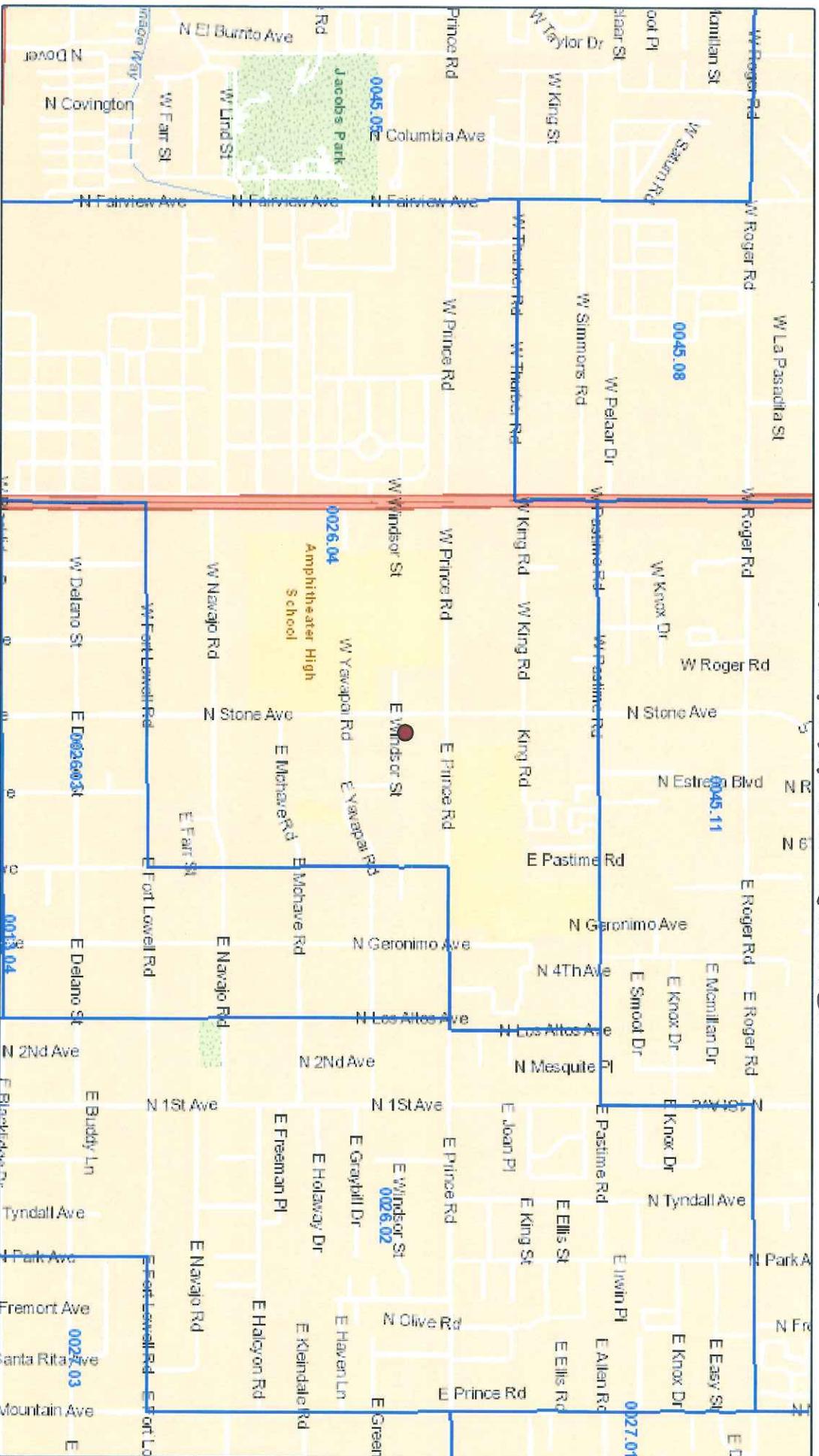
April 26, 2016

- + Search Result (point)
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Estuarine and Marine Wetland
- Lake
- Other
- Riverine

1:72,224  
 0 0.5 1 2 2 mi  
 0 1 2 4 km  
 © 2010 NAVTEQ AND © 2016 Microsoft Corporation



# ENVIRONMENTAL JUSTICE



● Matched Address: 3552 N STONE AVE, TUCSON, AZ, 85705  
 MSA: 46060 - TUCSON, AZ || State: 04 - ARIZONA || County: 019 - PIMA COUNTY || Tract Code: 0026.04

● Selected Tract  
 MSA: || State: || County: || Tract Code:



2015 FFIEC Geocode Census Report

Matched Address: 3552 N STONE AVE, TUCSON, AZ, 85705  
 MSA: 46060 - TUCSON, AZ  
 State: 04 - ARIZONA  
 County: 019 - PIMA COUNTY  
 Tract Code: 0026.04

Summary Census Demographic Information

Tract Income Level	Low
Underserved or Distressed Tract	No
2015 FFIEC Estimated MSAM/D/non-MSAM/D Median Family Income	\$59,000
2015 Estimated Tract Median Family Income	\$26,308
2010 Tract Median Family Income	\$25,590
Tract Median Family Income %	44.59
Tract Population	3884
Tract Minority %	67.22
Tract Minority Population	2611
Owner-Occupied Units	210
1- to 4- Family Units	774

Census Income Information

Tract Income Level	Low
2010 MSAM/D/statewide non-MSAM/D Median Family Income	\$57,377
2015 FFIEC Estimated MSAM/D/non-MSAM/D Median Family Income	\$59,000
% below Poverty Line	46.43
Tract Median Family Income %	44.59
2010 Tract Median Family Income	\$25,590
2015 Estimated Tract Median Family Income	\$26,308
2010 Tract Median Household Income	\$21,621

Census Population Information

Tract Population	3884
Tract Minority %	67.22
Number of Families	646
Number of Households	1614
Non-Hispanic White Population	1273
Tract Minority Population	2611
American Indian Population	108
Asian/Hawaiian/Pacific Islander Population	134
Black Population	302
Hispanic Population	1931
Other/Two or More Races Population	136

Census Housing Information

Total Housing Units	2008
1- to 4- Family Units	774
Median House Age (Years)	27
Owner-Occupied Units	210
Renter Occupied Units	1404
Owner Occupied 1- to 4- Family Units	210
Inside Principal City?	YES
Vacant Units	394



Location: User-specified point center at 32.268212, -110.980499

Ring (buffer): 1-mile radius

Description:

Summary of ACS Estimates		2008 - 2012	
Population			18,843
Population Density (per sq. mile)			5,882
Minority Population			11,032
% Minority			59%
Households			8,635
Housing Units			10,196
Housing Units Built Before 1950			682
Per Capita Income			16,007
Land Area (sq. miles) (Source: SF1)			3.20
% Land Area			100%
Water Area (sq. miles) (Source: SF1)			0.01
% Water Area			0%
		<b>2008 - 2012</b>	
		<b>ACS Estimates</b>	<b>Percent</b>
			<b>MOE (±)</b>
<b>Population by Race</b>			
Total		18,843	100%
Population Reporting One Race		18,523	98%
White		15,137	80%
Black		1,076	6%
American Indian		551	3%
Asian		634	3%
Pacific Islander		23	0%
Some Other Race		1,101	6%
Population Reporting Two or More Races		320	2%
Total Hispanic Population		8,907	47%
Total Non-Hispanic Population		9,935	
White Alone		7,810	41%
Black Alone		817	4%
American Indian Alone		439	2%
Non-Hispanic Asian Alone		611	3%
Pacific Islander Alone		23	0%
Other Race Alone		0	0%
Two or More Races Alone		235	1%
<b>Population by Sex</b>			
Male		9,456	50%
Female		9,386	50%
<b>Population by Age</b>			
Age 0-4		1,414	8%
Age 0-17		4,330	23%
Age 18+		14,513	77%
Age 65+		2,524	13%

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of any race. N/A means not available.

Source: U.S. Census Bureau, American Community Survey (ACS) 2008 - 2012.



Location: User-specified point center at 32.268212, -110.980499  
 Ring (buffer): 1-mile radius  
 Description:

	2008 - 2012 ACS Estimates	Percent	MOE (±)
<b>Population 25+ by Educational Attainment</b>			
Total	12,065	100%	341
Less than 9th Grade	1,166	10%	125
9th - 12th Grade, No Diploma	1,869	15%	173
High School Graduate	3,714	31%	234
Some College, No Degree	3,960	33%	242
Associate Degree	861	7%	150
Bachelor's Degree or more	1,355	11%	160
<b>Population Age 5+ Years by Ability to Speak English</b>			
Total	17,429	100%	532
Speak only English	10,690	61%	462
Non-English at Home <sup>1+2+3+4</sup>	6,739	39%	336
<sup>1</sup> Speak English "very well"	3,164	18%	301
<sup>2</sup> Speak English "well"	1,613	9%	161
<sup>3</sup> Speak English "not well"	1,438	8%	175
<sup>4</sup> Speak English "not at all"	524	3%	188
<sup>3+4</sup> Speak English "less than well"	1,961	11%	222
<sup>2+3+4</sup> Speak English "less than very well"	3,574	21%	248
<b>Linguistically Isolated Households*</b>			
Total	1,095	100%	97
Speak Spanish	852	78%	83
Speak Other Indo-European Languages	107	10%	64
Speak Asian-Pacific Island Languages	77	7%	43
Speak Other Languages	59	5%	45
<b>Households by Household Income</b>			
Household Income Base	8,635	100%	192
< \$15,000	2,702	31%	167
\$15,000 - \$25,000	1,939	22%	127
\$25,000 - \$50,000	2,418	28%	161
\$50,000 - \$75,000	950	11%	156
\$75,000 +	626	7%	110
<b>Occupied Housing Units by Tenure</b>			
Total	8,635	100%	192
Owner Occupied	3,080	36%	166
Renter Occupied	5,554	64%	180

**Data Note:** Detail may not sum to totals due to rounding. Hispanic population can be of any race. N/A means not available.

**Source:** U.S. Census Bureau, American Community Survey (ACS) 2008 - 2012.

\*Linguistically Isolated Households is available at the census tract summary level and up.



Location: User-specified point center at 32.268212, -110.980499

Ring (buffer): 1-mile radius

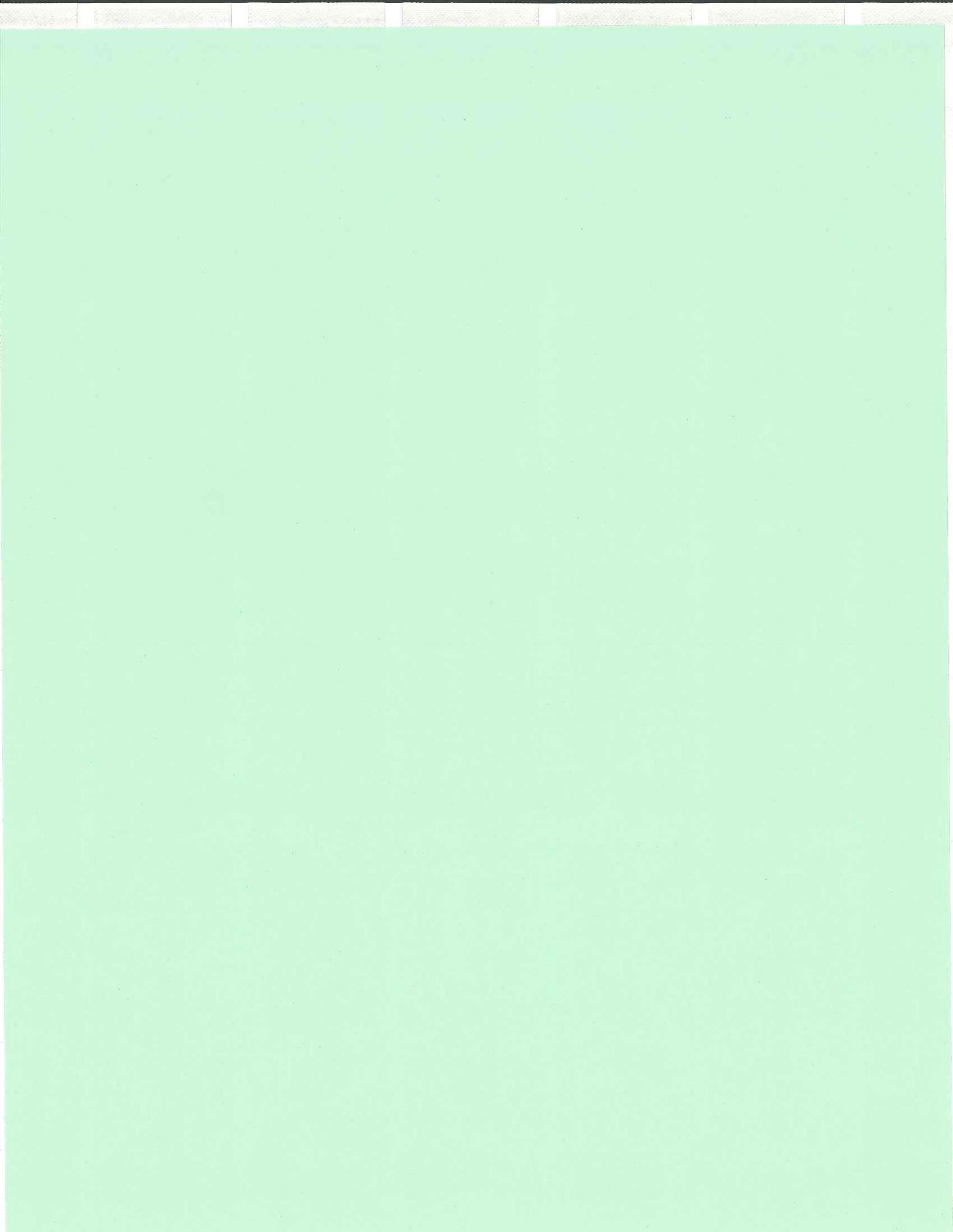
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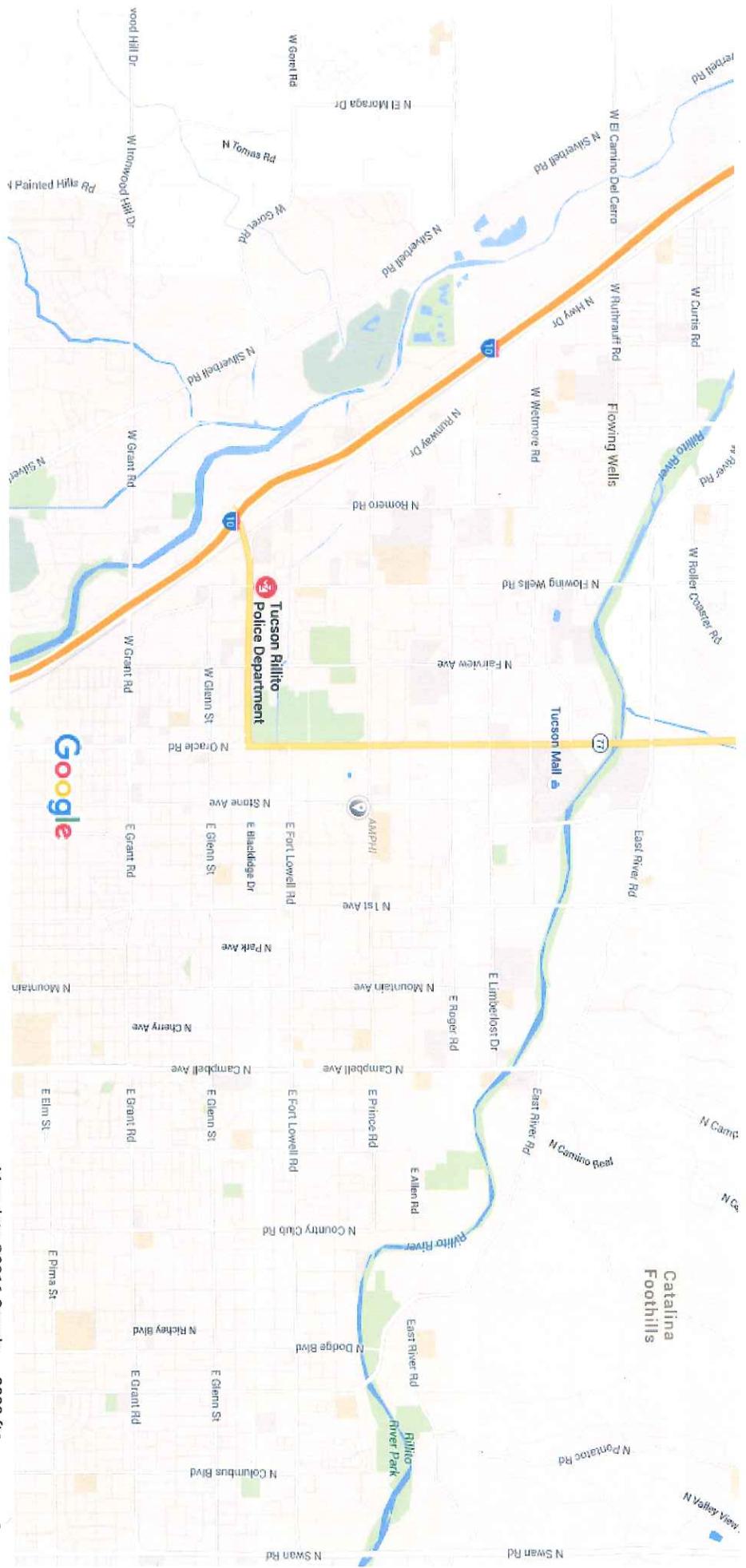
	2008 - 2012 ACS Estimates	Percent	MOE (±)
<b>Population by Language Spoken at Home**</b>			
Total (persons age 5 and above)	17,429	100%	532
English	N/A	N/A	N/A
Spanish	N/A	N/A	N/A
French	N/A	N/A	N/A
French Creole	N/A	N/A	N/A
Italian	N/A	N/A	N/A
Portuguese	N/A	N/A	N/A
German	N/A	N/A	N/A
Yiddish	N/A	N/A	N/A
Other West Germanic	N/A	N/A	N/A
Scandinavian	N/A	N/A	N/A
Greek	N/A	N/A	N/A
Russian	N/A	N/A	N/A
Polish	N/A	N/A	N/A
Serbo-Croatian	N/A	N/A	N/A
Other Slavic	N/A	N/A	N/A
Armenian	N/A	N/A	N/A
Persian	N/A	N/A	N/A
Gujarathi	N/A	N/A	N/A
Hindi	N/A	N/A	N/A
Urdu	N/A	N/A	N/A
Other Indic	N/A	N/A	N/A
Other Indo-European	N/A	N/A	N/A
Chinese	N/A	N/A	N/A
Japanese	N/A	N/A	N/A
Korean	N/A	N/A	N/A
Mon-Khmer, Cambodian	N/A	N/A	N/A
Hmong	N/A	N/A	N/A
Thai	N/A	N/A	N/A
Laotian	N/A	N/A	N/A
Vietnamese	N/A	N/A	N/A
Other Asian	N/A	N/A	N/A
Tagalog	N/A	N/A	N/A
Other Pacific Island	N/A	N/A	N/A
Navajo	N/A	N/A	N/A
Other Native American	N/A	N/A	N/A
Hungarian	N/A	N/A	N/A
Arabic	N/A	N/A	N/A
Hebrew	N/A	N/A	N/A
African	N/A	N/A	N/A
Other and non-specified	N/A	N/A	N/A
Total Non-English	N/A	N/A	N/A

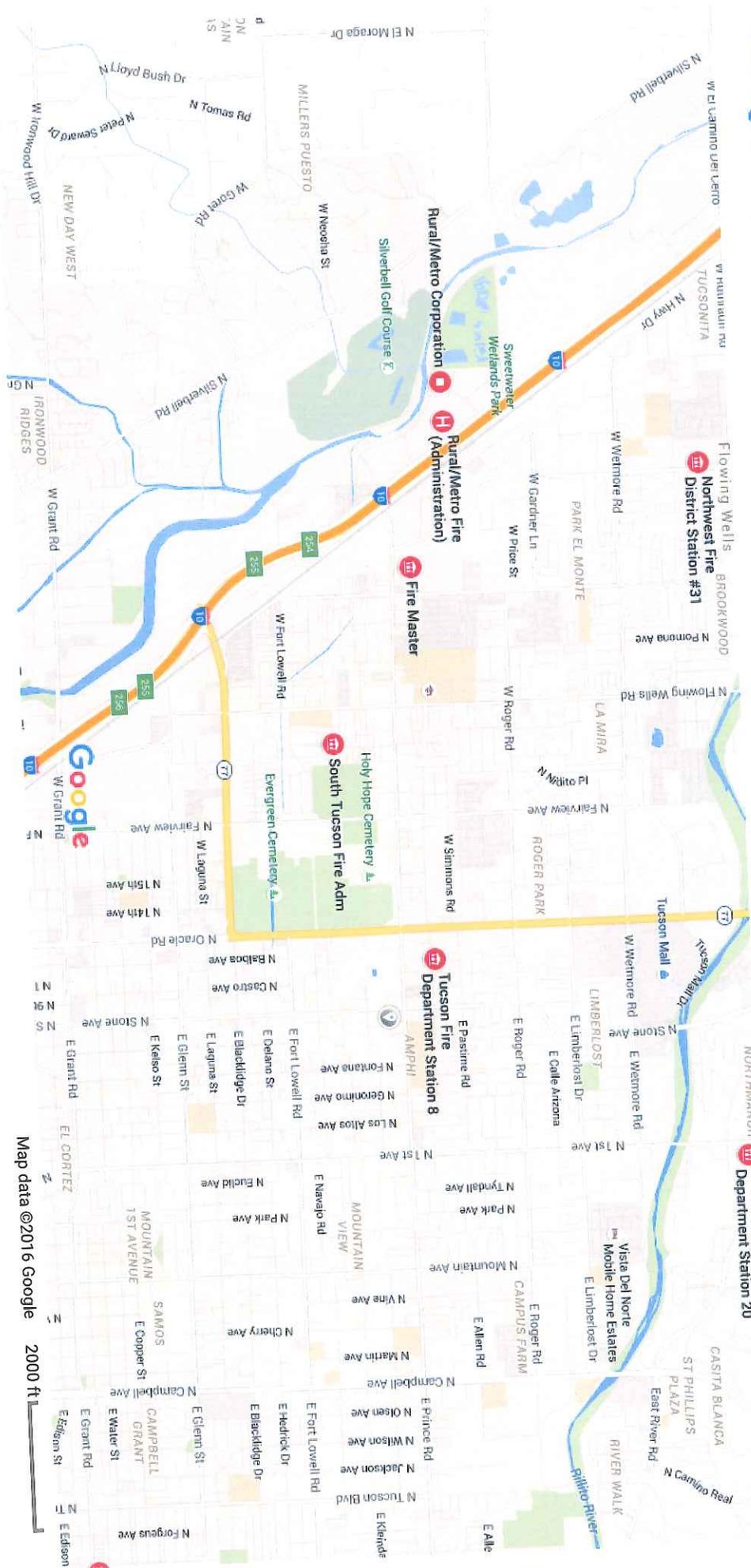
**Data Note:** Detail may not sum to totals due to rounding. Hispanic population can be of any race. N/A means not available.

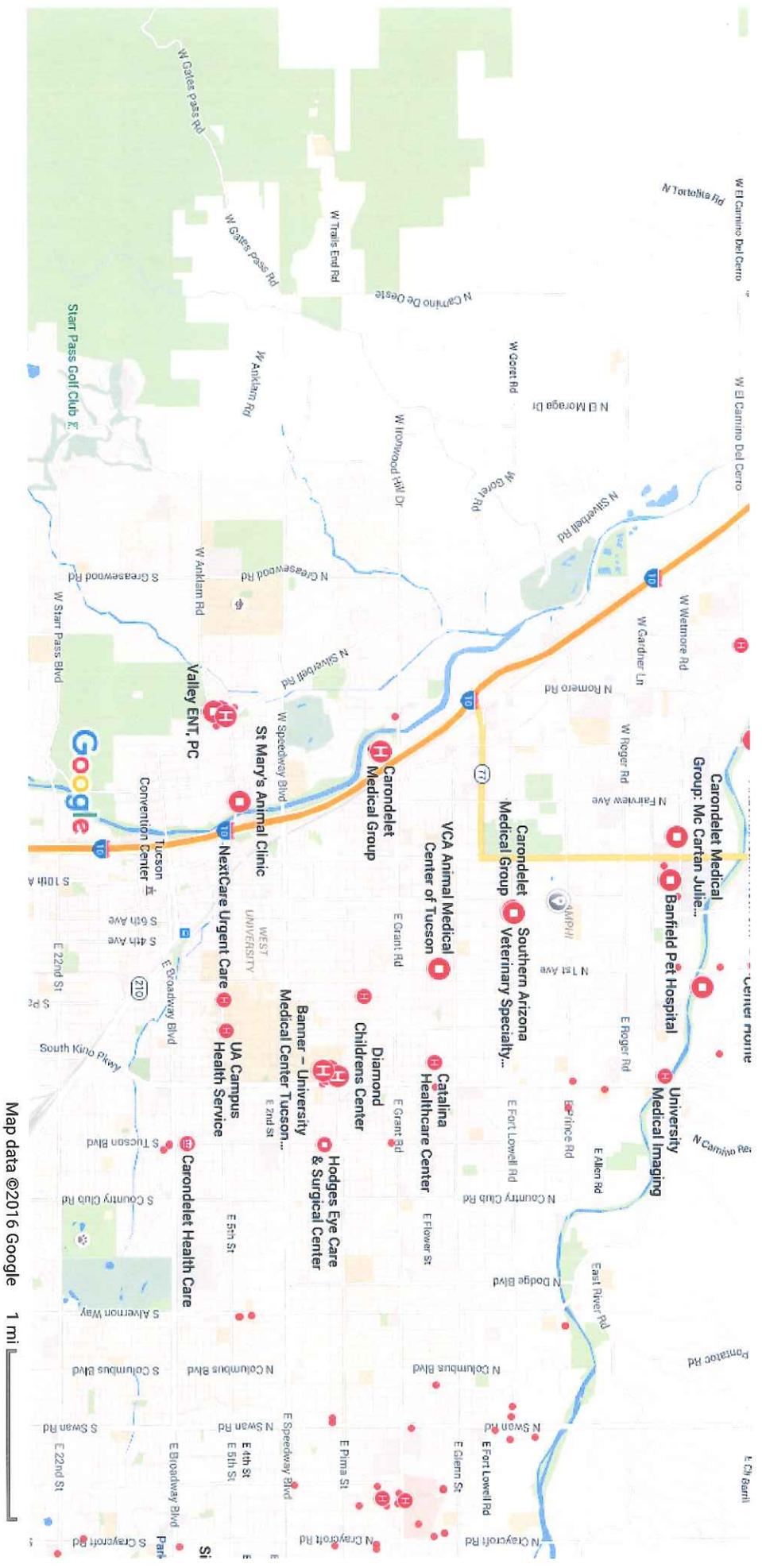
**Source:** U.S. Census Bureau, American Community Survey (ACS) 2008 - 2012.

\*\*Population by Language Spoken at Home is available at the census tract summary level and up.

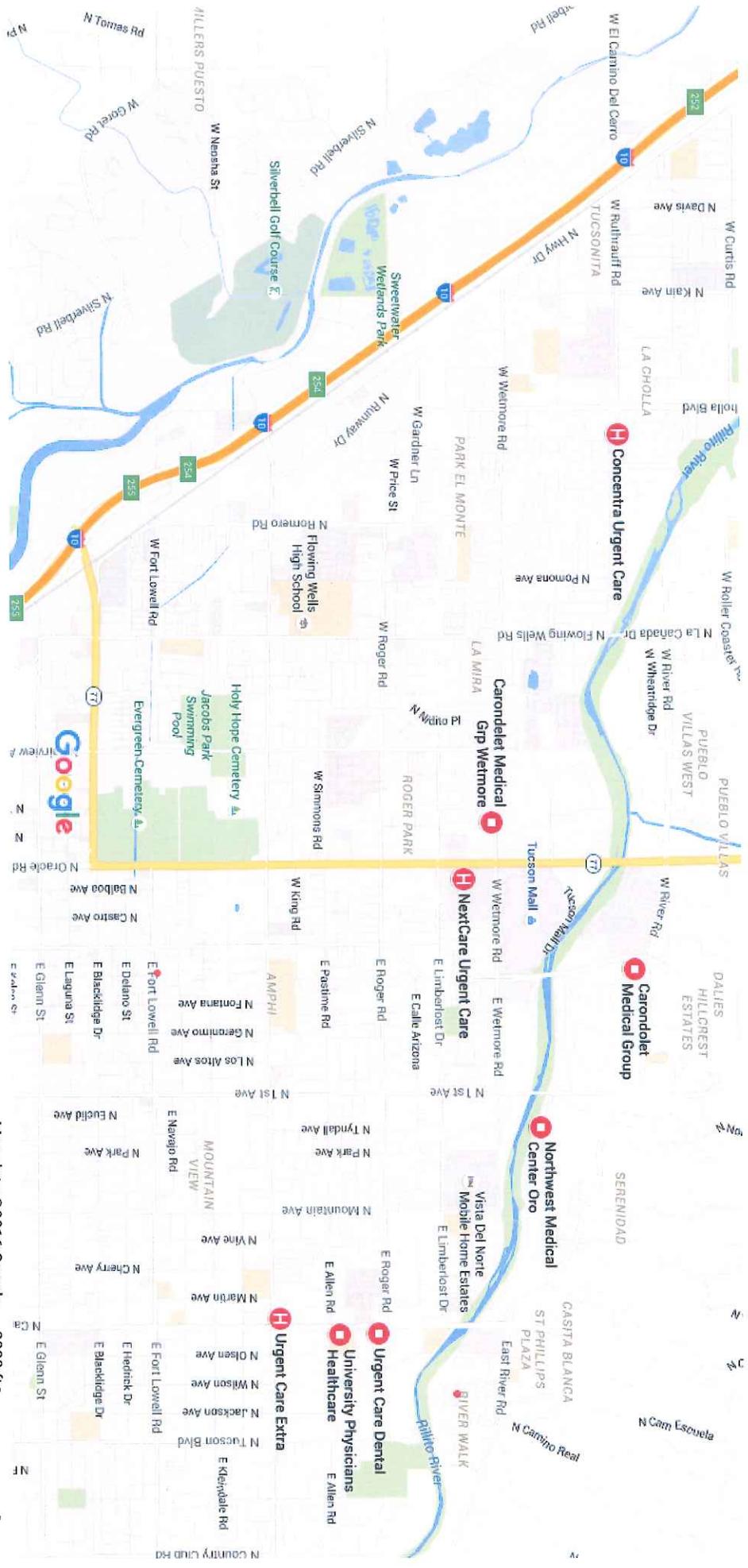








# Google Maps emergency medical care



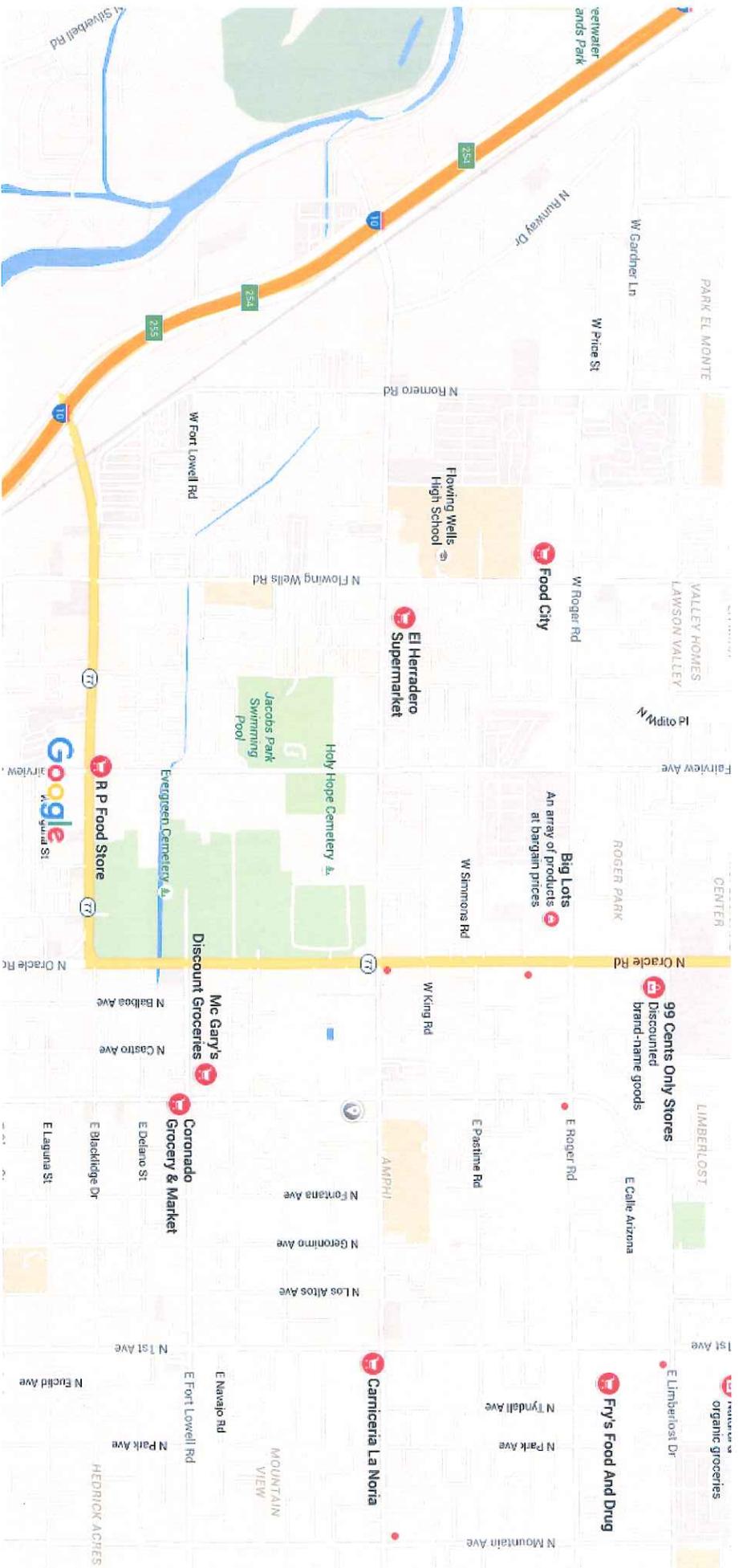
Google Maps

Map data ©2016 Google

2000 ft

Google

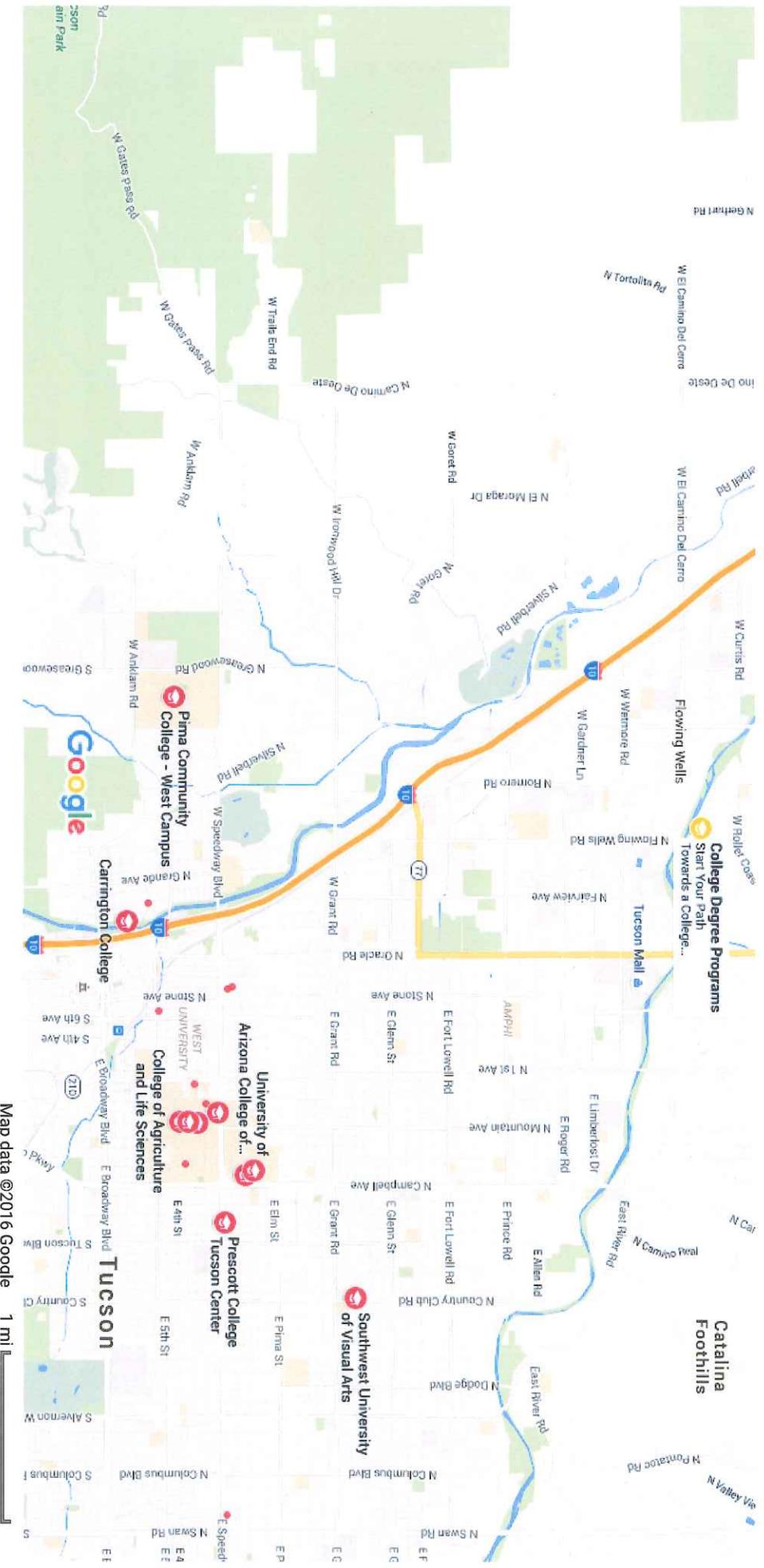
# Google Maps grocery stores



Google Maps

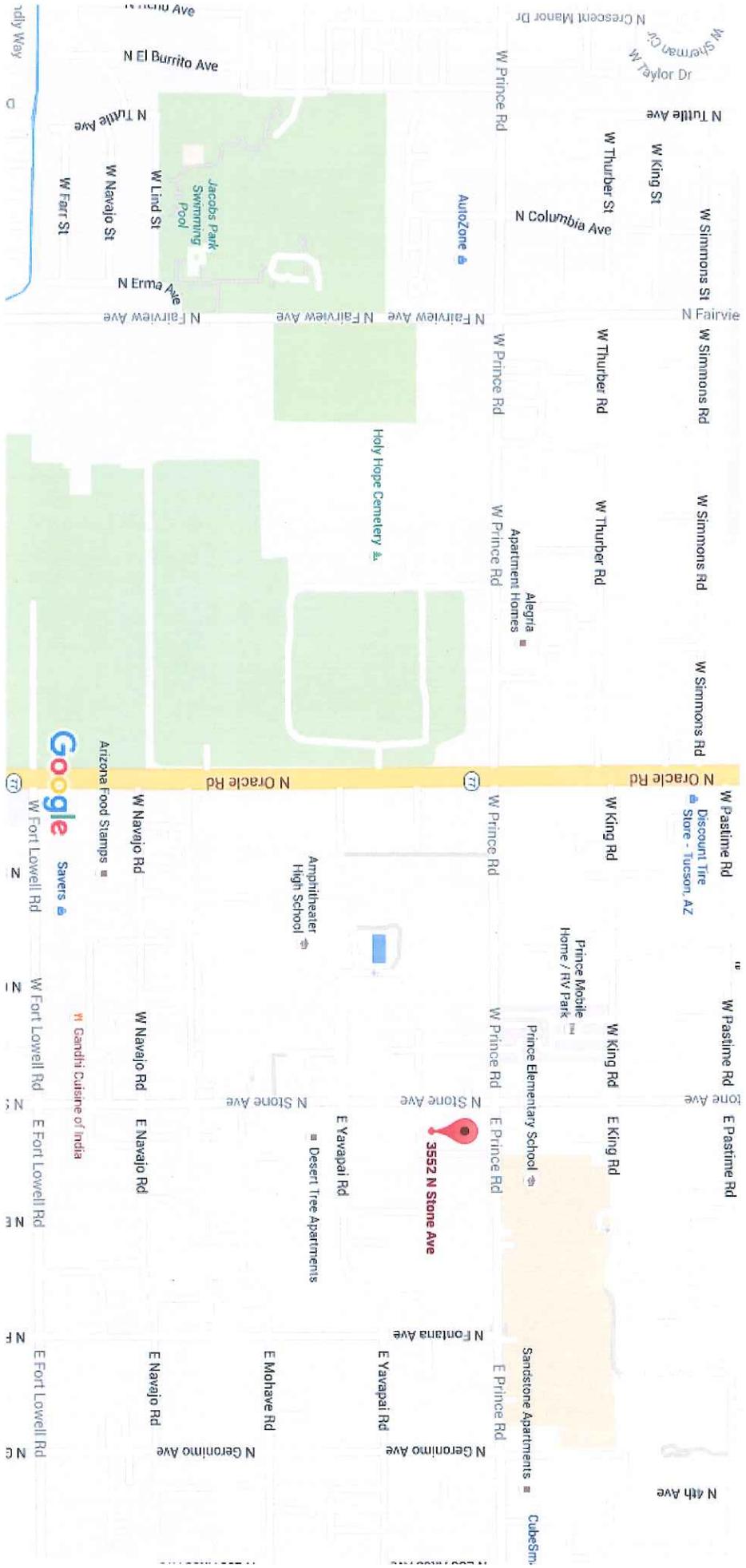
Map data ©2016 Google

1000 ft





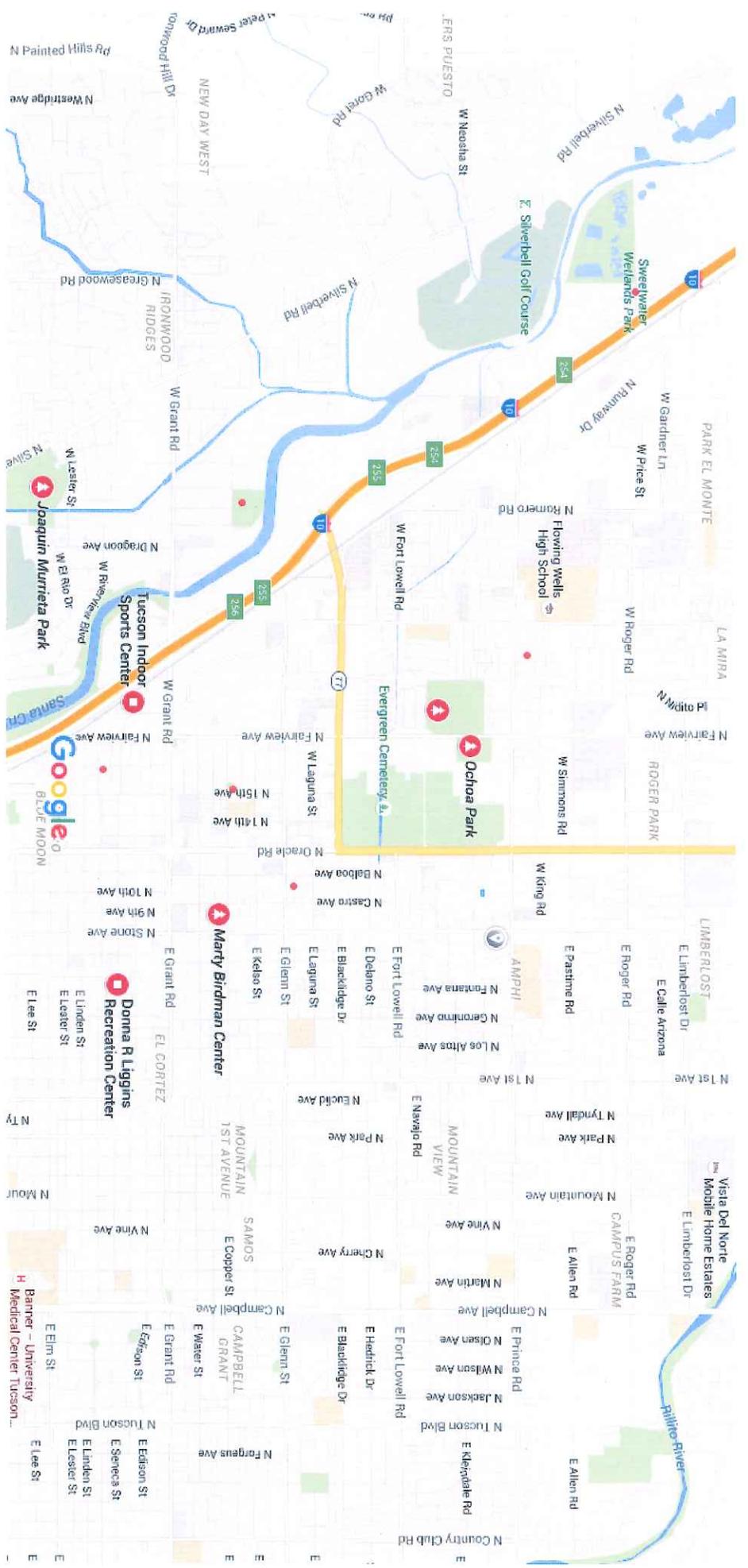
3552 N Stone Ave  
Parks



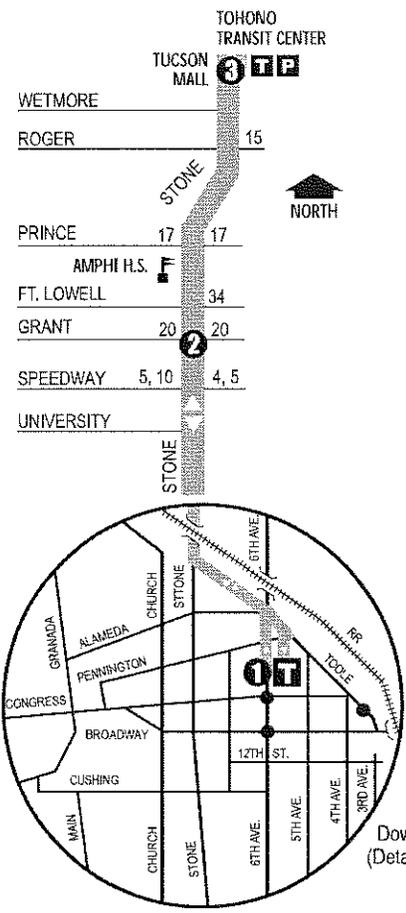
Google Maps

Map data ©2016 Google 500 ft

## recreation Recreation Centers



**Route 19**  
**STONE**

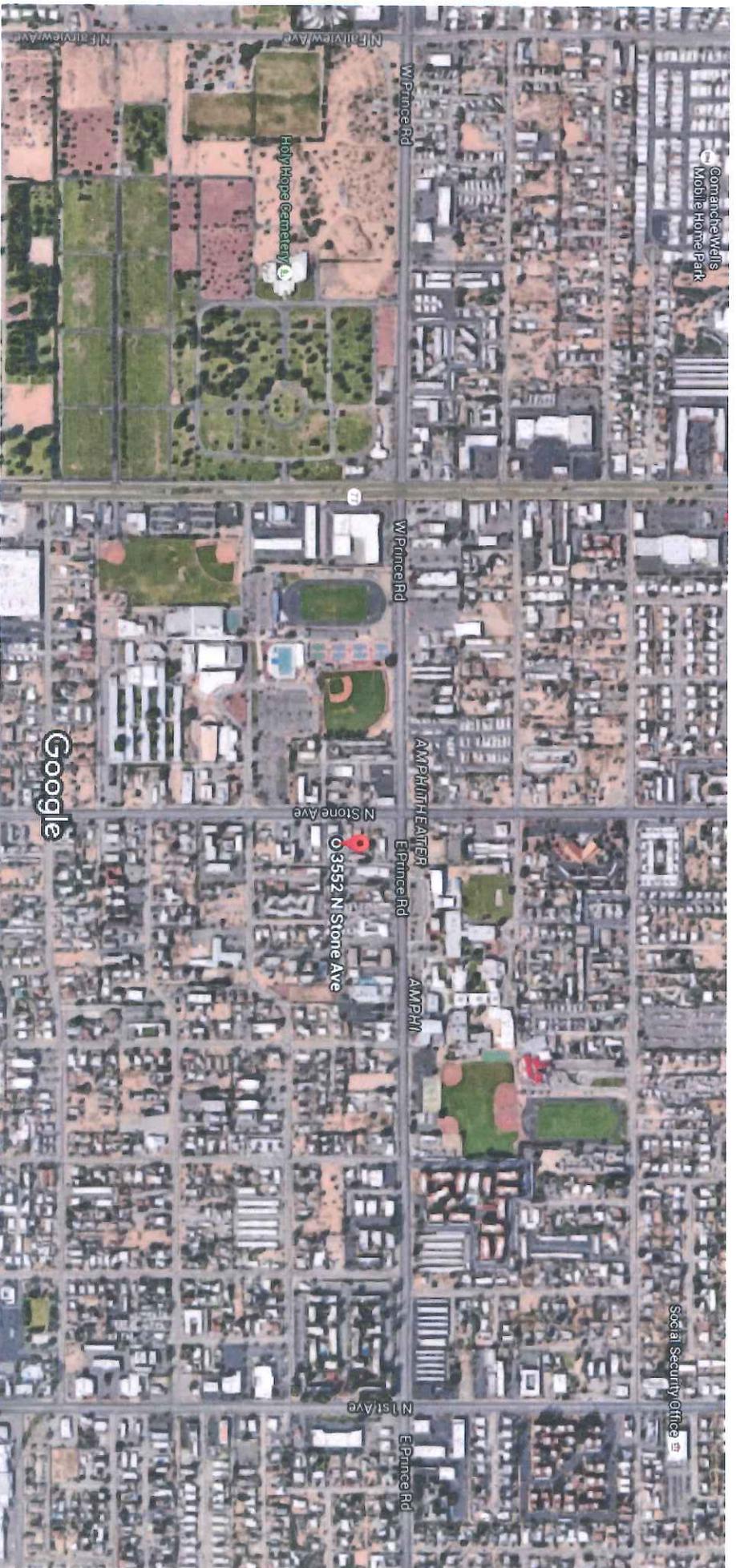


- Tohono Tadaí Transit Center*  
*Fantasticks*  
*Tucson Mall*  
*Amphi High School*  
*Pima Community College (PCC)—Downtown (Centro)*  
*Downtown (Centro)*  
*Ronstadt Transit Center*
- T** Ronstadt Transit Center (Centro de Tránsito)  
Connecting to/(Conexión a):  
Sun Tran — 1,2,3,4,6,7,8,9,10,12,16,18,21,22,23,25  
Sun Express — 102X AM, 103X, 105X, 107X, 109X, 110X  
Sun Link streetcar  
Sun Shuttle — 421  
Cat Tran — USA Route
  - T** Tohono Transit Center (Centro de Tránsito)  
Connecting to/(Conexión a):  
Sun Tran — 6,10,15,16,34,61  
Sun Express — 105X,312X  
Sun Shuttle — 412
  - P** Park & Ride Lot (Estacione y Viaje)  
South of Tohono  
Tadaí Transit Center Stone/Wetmore
  - SL** Sun Link Transfer Point (Puntos de Transbordo a Sun Link)  
● Sun Link stops (paradas de Sun Link)

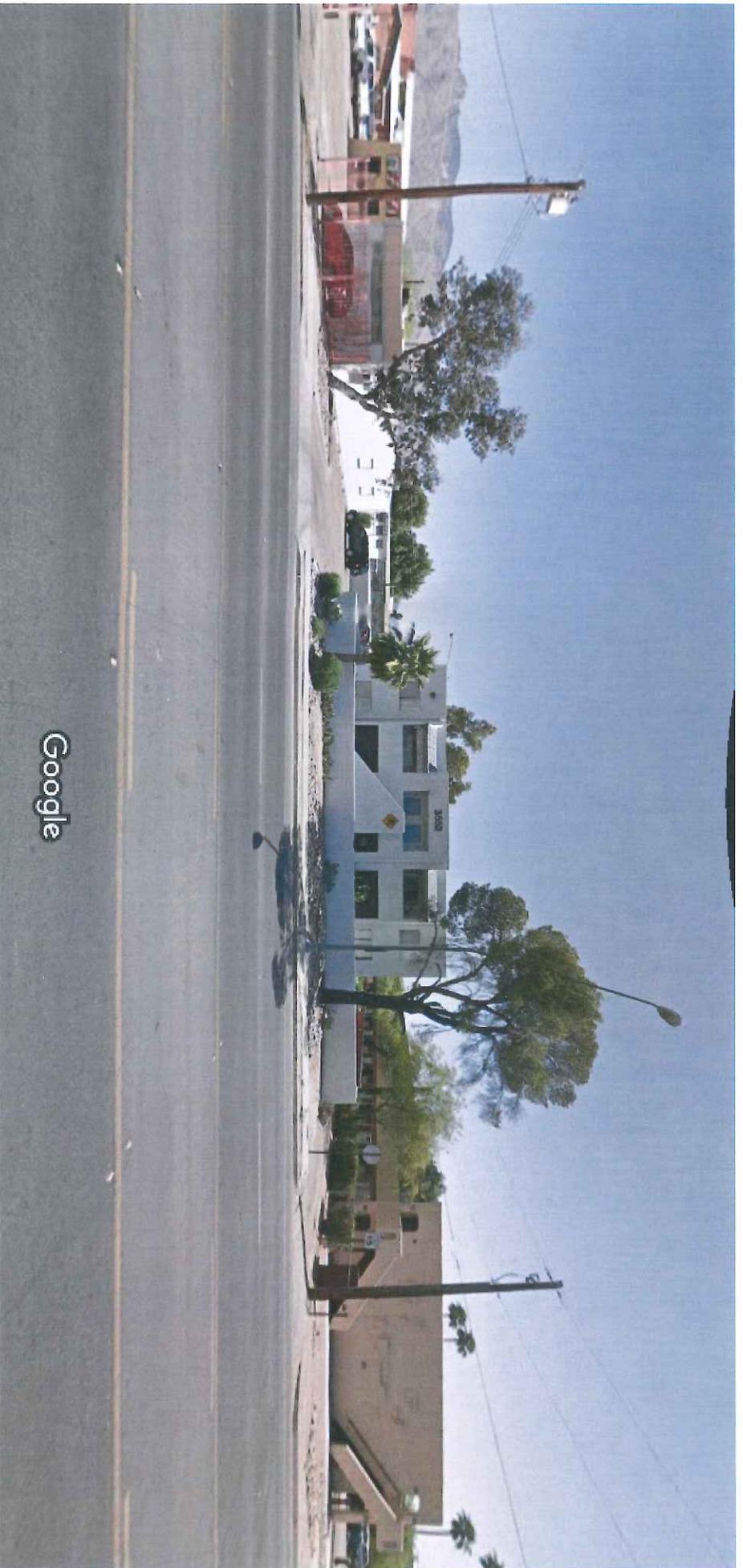
**Route 19 M-F / Northbound**

**Route 19 M-F / Southbound**

Downtown — Ronstadt Ctr. <b>1</b>	Stone at Grant <b>2</b>	Tohono Tadaí Transit Ctr. <b>3</b>	Tohono Tadaí Transit Ctr. <b>3</b>	Stone at Grant <b>2</b>	Downtown — Ronstadt Ctr. <b>1</b>
545	554	605	547	559	610
615	624	635	617	629	640
645	654	705	645	658	710
715	725	737	715	728	740
745	755	807	745	758	810
815	825	837	815	828	840
845	855	907	845	858	910
915	925	937	915	928	940
945	955	1007	945	958	1010
1015	1025	1037	1015	1028	1040
1045	1055	1107	1045	1058	1110
1115	1125	1137	1115	1128	1140
1145	1155	1207	1145	1158	1210
1215	1225	1237	1215	1228	1240
1245	1255	107	1245	1258	110
115	125	137	115	128	140
145	155	207	145	158	210
215	225	238	215	228	240
245	255	308	245	258	310
315	325	338	315	328	340
345	355	408	344	358	410
415	425	438	414	428	440
445	455	508	444	458	510
515	525	538	514	528	540
545	555	608	545	558	610
615	625	638	615	628	640
645	655	708	647	659	710
715	724	735	717	729	740
745	754	805	747	759	810
815	824	835	817	829	840
845	854	905	817	829	940
945	954	1005	1017	1029	1040
1045	1054	1105			



Imagery ©2016 Google, Map data ©2016 Google 500 ft



Tucson, Arizona  
Street View - Apr 2015

MAP FIND TOOLS PREFERENCES HELP

Scale: 1: 480

Base Aerial

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Active Tool: None

X-Coord: 991899.50 Y-Coord: 463677.75

MAP FIND TOOLS PREFERENCES HELP

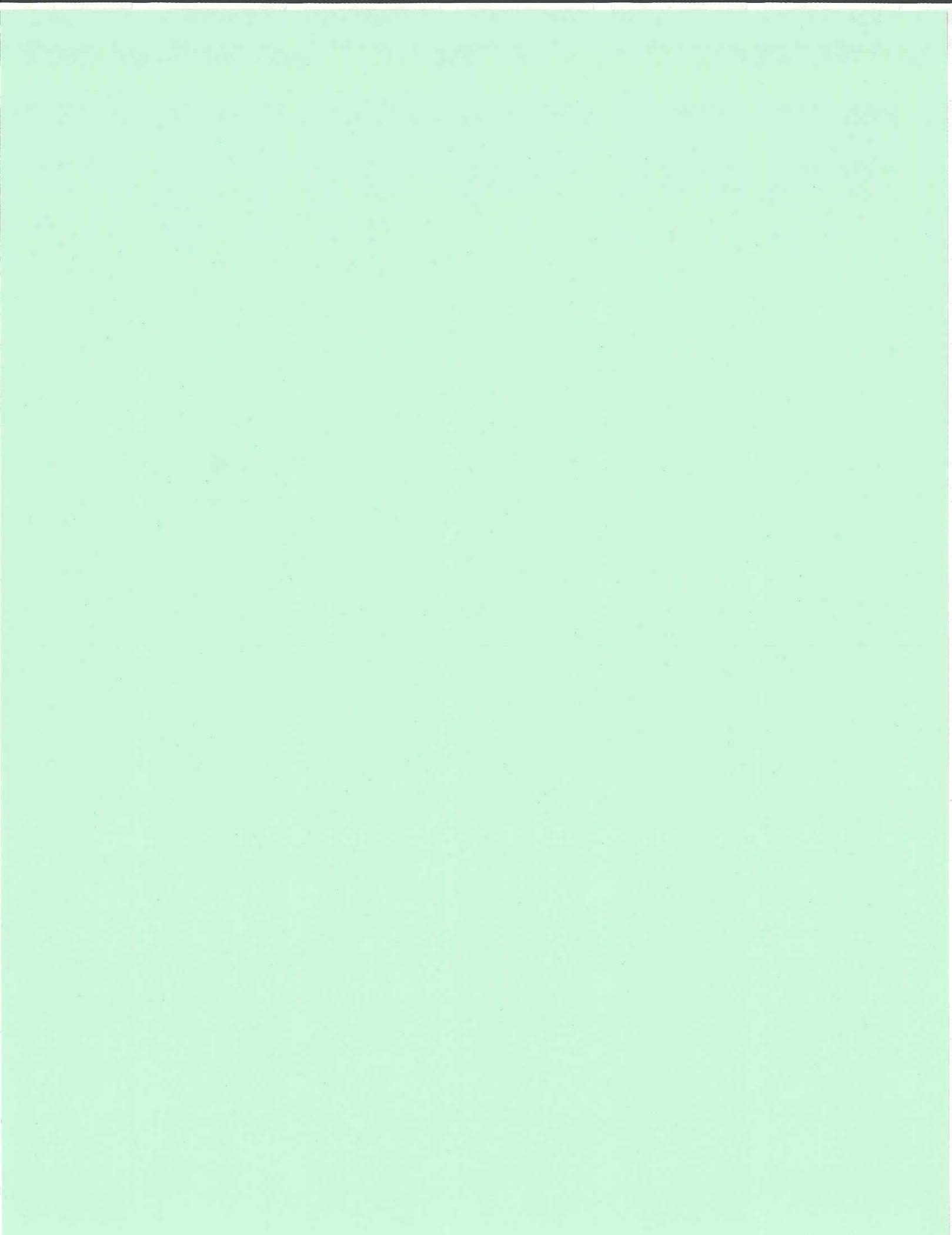
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Scale: 1: 1,200

Base Aerial

Active Tool: None

X-Coord: 991644.48 Y-Coord: 463873.19



# SCS ENGINEERS



## DRAFT Phase I Environmental Site Assessment

**3552 North Stone Avenue  
APN 106-03-0030  
Tucson, Arizona 85705**

Presented to:

**City of Tucson**  
Housing and Community Development  
310 N Commerce Park Loop  
Tucson, AZ 85745

Presented by:

**SCS ENGINEERS**  
2410 West Ruthrauff Road, Suite 110  
Tucson, Arizona 85705  
(520) 696-1617

July 27, 2015  
AAI Date: July 17, 2015  
File No. 01211313.08

Offices Nationwide  
[www.scsengineers.com](http://www.scsengineers.com)

Environmental Consultants  
and Contractors

2410 W. Ruthrauff Road  
Suite 110  
Tucson, AZ 85705

520 696-1617  
FAX 520 696-1618  
www.scsengineers.com

## SCS ENGINEERS

July 27, 2015  
File No. 01211313.08

Mr. Glenn Fournie  
Project Coordinator  
Housing and Community Development  
City of Tucson  
310 N Commerce Park Loop  
Tucson, AZ 85745

Subject: DRAFT Phase I Environmental Site Assessment  
3552 North Stone Avenue  
APN 106-03-0030  
Tucson, Arizona 85705

Dear Mr. Fournie:

SCS Engineers (SCS) is pleased to submit this Phase I Environmental Site Assessment for the above-referenced property located in Tucson, Pima County, Arizona. SCS appreciates the opportunity to assist you with this project. If you have any questions regarding this report, please feel free to contact Pat Hartshorne at (520) 696-1617.

Sincerely,

DRAFT

DRAFT

Patricia M. Hartshorne, RG  
Project Manager  
**SCS ENGINEERS**

Bradley F. Johnston, RG  
Project Director  
**SCS ENGINEERS**

PMH/BFJ:pmh  
P:\DATA\PROJECTS\2015\01211313.08 COT 3552 N Stone Ave Apts Ph I ESA\REPORT\COT 3552 N Stone Ave Apts Ph I ESA draft text 2015-7-27.docx



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## EXECUTIVE SUMMARY

City of Tucson Housing and Community Development retained SCS Engineers (SCS) to perform a Phase I Environmental Site Assessment (ESA) for the property at 3552 North Stone Avenue, located in Tucson, Pima County, Arizona (site). The site consists of Pima County Assessor's Parcel Number (APN) 106-03-0030. The ESA consisted of a site reconnaissance; interviews; review of environmental, historical, and physical records pertaining to activities on and adjoining the site; and interpretation and reporting of findings. In addition, a screening level evaluation of non-scope issues was also requested by the City of Tucson.

At the time of the site reconnaissance, the site contained two vacant two-story apartment buildings, an attached laundry building, parking areas, sidewalks, landscaping, a canopy, two ramadas, and a shed. The west apartment building contains 8 one-bedroom apartments. The east apartment building contains 8 one-bedroom apartments and 10 studio apartments. Most of the apartments showed some amount of water damage (sagging shelves under sinks, damaged tub tile surrounds, etc.). One second floor apartment (#210) reportedly experienced a water leak that also affected the first floor apartment below it (#110). The lower portion of the drywall in apartment #210 had been removed and apartment #110 had been gutted. Another apartment (#108) showed evidence of water that had pooled in the ceiling. No evidence of recognized environmental conditions (RECs) was observed on the site.

Historical information indicated the site was apparently residential from at least 1946 until 1983-84 when the residence was demolished and the current apartment complex was constructed. In 1970, a welding shop was operated on the site adjacent to the north side of the residential garage. The residence was connected to the municipal sewer system in 1976, at which time a septic tank was abandoned in place on the site; the location of the tank was not determined and it was not determined if this tank was removed when the apartments were constructed. A new sewer main was installed in the alley east of the site in 1983 for the new apartment complex. The City of Tucson purchased the site in 1995 and the site was then used for a transitional housing program for homeless women with or expecting children. A family counseling agency was also located on the site from 2008 to 2010. The former site uses are not considered a REC for the site.

A previous Phase I ESA and Comprehensive Asbestos Survey were performed for the site in 1993. No environmental concerns were identified for the site by the Phase I ESA and there were no recommendations for additional environmental investigation. A total of 83 samples of 21 suspect asbestos-containing materials (ACMs) were collected, including drywall, carpet and mastic, 12x12 floor tiles, white sink insulation, covebase, fixture caulk, linoleum, roofing, roof flashing, roof caulk, and stucco. White sink insulation (130 square feet) and roof caulk (50 square feet) were found to be non-friable Category II ACMs. An operations and maintenance plan was recommended for the ACMs.

Properties adjoining the site were developed apparently beginning in the 1920s. Types of properties that have adjoined the site included residences, mobile homes, and apartments; vacant land; a school and parking area; various retail and commercial properties; and companies such as an evaporative cooler pad manufacturer, plastics and millwork, upholsterer, lumber products, equipment rental, beauty salon, various automotive services and sales, etc. Based on the assessment, uses of adjoining properties do not appear to be a REC for the site.

The site was not identified in environmental database listings. One Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)/No Further Remedial Action Planned (CERCLIS/NFRAP) site, one Emergency Response Notification System (ERNS) incident, two registered underground storage tank (UST) facilities, 10 leaking UST (LUST) facilities, one hazardous materials incident, and four registered wells were identified by the environmental database search. None of the listings was considered a REC for the site.

A Tier 1 Vapor Encroachment Screen (VES) was performed for the site in order to evaluate whether there is a potential vapor encroachment condition (VEC) that could potentially be considered a REC for the site. Information obtained during the performance of the Phase I ESA was used for preparation of the VES. Based on the locations of the facilities and incidents identified by the environmental database review relative to the site and information regarding the type and status of the listing, VECs for the site were ruled out for each listing. No other information was found during the Phase I ESA investigation that would indicate the likely presence of a VEC on the site.

### **Non-Scope Issues**

By request of the City of Tucson Housing and Community Development, a screening level investigation of the following non-scope issues was performed for the site: ACMs, lead-based paint, lead in drinking water, mold, radon, ecological resources such as wetlands and endangered species, biological agents, industrial hygiene, health and safety, and regulatory compliance. No sampling was performed during this investigation. Note that this screening summary is not all encompassing and does NOT constitute an environmental audit.

- **Asbestos-Containing Materials (ACMs)** – The previous asbestos survey was performed in 1993 and identified white sink insulation (130 square feet) and roof caulk (50 square feet) as non-friable Category II ACMs and an operations and maintenance plan was recommended for the ACMs. Many of the previously sampled materials could not be matched with materials observed during the site reconnaissance and there were apparently some materials that were not sampled during the asbestos survey. In addition, because of the date that the asbestos survey was performed and observations made during the site reconnaissance, it is apparent that materials have been removed, added, or patched since 1993; therefore, these materials are not represented by the asbestos survey report.
- **Lead-Based Paint (LBP)** – Because the apartments were constructed after 1978, which was the date that the Consumer Product Safety Commission (CPSC) prohibited the use of lead in paint for residential use in concentrations greater than 0.06 percent lead by weight, it is less likely that LBP is a concern at the site. However, the presence of lead can only be determined by a lead survey.
- **Lead in Drinking Water** – The apartments were constructed before 1986, which was when the Safe Drinking Water Act (SDWA) required that “lead-free” pipe (less than 8% lead), solder (less than 0.2% lead), and flux (less than 0.2% lead) be used in residential or non-residential facilities that provide water for human consumption.

Amendments in 2011 redefined “lead-free” to lower the maximum lead content of the wetted surfaces of plumbing products such as pipes, pipe fittings, plumbing fittings, and fixtures from 8.0% to a weighted average of 0.25%. However, the largest risk for the presence of lead in drinking water is in new buildings or buildings with new plumbing systems. Due to the age of the buildings, the potential for lead to be present in the drinking water is low. However, during the planned remodeling, if any new plumbing, solder, fixtures, and faucets are used that contain lead or are made of brass, lead may be elevated in the drinking water for several months.

- **Mold** – Most of the units in the apartment buildings showed some amount of previous water damage (sagging shelves under sinks, damaged tub tile surrounds, etc.). In addition, three apartment units had been affected by significant water leaks (#210, #110, and #108). Possible visible mold was observed during the site reconnaissance under the bathroom sinks or adjacent to the tub of three apartments (#103, #108, and #213) and mildewed caulk was observed in a number of the apartment showers. However, the interiors of walls and ceilings or under flooring behind water damaged areas were not observed and could contain mold.
- **Radon** – A statewide radon survey performed in 1987-1989 found that 40 of 41 indoor home radon survey tests conducted for the zipcode area that includes the site were less than the EPA general guideline of 4.0 picocuries per liter (pCi/L); therefore, it appears unlikely that the site would exceed 4.0 pCi/L for radon.
- **Wetlands** – No potential wetlands were identified on the site.
- **Endangered Species** – Due to the lack of natural habitat on the site and predominance of pavement and structures, it is unlikely that most of the species listed in the screening reports from Arizona Game and Fish Department (AZGFD) or United States Fish and Wildlife Service (USFWS) would be using the site, other than potentially birds or bats. No critical habitats or refuges were identified on the site.
- **Biological Agents** – No potential biological agents other than possible mold and a bee hive were observed on the site. An exterminator had already been called with regard to the bees.
- **Industrial Hygiene/ Health and Safety** – No obvious industrial hygiene issues were observed on the site other than those previously discussed, including bees, ACMs, mold, and lead.
- **Regulatory Compliance** – The majority of regulatory compliance issues generally did not apply to the site. Fluorescent light ballasts may contain polychlorinated biphenyls (PCBs).

### **Recognized Environmental Conditions (RECS)**

SCS has performed a Phase I ESA in conformance with the scope and limitations of ASTM International (previously known as American Standards and Testing Materials [ASTM]) Practice

E1527-13 for the property at 3552 North Stone Avenue (APN 106-03-0030), located in Tucson, Pima County, Arizona (site). Any exceptions to, or deletions from, these practices are described in Section 10 of this report. This assessment has revealed no evidence of RECs in connection with the site. No Historical RECs (HRECs) or Controlled RECs (CRECs) were identified for the site.

### Recommendations

Based on the findings of this Phase I ESA, SCS did not have recommendations for the site, except for the following non-scope issues:

- **ACMs** – An update of the previous comprehensive asbestos survey should be performed before beginning rehabilitation of the site buildings. Existing sample results may be used where possible, but additional sampling will also be necessary. An updated report should then be prepared that documents the findings of the investigation. Confirmed ACMs should be categorized by National Emission Standard for Hazardous Air Pollutants (NESHAP) classification, identified on a site plan, and the quantity of each type of ACM should be estimated.
- **LBP** – A LBP survey is recommended for the site buildings because although it is less likely that LBP is a concern at the site, the presence of lead can only be determined by performing a LBP survey.
- **Lead in Drinking Water** – The potential for lead to be present in the drinking water in the site buildings is considered to be low. Remodeling should avoid the use of lead or brass plumbing components, which are a potential source of lead. If components containing lead are used, flushing of the system and periodic sampling should be performed.
- **Mold** – During rehabilitation, all areas of known water damage and areas around water piping and fixtures should be examined for signs of mold, especially in areas that are not currently visible. If found, removal of affected materials should be performed by contractors specialized in that activity in accordance with EPA guidance. The areas of mildewed caulk in the shower areas should be sprayed down with a 10:1 bleach/water solution and allowed to sit prior to removal.
- **Endangered Species** – The AZGFD recommends consideration of the impacts of outdoor lighting on species, avoidance of non-native invasive species in landscaping, and following manufacture's recommended application guidelines for chemical treatments.
- **Regulatory Compliance** – Fluorescent light ballasts may contain PCBs. If there are no labels on the ballasts, they should be treated as if they contain PCBs and be disposed appropriately.

# 1 INTRODUCTION

## PURPOSE

City of Tucson Housing and Community Development retained SCS Engineers (SCS) to perform a Phase I Environmental Site Assessment (ESA) for the property at 3552 North Stone Avenue, located in Tucson, Pima County, Arizona (site). The site consists of Pima County Assessor's Parcel Number (APN) 106-03-0030. A Site Location Map is provided as Figure 1 in Appendix A.

The purpose of this investigation was to identify evidence of recognized environmental conditions (RECs) at the subject site. The ASTM International (ASTM) E1527-13 standard practice defines a REC as *"... the presence or likely presence of any hazardous substance or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions."*

In addition, this investigation may identify historical RECs (HRECs) and controlled RECs (CRECs) at the subject site. An HREC is defined as *"a past release of any hazardous substance or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subject the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls."*

A CREC is defined as *"a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls."*

In using the ASTM E1527-13 standard practice, the term "release" of hazardous substances or petroleum products to the environment has the same meaning as the definition of a "release" under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, aka Superfund). Additionally, the terms "migrate" and "migration" refer to the movement of hazardous substances or petroleum products in any form, including, for example, solid and liquid at the surface or subsurface, and vapor in the subsurface. This Phase I ESA conforms to ASTM E1527-13, which also satisfies the All Appropriate Inquiries (AAI) Standard developed by the United States Environmental Protection Agency (EPA).

## DETAILED SCOPE OF SERVICES

This work was performed in accordance with our Proposal No. 010604215 (dated July 13, 2015). Notice to proceed was received on July 14, 2015. This ESA was conducted in accordance with

the guidelines set forth in the ASTM Practice E1527-13, and consisted of the following four components:

- **Site Reconnaissance** – A visual reconnaissance of the subject site and surrounding properties;
- **Records Review** – Examination of historical documents and state and federal regulatory agency records;
- **Interviews** – Interviews with individuals and public officials familiar with the site's history; and
- **Report** – Evaluation and Report.

## ENVIRONMENTAL PROFESSIONALS QUALIFICATIONS

ASTM Practice E1527 and the AAI Standard developed by the United States EPA require that the person who supervises or oversees Phase I ESAs be a qualified Environmental Professional (EP). Appendix X.2 of ASTM Practice E1527 and 40 CFR §312.10 define an EP as *“a person who possesses sufficient specific education, training, and experience necessary to exercise professional judgment to develop opinions and conclusions regarding conditions indicative of releases or threatened releases... on, at, in, or to a property...”* Ms. Patricia Hartshorne, RG, SCS Project Manager, and Mr. Bradley Johnston, RG, SCS Vice President, were the EPs responsible for performance of this Phase I ESA. Full resumes are included in the Appendices.

**Patricia M. Hartshorne, RG (Project Manager)** – Ms. Hartshorne has more than 24 years of experience performing environmental and solid waste management projects. She has extensive experience in Phase I and II ESAs of industrial, commercial, residential, and agricultural sites; remedial activities at hazardous and non-hazardous project sites; and landfill investigations. This includes historical and regulatory research; collection of soil, groundwater, landfill gas, and suspect asbestos- or lead-containing material samples; supervision of subcontractors; health and safety compliance; data management; interpretation of laboratory analytical results; remediation oversight; and technical report preparation. She has performed, managed, and assisted with more than 800 environmental assessments, remedial investigations, and landfill investigations in Arizona, California, New Mexico, Missouri, Colorado, Louisiana, Texas, Utah, and Ohio. Ms. Hartshorne is an Asbestos Hazard Emergency Response Act (AHERA)-certified Building Inspector. Ms. Hartshorne was responsible for the site reconnaissance; regulatory, historical, and records research and reviews; interviews; and preparation of the Phase I ESA report.

**Bradley F. Johnston, RG (Vice President)** – Mr. Johnston has more than 33 years of experience in geological studies, environmental assessments, hazardous waste management, and risk assessment. Mr. Johnston has managed and performed hundreds of environmental projects in Arizona, and is responsible for all phases of project work, including resource allocation, developing work plans and specifications, performing and supervising field work, preparation and review of reports, budgeting, client and regulatory agency contact, and quality control. Mr. Johnston's experience includes Phase I ESAs for state, federal, municipal, and private clients, including the City of Phoenix Light Rail Transit Project, right-of-way acquisitions, sand and

gravel mining facilities, agricultural facilities, residential developments, transportation improvements, and Brownfields sites throughout Arizona. Mr. Johnston was responsible for review of the Phase I ESA report.

## SHELF LIFE OF AAI DOCUMENTS

The AAI rule specifies that all appropriate inquiries must be conducted within a one-year period prior to the date a property is acquired. The EPA has defined the acquisition date to be the date on which the property title is transferred. To ensure full coverage under the AAI rule, a valid ESA report must be completed within a 12-month period prior to transfer of title.

However, selected ESA report components and supporting information sources must be updated if they were completed more than six months (180 days) prior to title transfer. The specific ESA components with a 180-day shelf life include:

- Site inspection;
- Interviews with knowledgeable persons;
- Review of government regulatory records;
- Search for environmental cleanup liens; and
- Declaration/signature of certifying Environmental Professional.

The AAI date included on the cover of the report indicates the date that research was performed for the different components of this project, whichever is the earliest.

## SIGNIFICANT ASSUMPTIONS

Based on documents reviewed, interviews with knowledgeable people, and a site reconnaissance, SCS assumes that information collected during this ESA is accurate and correct. Unless warranted, information collected has not been independently validated as part of this ESA.

## LIMITATIONS AND EXCEPTIONS

This report has been prepared for City of Tucson Housing and Community Development with regard to the assessment of environmental conditions of the subject site. This assessment focused on potential sources of hazardous substances or petroleum products that could be considered a REC and a liability due to the presence in significant concentrations (e.g., above acceptable limits set by the federal, state or local government) or due to the potential for contamination migration through exposure pathways (e.g., groundwater, soil vapor). Materials that contain substances that are not currently deemed hazardous by the EPA were not considered as part of this study.

Hazardous substances occurring naturally in plants, soils, and rocks (e.g., heavy metals, naturally occurring asbestos, or radon) are not typically considered in these assessments. Similarly, construction debris (e.g., discarded concrete, asphalt) is not considered unless observation suggests that hazardous substances are likely to be present in significant concentrations or likely to migrate.

The terms “scattered solid waste,” “debris,” or “rubbish” are used to describe wastes such as paper, plastic, glass, food packaging, cans, bottles, and other similar materials. These materials do not represent a REC.

The report has been prepared in a manner consistent with the level of care and skill ordinarily exercised by other professional consultants, under similar circumstances at the time the services were performed, in this or similar localities. No other representations, either expressed or implied, and no warranty or guarantee is made as to the professional advice presented herein. SCS assumes no responsibility for the accuracy of information obtained from, compiled, or provided by third-party sources, such as regulatory agency listings.

## SPECIAL TERMS AND CONDITIONS

SCS and City of Tucson Housing and Community Development agreed upon the terms and conditions set forth in SCS’s proposal. If additional services not normally performed as part of a Phase I ESA are included in the scope of services, these additional services are listed herein. This ESA report does not purport to address safety concerns, if any, associated with the use of the subject site or exposure to safety concerns from adjoining facilities. It is the responsibility of the owner and/or the user of this ESA report to establish appropriate safety and health practices and determine the applicability of regulatory limitations. SCS is not required to identify safety concerns unless otherwise required in the scope of work.

This report does not include assessment of issues described by the ASTM Practice E1527 as non-scope unless otherwise stated in Section 10, such as asbestos-containing building materials, biological agents, cultural and historical resources, ecological resources, endangered species, health and safety, indoor air quality (unrelated to releases of hazardous substances or petroleum products into the environment), industrial hygiene, lead-based paint, lead in drinking water, mold, radon, regulatory compliance, wetlands, and other issues unless otherwise noted. Unless specifically included in our scope of services, consideration of other building materials such as water supply plumbing, urea formaldehyde, and pressure-treated lumber are not considered in this report.

This ESA is not a compliance audit for regulatory compliance with Federal, State, and local statutes, laws, rules or regulations.

Unless otherwise noted, no sampling or laboratory analyses were performed as part of this Phase I ESA. Although this report may provide recommendations regarding the possibility of RECs specific to this site, positive identification of hazardous substances can be accomplished only through sampling and appropriate laboratory analysis.

## USER RELIANCE

This report has been prepared at the request and for the exclusive use of City of Tucson Housing and Community Development. Reliance cannot be transferred without the written permission of City of Tucson Housing and Community Development and SCS, and only if the other party agrees to the same terms and conditions to which City of Tucson Housing and Community Development and SCS agreed.

## 2 USER PROVIDED INFORMATION

A user questionnaire was provided to the City of Tucson Housing and Community Development and completed by Mr. Ronald Koenig, City of Tucson Community Services Manager, on July 15, 2015. A copy of the completed questionnaire is included in Appendix B.

### TITLE RECORDS

No historical title information was provided to or was obtained by SCS.

### ENVIRONMENTAL LIENS OR ACTIVITY AND USE LIMITATIONS (AULS)

Mr. Koenig did not know of environmental cleanup liens or activity and land use limitations (AULs) for the site. He noted that there is an Affordability Land Use Restriction (LURA) on the site through 2036 by the Federal Deposit Insurance Corporation (FDIC) managed by the Phoenix Revitalization Corporation.

A search of environmental liens, deed restrictions such as Voluntary Environmental Mitigation Use Restrictions (VEMURs) or Declaration of Environmental Use Restrictions (DEURs), and Arizona Department of Environmental Quality (ADEQ) AZURITE tracking system for the site was performed by Allands. No VEMURs, DEURs, environmental liens, brownfields, institutional controls, engineering controls, or AULs were found for the site. This information is included in the Allands reports included in Appendices C and G.

### KNOWLEDGE OR EXPERIENCE REGARDING THE SITE

Mr. Koenig stated he did not have specialized knowledge of the subject site or experience related to the site or nearby properties, other than that the site was previously used for residential rental and transitional housing purposes.

### VALUATION REDUCTION FOR ENVIRONMENTAL ISSUES

Not applicable.

### OWNER, PROPERTY MANAGER, AND OCCUPANT INFORMATION

The current owner, property manager, and occupant of the site are listed below.

- **Owner:** City of Tucson
- **Property Manager:** City of Tucson
- **Occupants:** Vacant

## REASON FOR PERFORMING PHASE I ESA

This assessment was performed for City of Tucson Housing and Community Development prior to the property being rehabilitated. Phase I ESAs are generally performed to make “all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice” as defined by CERCLA §101(35), 42 U.S.C. §9601(35), for the bona fide prospective purchaser exception or the innocent landowner defense to CERCLA liability.

## OTHER

City of Tucson Housing and Community Development provided SCS with a document that contained partial Phase I ESA and Comprehensive Asbestos Survey reports; these are discussed in Section 5 under *Helpful Documents*.

### 3 RECORDS REVIEW – PHYSICAL SETTING SOURCES

#### STANDARD PHYSICAL SETTING SOURCE – USGS 7.5-MINUTE TOPOGRAPHIC MAP

The United States Geological Survey (USGS) 7.5-minute topographic map containing the site, *Tucson North, Arizona*, was obtained and reviewed to evaluate the topographic characteristics of the site area. The reviewed map was dated 1984. Topography was also reviewed on the Pima County MapGuide website. The maps showed the elevation on the site as approximately 2,340 feet above mean sea level. The topography of the site area slopes generally west or northwest at a gradient of approximately 20 feet per mile. The ephemeral Santa Cruz River and Rillito River are located approximately 2.5 miles west and 1.25 miles north of the site, respectively. A copy of the topographic map of the site area is provided in the All Lands regulatory database report in Appendix D.

#### OTHER PHYSICAL SETTING SOURCES

##### **Summary of Local Geology**

The site is within the Basin and Range Physiographic Province, which is characterized by broad alluvial-filled basins bounded by steep, fault-block mountains. The Tucson Basin is a structural depression within the Basin and Range Physiographic Province. The Tucson Basin fill deposits are characterized by three stratigraphic units (from bottom to top): the Pantano Formation, the Tinaja beds, and the Fort Lowell Formation. Overlying the Fort Lowell Formation are younger, well-preserved surficial alluvium terrace deposits.

The Pantano Formation is thousands of feet thick, and consists of conglomerate, sandstone, mudstone, gypsiferous mudstone, volcanic flows and tuffs, landslide debris, and megabreccia lenses. The Tinaja beds are also thousands of feet thick, and the upper, middle, and lower units consist of silty gravel, conglomerate, volcanic flows and tuffs, gypsiferous and anhydritic clayey silt and mudstone, and sand and clayey silt in the central portion of the basin, grading to gravel and sand near the mountains at the edges of the basin. The Fort Lowell Formation is generally 300 to 400 feet thick, and consists of unconsolidated to moderately consolidated sediments grading from silty gravel at the basin margins to a sandy silt and clayey silt in the center of the basin. The surficial alluvium terrace sediments are generally thin (averaging 30 to 70 feet in thickness) and silty, and become younger and lower in relief closer to the Santa Cruz River (Anderson 1987; McKittrick 1988; Murphy and Hedley 1984).

##### **Summary of Regional Hydrogeology**

The site is located within the Tucson sub-area of the Upper Santa Cruz Basin area, in the Tucson Active Management Area. The Pantano Formation, Tinaja beds, and Fort Lowell Formation form a single aquifer; however, the primary source of groundwater in the Tucson sub-area is the Fort Lowell Formation. The ephemeral Santa Cruz River and Rillito River are located approximately 2.5 miles west and 1.25 miles north of the site, respectively.

Depth to groundwater measured in wells shown on the ADWR map (Murphy and Hedley 1984) in the site area ranged between approximately 126-148 feet below ground surface (bgs). Depths to water listed for two wells identified in the Allands report discussed in Section 3 under *Arizona Department of Water Resources Well Registration Database* were 103 and 151 feet bgs. Regional groundwater flow in the vicinity of the site was shown on the ADWR maps to be generally toward the northwest. Groundwater flow direction and gradient may be significantly influenced by localized sources of withdrawal and recharge, such as irrigation wells and unlined channels, respectively (Murphy and Hedley 1984; Mason and Bota 2006).

## 4 RECORDS REVIEW – ENVIRONMENTAL RECORD SOURCES

### INTRODUCTION

Allands was retained by SCS to perform a database search of the standard and additional federal, state, tribal, and local environmental record sources for the site, as identified in the table below. The database search was conducted by Allands on July 17, 2015. A copy of the Allands regulatory database search report is included in Appendix D.

The following table lists the reviewed environmental databases, the database compilation dates, the distances searched by Allands from the site boundary, and whether the site or a facility interpreted to be adjoining the site was identified on each database.

**Table 1. Regulatory Database Search Summary**

Database	Date of Database	Approximate Minimum Search Distance (miles)	Reported Facilities	Site	Adjoining Site
<b>Standard Federal ASTM Environmental Record Sources</b>					
NPL (National Priorities List) / Proposed NPL / DOD (Department of Defense Sites)	5/2015	1.0	0	No	No
Delisted National Priorities List	5/2015	0.5	0	No	No
CERCLIS (Comprehensive Environmental Response, Compensation and Liability Information System)/No Further Remedial Action Planned (NFRAP)	1/2014	0.5	1	No	No
RCRA (Resource Conservation and Recovery Act)	5/2015	0.125	0	No	No
RCRA – CORRACTS TSDFs (Corrective Action Treatment, Storage, and Disposal Facilities)	5/2015	1.0	0	No	No
RCRA – Non-CORRACTS TSDFs	5/2015	0.5	0	No	No
ERNS (Emergency Response Notification System)	5/2015	0.125	1	No	No
<b>Standard State and Tribal ASTM Environmental Record Sources</b>					
WQARF (Water Quality Assurance Revolving Fund) Areas	5/2015	1.0	0	No	No
Superfund Program List (replaces ACIDS)	8/2004	0.5	0	No	No
Solid Waste Facilities/Landfill Sites - Operating and Closed	5/1999 & 5/2004	0.5	0	No	No
Control Registries	5/2015	Site and adjoining	0	No	No
Brownfields / Voluntary Remediation Program	10/2014	0.5	0	No	No
Registered USTs (Underground Storage Tanks)	5/2015	0.125	2	No	No
LUSTs (Leaking Underground Storage Tanks) Incident Reports	5/2015	0.5	10	No	No
<b>Additional Environmental Record Sources</b>					
RCRA Compliance Facilities	5/2015	0.125	0	No	No

**Table 1. Regulatory Database Search Summary**

Database	Date of Database	Approximate Minimum Search Distance (miles)	Reported Facilities	Site	Adjoining Site
Hazardous Materials Incidents Emergency Response Logbook	1984-6/2001	0.125	1	No	No
ADEQ Drywell Registration Database (includes Tribal records)	5/2015	0.125	0	No	No
Environmental Permits	5/2015	Site	0	No	NA
Dry Cleaners	6/2006	0.125	0	No	No
Arizona Department of Water Resources Well Registration Database	1/2015	Site and adjoining	4	No	Yes
VEMURs, DEURs, and Environmental Liens	5/2015	Site	0	No	NA

## ENVIRONMENTAL RECORD SOURCE FINDINGS

Based on the groundwater flow direction in relation to the subject site and the location and status of the environmental database listing, only the database listings deemed to be potential RECs are discussed below in this section. The hydrogeologic flow direction (“gradient direction”) with respect to the site is identified for each database listing using the following descriptors:

- **Upgradient** – Based on the estimated direction of groundwater flow, the site may be in the path of groundwater flowing from the location of the database listing. If this groundwater is impacted by contaminants, there is a potential for groundwater beneath the site to be impacted.
- **Downgradient** – Based on the estimated direction of groundwater flow, the site is not in the path of groundwater flowing from the location of the database listing. If this groundwater is impacted by contaminants, it is not likely that groundwater beneath the site would be impacted.
- **Crossgradient** – Based on the estimated direction of groundwater flow, the site is not in the path of groundwater flowing from the location of the database listing. If this groundwater is impacted by contaminants, it is not likely that groundwater beneath the site would be impacted. However, if the database listing is on a property that adjoins the site, there could potentially be impacts to groundwater beneath the site depending on the location of the impacted area.

As discussed in Section 3 under *Summary of Regional Hydrogeology*, the regional groundwater flow in the vicinity of the site is generally toward the northwest.

### Standard Federal ASTM Environmental Record Sources

#### Federal CERCLIS/NFRAP List

**Explanation.** The Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) is a comprehensive database and management system, compiled and maintained by the EPA, which inventories and tracks suspected or actual hazardous

substances sites under the Superfund program. These sites were reported to the EPA by states, municipalities, private companies, and private persons. Actions that may be taken under CERCLA include a preliminary assessment, remedial investigation, feasibility study, and remedial cleanup. Inclusion of a specific site or area in the CERCLIS database does not represent a determination of any party's liability, nor does it represent a finding that any response action is necessary. Those sites that are on the NFRAP ("No Further Remedial Action Planned") list have no further remediation actions planned by EPA.

**Search Results.** The site and adjoining properties were not identified on the CERCLIS/NFRAP list. The following CERCLIS/NFRAP List site was identified within 0.5 mile of the site.

**Table 2. CERCLIS/NFRAP List Results**

Facility	Address	NFRAP	Distance/ Gradient Direction	Environmental Concern?
Artful Dusters	3450 North Stone Ave #205	X	0.1 mi. S/ Crossgradient	No

This CERCLIS site was designated NFRAP, which indicates that CERCLA investigations by the EPA did not identify significant environmental problems at the facility, identified concerns have been adequately addressed under CERCLA, or the case has been transferred to another regulatory program. The hydrogeologic location relative to the site and NFRAP status indicates that it is not likely to be a REC for the site.

#### Federal ERNS List

**Explanation.** The Emergency Response Notification System (ERNS) is a national computer database and retrieval system compiled by the National Response Center containing information on release notifications of oil and hazardous substances that have occurred throughout the United States and have been reported to the National Response Center, the ten EPA Regions, or the Coast Guard. Information may include discharge operator information, date of release, material released, incident location, and environmental medium into which the release occurred. The ERNS database is searched for the subject site.

**Search Results.** The site and adjoining properties were not identified on the ERNS list. The following incident was identified within 0.125 mile of the site.

**Table 3. ERNS List Results**

Location	Description	Distance/ Gradient Direction	Environmental Concern?
3620 North Stone Ave	1987 – 30 gallons untested mineral oil spilled, 2 pole-mounted transformers ruptured when a car hit pole and knocked it over.	0.1 mi. N/ Crossgradient	No

This incident was also identified on the Arizona Hazardous Materials Incident Emergency Response Log, discussed later in this section. Based on the address listed for the above incident, it did not occur on the site or an adjoining property. Spills from transformers are typically cleaned up by the utility that owns the transformer, which was identified as Tucson Electric

Power Company on the Arizona Hazardous Materials Incidents log. Therefore, this incident is not considered a REC for the site.

### Standard State and Tribal ASTM Environmental Record Sources

#### Arizona Registered USTs

**Explanation.** ADEQ maintains a list of registered USTs in Arizona that contain or have contained regulated substances, primarily petroleum products. The list includes information, where available, regarding the location, owner, number of registered tanks, contents, capacity, age, tank and piping construction material, and type of piping system.

**Search Results.** The site and adjoining properties were not listed on the UST database. The following facilities with USTs were identified within a 0.125-mile search distance from the site.

**Table 4. UST Database Results**

Facility	Address	# Tanks	Closed	Distance/ Gradient Direction	Environmental Concern?
Vacant	1 East Prince Road	2	Removed 3/1998	<0.1 mi. N/ Crossgradient	No
Amphitheater High School	125 West Yavapai Road	1	Removed 9/1990	0.1 mi. SW or W/ Cross or Downgradient	No

The USTs at the above two facilities have been removed. The USTs located at 1 East Prince Road were also listed as having a closed LUST case with ADEQ; this facility is discussed in the LUSTs section below. These facilities are not located on properties adjoining the site and are not located hydrogeologically upgradient of the site. Therefore, these two UST facilities are not considered to be RECs for the site.

#### Arizona LUSTs

**Explanation.** ADEQ maintains a list of LUSTs in Arizona that have had a reported release of regulated substances, primarily petroleum products. The list identifies the owner, location, date of release, and date of closure, if applicable.

**Search Results.** No LUST facilities were identified on the site or adjoining properties. The following LUST facilities were identified within a 0.5-mile search distance from the site.

**Table 5. LUST Database Results**

Facility	Address	Date Case Closed	P Code	Distance/Gradient Direction	Environmental Concern?
Vacant	1 E Prince Rd	6/18/1998	5R1	<0.1 mi. N/ Crossgradient	No
Circle K #775	402 E Prince Rd	8/14/1997 6/11/1999 (3)	5R1 5S	0.3 mi. ENE/ Crossgradient	No
Circle K Store #27000547	3602 N Oracle Rd	3/30/1995	5R1	0.3 mi. WNW/ Downgradient	No
Lube Pit #3 (060166) Oracle	3502 N Oracle Rd	5/27/1997 (4)	5R1	0.3 mi. WSW/ Crossgradient	No

**Table 5. LUST Database Results**

Facility	Address	Date Case Closed	P Code	Distance/Gradient Direction	Environmental Concern?
Oracle Prince Chevron / Fast Fuel	3601 N Oracle Rd	2/21/1998	5R1	0.3 mi. WNW/ Downgradient	No
Diocese Of Tucson / Holy Hope Cemetery	3555 N Oracle Rd	7/14/2003 (3)	5R1	0.3 mi. W or SW/ Crossgradient	No
Texaco #60-351-0044/Equilon	3520 N Oracle Rd	1/31/1997 8/2/2004 (3)	5R1	0.3 mi. WSW/ Crossgradient	No
Rice Plumbing Co	3232 N Stone Ave	7/15/1997	5R1	0.4 mi. S/ Crossgradient	No
Welford Construction Company	98 E Fort Lowell Rd	3/2/2000	5R1	0.4 mi. S/ Crossgradient	No
Econo Lube N Tune #89	3332 N Oracle Rd	5/1/2007	5R1	0.4 mi. SW/ Crossgradient	No

P (Priority) Codes:

5R1 Closed soil levels meet RBCA

5S Closed case for suspected release (false alarm)

The LUST facilities listed above all have closed LUST cases with ADEQ, have impacts only to soil, are not located on properties adjoining the site, and are not located hydrogeologically upgradient from the site. Based on these reasons, these LUST facilities are not likely to be a REC for the site.

#### Additional Environmental Record Sources

##### Arizona Hazardous Materials Incidents Emergency Response Log

**Explanation.** The ADEQ Emergency Response Unit documents chemical spills and incidents that have been reported to the unit. This is generally the Arizona equivalent to the Federal ERNS list. Reported incidents have been compiled into yearly lists, beginning with the year 1984. All lists except for 1987 provide the addresses of the recorded incidents. This database is searched for the subject site.

**Search Results.** The site and adjoining properties were not identified on the Hazardous Materials Incidents log. The following incident was identified within 0.125 mile of the site.

**Table 6. Hazardous Materials Incidents Log Results**

Facility	Location	Description	Distance/ Gradient Direction	Environmental Concern?
Tucson Electric Power	3620 North Stone Ave	11/30/1987 – 30 gallons untested mineral oil	0.1 mi. N/ Crossgradient	No

This incident was discussed previously in this section under the *Federal ERNS List*.

##### Arizona Department of Water Resources Well Registration Database

**Explanation.** The Arizona Department of Water Resources (ADWR) Well Registration Database contains information provided to the ADWR Operations Division by well drillers and/or owners of wells.

**Search Results.** Four registered well listings were identified in the Allands report. Owners identified for the listings were Southwest Gas Corp and private owners. Water uses were listed as domestic, irrigation, and none. SCS reviewed online records on the ADWR website for the four well listings. The two listings registered to Southwest Gas Corp are for the purpose of cathodic protection; one of the locations (ADWR #55-534312) is within the City of Tucson right of way at the property that adjoins the site to the southwest (3525 North Stone Avenue); this well had a depth to groundwater of 103 feet below ground surface (bgs) in 1992. The other three wells are located on the site or adjoining properties. Depth to water of 151 feet bgs was provided for one of the other wells.

**VEMURs, DEURs, and Environmental Liens**

**Explanation.** Voluntary Environmental Mitigation Use Restrictions (VEMURs) or Declaration of Environmental Use Restrictions (DEURs) are used to restrict properties to non-residential use if contaminants in soil have been cleaned up to below Arizona Non-Residential Soil Remediation Levels (NRSRLs), but remaining concentrations are above the Arizona Residential Soil Remediation Levels (RSRLs). ADEQ maintains a repository listing of sites remediated under programs administered by the department. This is called the Remediation and DEUR Tracking System (RDT). ADEQ’s RDT was researched for the subject site.

**Search Results.** The site was not identified as having environmental deed restrictions or liens.

**VAPOR ENCROACHMENT SCREEN (VES)**

As requested by the City of Tucson, a Tier 1 vapor encroachment screen (VES) was performed for the site per the ASTM E2600-10 *Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions* in order to evaluate whether there is a potential vapor encroachment condition (VEC) for the site that could potentially be considered a REC. A VEC is the presence or likely presence of chemicals of concern (COC) in soil vapor beneath a property that have been caused by releases from contaminated soil or groundwater either on or near the property, as identified by Tier 1 or Tier 2 procedures. The VES is intended to reduce, but not eliminate, uncertainty regarding whether or not a VEC exists at a property.

Information obtained during the performance of the Phase I ESA was used for preparation of this VES. The regulatory database records searched for the Phase I ESA were also used for the VES standard environmental record sources, which are listed below:

**Table 7. VES Regulatory Database Search Summary**

Standard Environmental Record Sources (where available)	Area of Concern	
	Approximate Minimum Search Distance (in miles)	
	Chemicals of Concern	Petroleum Hydrocarbon Chemicals of Concern
Federal NPL Site List	1/3	1/10
Federal CERCLIS List	1/3	1/10
Federal RCRA CORRACTS Facilities List	1/3	1/10
Federal RCRA Non-CORRACTS TSDFs List	1/3	1/10
Federal RCRA Generators List	Site Only	Site Only

**Table 7. VES Regulatory Database Search Summary**

Standard Environmental Record Sources (where available)	Area of Concern	
	Approximate Minimum Search Distance (in miles)	
	Chemicals of Concern	Petroleum Hydrocarbon Chemicals of Concern
Federal Institutional Control/Engineering Control Registries	Site Only	Site Only
Federal ERNS List	Site Only	Site Only
State- and Tribal-equivalent NPL Lists	1/3	1/10
State- and Tribal-equivalent CERCLIS Lists	1/3	1/10
State- and Tribal-equivalent Landfill and/or Solid Waste Disposal Sites Lists	1/3	1/10
State- and Tribal-equivalent Leaking Storage Tank Lists	1/3	1/10
State- and Tribal-equivalent Registered Storage Tanks Lists	Site Only	Site Only
State- and Tribal-equivalent Institutional Control/Engineering Control Registries	Site Only	Site Only
State- and Tribal-equivalent Voluntary Cleanup Sites Lists	1/3	1/10
State- and Tribal-equivalent Brownfield Sites Lists	1/3	1/10

The following “critical distance determination” was used as described in ASTM E2600-10 (section 9.2), as modified for instances where the direction of groundwater flow is known (per Buonicore 2009, 2011) to determine whether a listed facility or incident is within the area of concern for a potential VEC:

**Table 8. Modified Area of Concern (Distance of Contamination Plume from Site)**

Hydrogeologic Direction From Site	Chemicals of Concern	Petroleum Hydrocarbon Chemicals of Concern
Upgradient	1,760 feet	528 feet
Crossgradient	365 feet	95 feet – Dissolved 165 feet – LNAPL (light nonaqueous phase liquid)
Downgradient	100 feet	30 feet – Dissolved 100 feet – LNAPL

The above modified area of concern was used to evaluate the facilities and incidents discussed previously in this section for the Phase I ESA regulatory database search, as shown in the table below.

**Table 9. VEC Evaluation Based on Modified Area of Concern**

Facility	Address	Database/Discussion	Distance/ Gradient Direction	VEC?
Artful Dusters	3450 N Stone Ave #205	CERCLIS/NFRAP	0.1 mi. (475 feet) S/ Crossgradient	No
Tucson Electric Power	3620 N Stone Ave	ERNS/Hazardous Materials Incidents Log – spill of transformer oil	0.1 mi. (525 feet) N/ Crossgradient	No
Amphitheater High School	125 W Yavapai Road	UST – No suspected contamination	0.1 mi. (345 feet) SW or W/ Cross or Downgradient	No

**Table 9. VEC Evaluation Based on Modified Area of Concern**

Facility	Address	Database/Discussion	Distance/ Gradient Direction	VEC?
Vacant	1 E Prince Rd	UST/LUST – Impacts only to soil	<0.1 mi. (350 feet) N/ Crossgradient	No
Circle K #775	402 E Prince Rd	LUST– Impacts only to soil	0.3 mi. ENE/ Crossgradient	No
Circle K Store #27000547	3602 N Oracle Rd	LUST– Impacts only to soil	0.3 mi. WNW/ Downgradient	No
Lube Pit #3 (060166) Oracle	3502 N Oracle Rd	LUST– Impacts only to soil	0.3 mi. WSW/ Crossgradient	No
Oracle Prince Chevron / Fast Fuel	3601 N Oracle Rd	LUST– Impacts only to soil	0.3 mi. WNW/ Downgradient	No
Diocese Of Tucson / Holy Hope Cemetery	3555 N Oracle Rd	LUST– Impacts only to soil	0.3 mi. W or SW/ Crossgradient	No
Texaco #60-351-0044/Equilon	3520 N Oracle Rd	LUST– Impacts only to soil	0.3 mi. WSW/ Crossgradient	No
Rice Plumbing Co	3232 N Stone Ave	LUST– Impacts only to soil	0.4 mi. S/ Crossgradient	No
Welford Construction Company	98 E Fort Lowell Rd	LUST– Impacts only to soil	0.4 mi. S/ Crossgradient	No
Econo Lube N Tune #89	3332 N Oracle Rd	LUST– Impacts only to soil	0.4 mi. SW/ Crossgradient	No

As shown in the table above, based on the locations of the facilities and incidents relative to the site and information regarding the type and status of the listing, VECs were ruled out for each listing because the listed facilities were outside the area of concern. No other information was found during the Phase I ESA investigation that would indicate the likely presence of a VEC on the site.

## 5 RECORDS REVIEW – HISTORICAL USE INFORMATION

### STANDARD HISTORICAL SOURCES

A summary of the standard historical sources and the dates researched is provided in the table below.

**Table 10. Standard Historical Source Summary**

Dates	Aerial Photos	Sanborn Maps	Topographic Maps	City Directories	Building Records	Land Title Records	Other
Pre-1900							1871
1900-1904							
1905-1909			1905				
1910-1914							
1915-1919			1916				
1920-1924				(1920)			
1925-1929				(1925)			
1930-1934			1932	1930			
1935-1939				1938			
1940-1944							
1945-1949	1946		1947	1946			
1950-1954				1950, 1952			
1955-1959	1958		1957, 1959	1955			
1960-1964			1962	1962	1962-1964		
1965-1969	1967		1967	1965	1965		
1970-1974	1972		1973	1970	1970		
1975-1979			1977	1976	1976		
1980-1984	1980, 1983		1984	1980	1981, 1983-1984		
1985-1989				1985	1985		
1990-1994	1990-1992		1994	1992	1992		
1995-1999	1996, 1998		1995	1995	1999		1995
2000-2004	2002-2004		2002	2001	2000		
2005-2009	2005-2009			2005			
2010-2014	2010-2014			2010, 2014			
2015							
Able to determine date when site was undeveloped:				<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO		
Historical data source failure?				<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		

Because many of the historical dates listed in the report are based on a limited selection of historical resources, they are considered to be approximations only; the actual beginning/ending dates for many of the site uses listed in the report may have been earlier or later than indicated.

There were several gaps in the historical information prior to 1930 and from 1938-1946. The only identified uses of the site have been residential and a welding shop. Therefore, these data gaps are not considered significant.

#### Aerial Photographs

Historical aerial photographs of the site were reviewed for the period 1946 through 2014 to evaluate past uses of the site and adjoining area. Copies of selected historical aerial photographs

are included in Appendix E. The 2014 aerial photograph is used as a base for Figures 2 and 3 in Appendix A. Information obtained for the site from the reviewed aerial photographs is discussed in the table below.

**Table 11. Historical Aerial Photographs – Site**

Year	Description
1946	Occupied by one small structure in the western portion of the site. The remainder of the site appeared to be vacant.
1958-1983	Occupied by two structures in the western portion of the site; the north structure appeared to be a residence. A driveway was located in the southwest portion of the site. The south structure appeared to have been added onto in the 1980 aerial photograph.
1992-2014	Occupied by current apartment structures. A canopy was added between the two apartment structures between 2002 and 2003.

Properties adjoining the site are discussed in the table below. Stone Avenue adjoined the west site boundary and alleys adjoined the east and south site boundaries. Windsor Street extended west from Stone Avenue, southwest of the site.

**Table 12. Historical Aerial Photographs – Adjoining Properties**

Adjoining Site	Description	
North	1946-1958	Approximately one to two structures, possibly residential.
	1967-2014	Three current structures; numerous vehicles were present during some years.
Northeast and East	1946	Apparent residential property.
	1958-1967	Occupied by 3-9 possible mobile homes.
	1972-2014	Vacant except for a few vehicles, with a large structure to the north. In 2010, the south portion of the property contained a parking area.
Southeast	1946	Vacant and undeveloped.
	1958-2006	Vacant fenced yard with a small structure in the south portion until the 1990s.
	2006-2014	Current apartment structures (under construction in 2006) and parking area.
South	1946	Vacant and undeveloped.
	1958-1972	Small structure present in the east portion of the property.
	1980-2014	Current apartment structure and two smaller structures.
Southwest	1946	Vacant and undeveloped.
	1958-1983	Possible residential structure.
	1990-2014	Current apartment structures and a swimming pool.
West	1946	Probable residential structures.
	1958-2014	Current structure. Additional structures were present in the southwest portion of the property from 1958 to 1980; possibly residential.
Northwest	1946-1998	Possible residential structure.
	2002-2014	Parking lot; empty in 2003-2006, and used for parking of trucks and other vehicles after 2006.

### Fire Insurance Maps

Historic fire insurance rate maps, such as those published by the Sanborn Map Company, show locations of structures and other features and uses of buildings for numerous cities in the United States. The Allands report stated that there was no map coverage for the site.

### USGS 7.5-Minute Topographic Maps

Editions of the USGS 7.5-minute topographic map containing the site, *Tucson North, Arizona*, were reviewed for the years 1905 through 2002. A copy of the 1984 topographic map for the site area is provided in the Allands regulatory database report in Appendix D. The 1905 through 1957 map versions showed two small structures on the south side of Prince Road in the vicinity of the site; no other structures, roads, or other features were shown in the site area. The 1959 through 2002 map versions showed the site area shaded as undifferentiated urban area, with no individual structures shown on the site or adjoining properties; North Stone Avenue and other streets were shown on these map versions.

### Local Street Directories

City directories identify occupants of listed addresses. SCS performed a search of the city directories at the Pima County Main Library in approximate five-year intervals for site addresses from 1920 to 2014. If a particular directory was not available, the directory with the closest available year was reviewed. No addresses were listed in the vicinity of the site on North Stone Avenue in the 1920 or 1925 city directories. A summary of city directory listings for the site addresses is included in the table below.

**Table 13. City Directories – Site**

Address	Occupant (Date)
3530 North Stone Avenue*	Residences (1938-62)
3534 North Stone Avenue	Residence (1946-76)
3552 North Stone Avenue	Apartments (1985-2014), Family Counseling Agency (2008-10)

\*May be on the site or may adjoin the site to the south

A summary of city directory listings for property addresses adjoining the site is included in the table below. Occupants that may have used or stored hazardous materials or petroleum products are in bold italics. East Prince Road was not listed in the 1938 or earlier city directories. East Yavapai Road was first listed in the 1930 city directory, but no addresses were listed.

**Table 14. City Directories – Adjoining Properties**

Direction and Address	Occupant (Date)
North (3536 N Stone Ave)	Residence (1946-55), <b><i>Ace Plastics &amp; Mlwrk</i></b> (1962-70), Arizona Custom Upholstery (1976), Allied Lumber Products (1976-80), Bel-Air Coins & Stamp (1976-80), Cappy's (1980), ARCO Equipment Rental (1985), Advanced Mattress (1985, <b><i>Artistic Auto Craft</i></b> (1980-85), Lucy's Beauty Salon (1985), <b><i>Automotive Specialist</i></b> (1993-1995), <b><i>Sag Auto Sales</i></b> (1993-1995), <b><i>Dennis Auto Care</i></b> (1995), <b><i>Jim's Automotive</i></b> (1993-2001), <b><i>Prince &amp; Stone Motors</i></b> (2001), Velocity Auto Accessories (2002-05), Desert Barricades (2004-14)
Northeast and East (104 E Prince Rd)	Residences (1946), Residential Court (1962), Residences (1965), J P Fitzgerald Inc. (1976-80), Fsh Communications (2006-10), Tucson Preparatory School (2007-14)

**Table 14. City Directories – Adjoining Properties**

Direction and Address	Occupant (Date)
Southeast (105 E Yavapai Rd)	Residences (1946-55, 1962-85), Apartments (1989-2014)
South (3528 N Stone Ave)	Residence (1952, 1960, 1970), Apartments (1980-2014)
Southwest (3525 N Stone Ave)	Residence (1952-65, 1976), Apartments (1985-2014), Compass Health Care Inc. (1994-2005)
Southwest or West (3535 N Stone Ave)	Electrolux Corp (1955)
West (3543 N Stone Ave)	Residences (1952-76), Buy-Lo Furniture (1980), Discount Off Road Center (1985), Telestar Serv (1986-92), Residence? (1995), Attention Bench/Transit Advertising (2001-05), Aztec Temporaries (2005), Naturopathic Colon Hydrotherapy (2005)
West (3545 N Stone Ave)	Residence (1946)
Northwest (3549 N Stone Ave)	Residence (1946-55), Stone Ave Cooler Pad Co/Stone Avenue Pad Mfg (1962-70)

### Building Department Records

An online search of Pima County Development Services permit records was performed for the site parcel to identify historical occupancies and evidence of potential environmental liabilities. No permit records were identified for the site address.

A search for permit records was also performed on the City of Tucson Development Services website and at the City building permit records department for the site addresses. Information in the files is discussed below.

- 3534 North Stone Avenue – The site address when it was occupied by a residence (at least 1962 through 1983). Permit records included signs, air conditioning, fence, natural gas piping, reroofing, awning, plumbing, and electrical. A 1970 sign permit was for “Ray’s Fix-It Shop Welding.” A figure showed the location of the shop adjacent to the north side of the garage, apparently where a new awning was attached. A 1976 permit for a sewer connection indicated that a septic tank was filled in. Documents beginning in June 1983 indicated that there were violations for an open house and trash until the building was finally demolished and the debris was removed by November 1983. Copies of selected documents are included in Appendix F.
- 3552 North Stone Avenue – The site address when it was occupied by the current apartments. Permit records included building plans for the current apartment buildings (1983), a geotechnical report prepared prior to construction of the apartments (1983), and various permits for the apartment construction, swimming pool, electrical reconnects, a complaint about poor building conditions (1992), and other such documents. The owner of the site at the time the apartments were constructed was TTAB Investing Venture or TTAB Limited Partnership. The swimming pool and associated equipment and fence were filled in/removed in 2000 and a new ramada was constructed in its place.

## City and County Websites

Parcel information, plat maps, site topography, sanitary sewer locations, hydrological information, and other information was reviewed for the site on the Pima County Assessor and City and County Department of Transportation websites. Site information is included in the table below.

**Table 15. Pima County and City of Tucson Websites**

Map Information	Discussion
<b>Adjoining Property Owners</b>	Shadowcor, LLC; Tucson Preparatory School, Inc; Cope Properties, LLC; Compass Healthcare, Inc; Corfinium Holdings, LLC; CWI Properties, LLC; and a trust.
<b>Adjoining Building Dates</b>	There was development on one adjoining property by 1922 and another by 1939.
<b>Site Zoning</b>	C-2: General and Intensive Commercial
<b>Annexation</b>	Annexed by City of Tucson ordinance in 1959
<b>Water Service Provider in Site Area</b>	City of Tucson
<b>Sanitary Sewer Lines</b>	Pima County – Two sewer mains located along North Stone Avenue, including a 21-inch reinforced concrete box (RCP) and an 8-inch vitrified clay pipe (VCP), both built in 1986. A sewer main is also located along the alley adjoining the site to the east, consisting of an 8-inch polyvinylchloride (PVC) pipe installed in 1983. According to the sewer plans G-83-25 (dated 9/1/1983), the PVC sewer main was installed to serve a new 26-unit apartment complex located on the site parcel.
<b>Landfills</b>	None on or adjoining site.
<b>Washes and Riparian Areas</b>	None on or adjoining site.
<b>Soil Group</b>	Soil Group B, Mohave Soils and Urban Land, 1-8 percent slopes

## Recorded Land Title Records and Property Tax Files

No historical chain of title search was performed for the site. The Allands environmental deed restrictions and liens report included a copy of the site parcel map; parcel information and a copy of the most recent deed (dated 1995) was also provided. The City of Tucson was listed as the current owner of the site. A copy of the Allands environmental liens and AULs report is included in Appendix C.

## OTHER HISTORICAL SOURCES

### 1871 Surveyor General's Map

A land survey map by the Surveyor General's Office for the township and range containing the site section (southwest quarter of Section 25) indicated the area was surveyed and filed in 1871. No features were shown in the southwest quarter of this section; an apparent dirt road was shown east of the quarter section.

### Pima County Assessor Information and Property Record Card

Information on the Pima County Assessor's Office website was reviewed, which included a Property Record Card and building plan. The size of the site is 30,688 square feet and the site is occupied by apartments built in 1984. There was reported to be 26 units, including office and

manager units, in two buildings. Building A was listed as containing 8 one-bedroom apartments and Building B was listed as containing 10 studio apartments and 8 one-bedroom apartments. The construction used in the buildings was listed as concrete block walls, stucco, sliding windows, flat roof, wood truss and plywood roof, built-up roof, concrete floor, wood joists, vinyl asbestos tile (VAT), carpet, and drywall walls and ceilings. The laundry was listed as having concrete block walls, stucco, aluminum sliders, wood joists, mission tile roofing, concrete 4" flooring, VAT, drywall walls and ceilings, and evaporative cooling.

## HELPFUL DOCUMENTS

### Previous Reports

The City of Tucson provided SCS with a document titled "Wallace Associates Consulting Group, Underwriter Recommendation, Appendix VII: Excerpts from Phase I Environmental Site Assessment." This document included the following partial documents that are discussed below. A copy of this document is included in Appendix G.

- Phase I ESA performed by Environmental Engineering Consultants (EEC) for Telacu Carpenter Realcon for the property titled "Phil and Bella Phillips (Stone Pointe Apartments), 3534 North Stone Avenue, Tucson, Pima County, Arizona" and dated December 31, 1993 (1.0 Scope of Work and 2.0 Asset Information table on page 1; and 8.0 Summary and Recommendations, 9.0 Persons Performing the Phase I ESA, and 10.0 Limitations on pages 13-15).

According to the report, the site was occupied by Stone Point Apartments, consisting of two 2-story buildings containing 26 apartment units. Two pad-mounted transformers were identified at the site; no leaks were identified from the transformers. Two types of asbestos-containing materials were identified, consisting of sink insulation and roof caulk. Radon, lead-based paint, and lead in drinking water were not considered to be of concern for the site. No environmental concerns were identified for the site and there were no recommendations for additional environmental investigation. An operations and maintenance program was recommended to track and manage the asbestos-containing materials.

- Comprehensive Asbestos Survey performed by EEC for Telacu Carpenter Realcon for the property titled "Phil and Bella Phillips (Stone Pointe Apartments), 3534 North Stone Avenue, Tucson, Pima County, Arizona" and dated December 31, 1993 (includes entire text pages 1-8, but no appendices).

The construction of the buildings was described as block and mortar with exterior stucco finishing. The interiors of the buildings contained drywall, floor tile, linoleum, carpeting with mastic, and covebase. The heating and cooling system air handling units were located on the roofs.

The report stated that an asbestos survey was performed for both interior and exterior portions of the buildings by collection of 83 samples of 21 suspect asbestos-containing materials (ACMs) in general accordance with the Asbestos Hazard

Emergency Response Act (AHERA). The sampled building materials included drywall, carpet and mastic, 12x12 floor tiles, white sink insulation, covebase, fixture caulk, linoleum, roofing, roof flashing, roof caulk, and stucco. The white sink insulation (130 square feet) and the roof caulk (50 square feet) were found to be non-friable Category II ACMs. An operations and maintenance plan was recommended for the ACMs.

- Physical and Structural Assessment of the Stonepoint Apartments, 3552 North Stone, Tucson, Arizona, by Bernard J. Cook and Richard T. Merkle of Property Profile, Inc. for Telacu Carpenter Realcon and the RTC, dated October 14, 1994.

The report summarized various types of information about the property structures and improvements, such as number, types, sizes, and construction of buildings; heating and cooling systems; utilities; parking lot condition and adequacy; etc., and evaluated the site for features such as topography, flood risk, stormwater, erosion or settling, landscaping, etc. The report recommended areas of the site and buildings that needed repairs.

## 6 SITE DESCRIPTION AND RECONNAISSANCE

### SITE LOCATION AND LEGAL DESCRIPTION

The site consists of the property at 3552 North Stone Avenue (APN 106-03-0030), located in Tucson, Pima County, Arizona. The site is located within the southwest quarter of Section 25, Township 13 South, Range 13 East of the Gila and Salt River Base and Meridian. The Site and Vicinity Map and Site Plan are provided as Figures 2 and 3 in Appendix A.

### GENERAL SITE SETTING

The area of the site is within a mixed use urban setting containing residential properties (including apartments and trailer courts), commercial businesses, and schools.

### CURRENT USE OF THE SITE

On July 21, 2015, Ms. Patricia Hartshorne of SCS performed a site reconnaissance by walking through the site and structures. Mr. Ronald Koenig, City of Tucson Community Services Manager, provided SCS with access to the site apartment units during the site reconnaissance. The apartment complex was vacant at the time of the site reconnaissance. Photographs of the site and adjoining properties are included in Appendix H.

Descriptions of the site as observed during the site reconnaissance are summarized in the table below.

**Table 16. Description and Current Site Use**

Feature	Description	Environmental Concern?
Interior of Structures	Structures located on the site include two vacant 2-story apartment buildings; a laundry was attached to the west side of the east apartment building. The west apartment building contains 8 one-bedroom apartments. The east apartment building contains 8 one-bedroom apartments and 10 studio apartments. Most of the apartments showed some amount of water damage (sagging shelves under sinks, damaged tub tile surrounds, etc.). One second floor apartment (#210) reportedly experienced a water leak, which also affected the first floor apartment below it (#110). The lower portion of the drywall in apartment #210 had been removed and apartment #110 had been gutted. Another apartment (#108) showed evidence of water that had pooled in the ceiling.	No
Exterior Area	The exterior portions of the site contain asphalt-paved parking areas, sidewalks, landscaping, a canopy between the two apartment buildings, two ramadas east and northeast of the east apartment building, and a shed and a dumpster north of the ramadas.	No

The following is a list of conditions of potential concern with an indication of which, if any, were observed during the site reconnaissance.

**Table 17. Conditions of Potential Concern**

Condition or Feature	Observed On Site		Comments
	Yes	No	
Potable Water Supply	X		Tucson Water municipal service
Sewage Disposal System	X		Pima County municipal service
Septic System		X	Note: According to City of Tucson building permit records, a septic tank on site was abandoned by filling in place when the site was connected to the sewer system; the location of the tank was not determined, and it was not determined if this tank was removed when the apartments were constructed.
Hazardous Substances and Petroleum Product Containers		X	
Storage Tanks		X	
Indications of polychlorinated biphenyl (PCB)-containing equipment (e.g., elevators, transformers, etc.)	X		Two pad-mounted transformers were located on the south portion of the site and one pole-mounted transformer was located at the northwest corner of the site. The transformers appeared to be in good condition with no evidence of leaks or spills. The transformers belong to Tucson Electric Power Company (TEP); any leaks or spills are the responsibility of TEP.
Indications of Solid Waste Disposal	X		No evidence of burial of solid waste. Scattered solid waste debris was observed throughout the site, particularly below stairwells and along the fences in the adjoining alleys. Mattresses were located in the northeast corner of the site, outside the fence.
Odors		X	
Pools of Liquid		X	
Pits, Ponds, or Lagoons		X	
Wastewater and Other Liquid Discharges		X	
Drains and Sumps		X	
Drywells		X	
Wells		X	
Stained Soil or Pavement	X		Small stained areas were observed in the parking areas typical of areas where vehicles are parked. These stains are considered <i>de minimis</i> .
Stains or Corrosion Inside Buildings	X		Water staining and <i>de minimis</i> stains in individual apartment storage areas were observed.
Stressed Vegetation		X	

## GENERAL DESCRIPTION OF ADJOINING PROPERTIES

The following table summarizes land use on adjoining properties. Adjoining land uses are shown on Figures 2 and 3 in Appendix A. Photographs are included in Appendix H.

**Table 18. Adjoining Properties**

Area Adjoining the Site	Description	Environmental Concern?
North	Desert Barricades	No
Northeast and East	Alley, unmarked building (Tucson Preparatory School?)	No
Southeast	Alley, Apartments	No
South	Alley, Apartments	No
Southwest	Stone Avenue, Vida Nueva Apartments	No
West	Stone Avenue, Paseim Carpentry, ITN Greater Tucson (transport for senior citizens)	No
Northwest	Parking for business to west	No

## 7 INTERVIEWS

### INTERVIEW WITH OWNER

SCS provided an interview questionnaire to the City of Tucson Housing and Community Development and Mr. Ron Koenig, City of Tucson Community Services Manager, provided a completed questionnaire on July 15, 2015. Information from the questionnaire is summarized below. A copy of the interview questionnaire is included in Appendix B.

The City of Tucson acquired the site in 1995 through Family Housing Resources (Pima County Industrial Development Authority [IDA]), who purchased it from the FDIC. The site was used as a transitional housing program for homeless 19-22 year old women with or expecting children. The previous use was for general occupancy apartments that were foreclosed on by the FDIC. During the time that the City owned the property, the pool was eliminated. Current adjoining properties include a barricade company to the north, a trailer park to the east, and an apartment complex to the south. A previous asbestos survey and environmental site assessment were performed for the site. An Affordability Land Use Restriction (LURA) is recorded for the site. None of the information indicated evidence of a REC for the site.

### INTERVIEW WITH KEY SITE MANAGER

Same as owner.

### INTERVIEW WITH OCCUPANTS

The site was vacant at the time of this report.

### INTERVIEW WITH PAST OWNERS, OPERATORS, AND OCCUPANTS

SCS did not interview past owners, operators, or occupants. The site buildings were constructed in 1983-1984 and have always been used as apartments. The City of Tucson has owned the site since 1995. Prior to the construction of the apartments, the site was occupied by a residence; in 1970, the occupant added a welding shop adjacent to the residential garage. No indications were found to indicate that the site has been occupied by businesses that would be of environmental concern.

### INTERVIEWS WITH STATE AND/OR LOCAL GOVERNMENT OFFICIALS

#### **Fire Department**

A search of City of Tucson Fire Department (TFD) records was requested for USTs, hazardous materials spills, emergency response, or other such information at the site addresses. According to Ms. Rachel Duarte of TFD, no records were found for the site except for a lockbox record.

## 8 EVALUATION

### SCOPE OF WORK

City of Tucson Housing and Community Development retained SCS to perform a Phase I ESA for the property at 3552 North Stone Avenue, located in Tucson, Pima County, Arizona (site). The site consists of Pima County APN 106-03-0030. The ESA consisted of a site reconnaissance; interviews; review of environmental, historical, and physical records pertaining to activities on and adjoining the site; and interpretation and reporting of findings. In addition, a screening level evaluation of non-scope issues was also requested by the City of Tucson.

### FINDINGS AND OPINIONS

#### **Current Conditions**

At the time of the site reconnaissance, the site contained two vacant two-story apartment buildings, an attached laundry building, parking areas, sidewalks, landscaping, a canopy, two ramadas, and a shed. The west apartment building contains 8 one-bedroom apartments. The east apartment building contains 8 one-bedroom apartments and 10 studio apartments. Most of the apartments showed some amount of water damage (sagging shelves under sinks, damaged tub tile surrounds, etc.). One second floor apartment (#210) reportedly experienced a water leak that also affected the first floor apartment below it (#110). The lower portion of the drywall in apartment #210 had been removed and apartment #110 had been gutted. Another apartment (#108) showed evidence of water that had pooled in the ceiling. No evidence of RECs was observed on the site.

#### **Historical Review**

Historical information indicated the site was apparently residential from at least 1946 until 1983-84 when the residence was demolished and the current apartment complex was constructed. In 1970, a welding shop was operated on the site adjacent to the north side of the residential garage. The residence was connected to the municipal sewer system in 1976, at which time a septic tank was abandoned in place on the site; the location of the tank was not determined and it was not determined if this tank was removed when the apartments were constructed. A new sewer main was installed in the alley east of the site in 1983 for the new apartment complex. The City of Tucson purchased the site in 1995 and the site was then used for a transitional housing program for homeless women with or expecting children. A family counseling agency was also located on the site from 2008 to 2010. The former site uses are not considered a REC for the site.

A previous Phase I ESA and Comprehensive Asbestos Survey were performed for the site in 1993. No environmental concerns were identified for the site by the Phase I ESA and there were no recommendations for additional environmental investigation. A total of 83 samples of 21 suspect ACMs were collected, including drywall, carpet and mastic, 12x12 floor tiles, white sink insulation, covebase, fixture caulk, linoleum, roofing, roof flashing, roof caulk, and stucco. White sink insulation (130 square feet) and roof caulk (50 square feet) were found to be non-friable Category II ACMs. An operations and maintenance plan was recommended for the ACMs.

### **Adjoining Properties**

Properties adjoining the site were developed apparently beginning in the 1920s. Types of properties that have adjoined the site included residences, mobile homes, and apartments; vacant land; a school and parking area; various retail and commercial properties; and companies such as an evaporative cooler pad manufacturer, plastics and millwork, upholsterer, lumber products, equipment rental, beauty salon, various automotive services and sales, etc. Based on the assessment, uses of adjoining properties do not appear to be a REC for the site.

### **Regulatory Review**

The site was not identified in environmental database listings. One CERCLIS/NFRAP site, one ERNS incident, two registered UST facilities, 10 LUST facilities, one hazardous materials incident, and four registered wells were identified by the environmental database search. None of the listings was considered a REC for the site.

### **Vapor Encroachment Screen (VES)**

A Tier I VES was performed for the site in order to evaluate whether there is a potential VEC for the site, which could potentially be considered a REC for the site. Information obtained during the performance of the Phase I ESA was used for preparation of the VES. Based on the locations of the facilities and incidents identified by the environmental database review relative to the site and information regarding the type and status of the listing, VECs were ruled out for each listing. No other information was found during the Phase I ESA investigation that would indicate the likely presence of a VEC on the site.

### **Non-Scope Issues**

By request of the City of Tucson Housing and Community Development, a screening level investigation of the following non-scope issues was performed for the site: ACMs, lead-based paint, lead in drinking water, mold, radon, ecological resources such as wetlands and endangered species, biological agents, industrial hygiene, health and safety, and regulatory compliance (discussed in Section 10). No sampling was performed during this investigation. Note that this screening summary is not all encompassing and does NOT constitute an environmental audit.

- **Asbestos-Containing Materials (ACMs)** – The previous asbestos survey was performed in 1993 and identified white sink insulation (130 square feet) and roof caulk (50 square feet) as non-friable Category II ACMs and an operations and maintenance plan was recommended for the ACMs. Many of the previously sampled materials could not be matched with materials observed during the site reconnaissance and there were apparently some materials that were not sampled during the asbestos survey. In addition, because of the date that the asbestos survey was performed and observations made during the site reconnaissance, it is apparent that materials have been removed, added, or patched since 1993; therefore, these materials are not represented by the asbestos survey report.
- **Lead-Based Paint (LBP)** – Because the apartments were constructed after 1978, which was the date that the Consumer Product Safety Commission (CPSC) prohibited

the use of lead in paint for residential use in concentrations greater than 0.06 percent lead by weight, it is less likely that LBP is a concern at the site. However, the presence of lead can only be determined by a lead survey.

- **Lead in Drinking Water** – The apartments were constructed before 1986, which was when the Safe Drinking Water Act (SDWA) required that “lead-free” pipe (less than 8% lead), solder (less than 0.2% lead), and flux (less than 0.2% lead) be used in residential or non-residential facilities that provide water for human consumption. Amendments in 2011 redefined “lead-free” to lower the maximum lead content of the wetted surfaces of plumbing products such as pipes, pipe fittings, plumbing fittings, and fixtures from 8.0% to a weighted average of 0.25%. However, the largest risk for the presence of lead in drinking water is in new buildings or buildings with new plumbing systems. Due to the age of the buildings, the potential for lead to be present in the drinking water is low. However, during the planned remodeling, if any new plumbing, solder, fixtures, and faucets are used that contain lead or are made of brass, lead may be elevated in the drinking water for several months.
- **Mold** – Most of the units in the apartment buildings showed some amount of previous water damage (sagging shelves under sinks, damaged tub tile surrounds, etc.). In addition, three apartment units had been affected by significant water leaks (#210, #110, and #108). Possible visible mold was observed during the site reconnaissance under the bathroom sinks or adjacent to the tub of three apartments (#103, #108, and #213) and mildewed caulk was observed in a number of the apartment showers. However, the interiors of walls and ceilings or under flooring behind water damaged areas were not observed and could contain mold.
- **Radon** – A statewide radon survey performed in 1987-1989 found that 40 of 41 indoor home radon survey tests conducted for the zipcode area that includes the site were less than the EPA general guideline of 4.0 picocuries per liter (pCi/L); therefore, it appears unlikely that the site would exceed 4.0 pCi/L for radon.
- **Wetlands** – No potential wetlands were identified on the site.
- **Endangered Species** – Due to the lack of natural habitat on the site and predominance of pavement and structures, it is unlikely that most of the species listed in the screening reports from Arizona Game and Fish Department (AZGFD) or United States Fish and Wildlife Service (USFWS) would be using the site, other than potentially birds or bats. No critical habitats or refuges were identified on the site.
- **Biological Agents** – No potential biological agents other than possible mold and a bee hive were observed on the site. An exterminator had already been called with regard to the bees.
- **Industrial Hygiene/ Health and Safety** – No obvious industrial hygiene issues were observed on the site other than those previously discussed, including bees, ACMs, mold, and lead.

- Regulatory Compliance – The majority of regulatory compliance issues generally did not apply to the site. Fluorescent light ballasts may contain polychlorinated biphenyls (PCBs).

## 9 CONCLUSIONS AND RECOMMENDATIONS

### RECOGNIZED ENVIRONMENTAL CONDITIONS (RECS)

SCS has performed a Phase I ESA in conformance with the scope and limitations of ASTM Practice E1527-13 for the property at 3552 North Stone Avenue (APN 106-03-0030), located in Tucson, Pima County, Arizona (site). Any exceptions to, or deletions from, these practices are described in Section 10 of this report. This assessment has revealed no evidence of RECs in connection with the site. No Historical RECs (HRECs) or Controlled RECs (CRECs) were identified for the site.

### RECOMMENDATIONS

Based on the findings of this Phase I ESA, SCS did not have recommendations for the site, except for the following non-scope issues:

- ACMS – An update of the previous comprehensive asbestos survey should be performed before beginning rehabilitation of the site buildings. Existing sample results may be used where possible, but additional sampling will also be necessary. An updated report should then be prepared that documents the findings of the investigation. Confirmed ACMS should be categorized by NESHAP classification, identified on a site plan, and the quantity of each type of ACM should be estimated.
- LBP – A LBP survey is recommended for the site buildings because although it is less likely that LBP is a concern at the site, the presence of lead can only be determined by sampling and analysis.
- Lead in Drinking Water – The potential for lead to be present in the drinking water in the site buildings is considered to be low. Remodeling should avoid the use of lead or brass plumbing components, which are a potential source of lead. If components containing lead are used, flushing of the system and periodic sampling should be performed.
- Mold – During rehabilitation, all areas of known water damage and areas around water piping and fixtures should be examined for signs of mold, especially in areas that are not currently visible. If found, removal of affected materials should be performed by contractors specialized in that activity in accordance with EPA guidance. The areas of mildewed caulk in the shower areas should be sprayed down with a 10:1 bleach/water solution and allowed to sit prior to removal.
- Endangered Species – The AZGFD recommends consideration of the impacts of outdoor lighting on species, avoidance of non-native invasive species in landscaping, and following manufacture's recommended application guidelines for chemical treatments.

- Regulatory Compliance –Fluorescent light ballasts may contain PCBs. If there are no labels on the ballasts, they should be treated as if they contain PCBs and be disposed appropriately.

## 10 DEVIATIONS AND ADDITIONAL SERVICES

### DATA GAPS

Certain limitations that could affect the accuracy and completeness of this report are as follows:

- **Site Access Limitations** – None.
- **Physical Obstructions to Observations** – None.
- **Outstanding Information Requests** – None.
- **Historical Data Sources Failure** – There were several gaps in the historical information prior to 1930 and from 1938-1946. The only identified uses of the site have been residential and a welding shop. Therefore, these data gaps are not considered significant.
- **Other** – SCS did not interview past owners, operators, or occupants. The site buildings were constructed in 1983-1984 and have always been used as apartments. The City of Tucson has owned the site since 1995. Prior to the construction of the apartments, the site was occupied by a residence since at least 1946. No indications were found to indicate that the site was occupied by businesses that would be of environmental concern. Therefore, if these people were able to be found and interviewed, the information would not likely change the conclusions of this report.

### DELETIONS

No deletions were made to the general ASTM scope of work for Phase I ESAs.

### ADDITIONS

Additions to the general ASTM scope of work for Phase I ESAs included the following:

1) geologic and hydrogeologic information for the site area was researched in order to assess the direction of regional groundwater flow in this area; and 2) additional environmental record sources were automatically included as part of the standard environmental database search report performed by Allands.

Certain business environmental risks associated with a property's current or planned use could have a material environmental or environmentally-driven impact on the business or real estate transaction. The assessment of business environmental risks may involve the investigation of considerations that are outside the subject of the ASTM standard practice (non-ASTM). No implication is intended as to the relative importance of inquiry into such non-ASTM considerations. Non-scope services are discussed below.

## NON-SCOPE SERVICES

A screening level investigation of the following non-scope issues (as examples in the appendix of ASTM E1527-13) were requested for this Phase I ESA by the City of Tucson Housing and Community Development: ACMs, lead-based paint, lead in drinking water, mold, radon, ecological resources such as wetlands and endangered species, biological agents, industrial hygiene, health and safety, and regulatory compliance. These issues are discussed below.

No sampling was performed during this investigation. It should be noted that although the likelihood of the presence of asbestos, lead, mold, radon, etc. is discussed below, the actual presence of these materials can only be determined by the collection and analysis of samples. This screening survey is not considered to be an environmental audit.

### **Asbestos-Containing Building Materials (ACMs)**

A Comprehensive Asbestos Survey was previously performed for the site (EEC 1993); the text portion of this report was provided to SCS for review as discussed under *Helpful Documents* in Section 5. The report indicated 83 samples of 21 suspect ACMs were collected in general accordance with AHERA. The sampled building materials included drywall, carpet and mastic, 12x12 floor tiles, white sink insulation, covebase, fixture caulk, linoleum, roofing, roof flashing, roof caulk, and stucco. The white sink insulation (130 square feet) and the roof caulk (50 square feet) were found to be non-friable and were classified as Category II ACMs. An operations and maintenance plan was recommended for the ACMs.

Review of the building plans for the site indicated that cement asbestos pipe and vinyl asbestos tiles were to have been placed in the buildings during construction; in addition, the expansion joints in the concrete foundation may have come from a company that owned an asbestos mine.

Because no figures or photographs were included with the partial asbestos survey report provided to SCS, many of the sampled materials listed in the report could not be matched with materials observed during the site reconnaissance, such as flooring materials. In addition, there were apparently some materials that were not sampled during the asbestos survey, such as cement asbestos pipe and moisture barrier in the walls. Because of the date that the asbestos survey was performed and observations made during the site reconnaissance, it is apparent that there are building materials that have been removed, added, or patched since 1993; therefore, these materials are not represented by the above report. Any building material that has not previously been sampled in accordance with AHERA must be considered an ACM, unless it is an exempted material or if proven otherwise by sampling and analysis.

### **Lead-Based Paint (LBP)**

In 1978, the use of lead in paint for residential use in concentrations greater than 0.06 percent lead by weight was prohibited by the Consumer Product Safety Commission (CPSC). Because the apartments were constructed in 1983-1984, it is less likely that lead-based paint (LBP) is a concern. However, the only way to be certain that lead is not an issue for workers and eventual occupants is to perform a LBP survey.

## Lead in Drinking Water

The City of Tucson provides municipal water service to the site. Municipal water providers are required to meet drinking water standards for a variety of contaminants, of which one is lead. Therefore, it is unlikely that lead would exceed the drinking water standards in the municipal water supply.

Drinking water can also be impacted by leaching of lead from plumbing, solder, fixtures, and faucets (brass), and fittings in a structure or in the water line leading from the water main. The leaching is influenced by the water acidity and temperature, minerals in the water, how long the water sits in the pipes, and the condition of the pipes. Since 1986, "lead-free" pipe (less than 8% lead), solder (less than 0.2% lead), and flux (less than 0.2% lead) have been required by the Safe Drinking Water Act (SDWA) in residential or non-residential facilities that provide water for human consumption. Businesses selling plumbing supplies were required to sell solder or flux that was "lead free" after August 6, 1996. Amendments in 2011 redefined "lead-free" to lower the maximum lead content of the wetted surfaces of plumbing products such as pipes, pipe fittings, plumbing fittings, and fixtures from 8.0% to a weighted average of 0.25%.

The construction of the site buildings pre-dates the requirements for "lead-free" pipes, solder, and flux. According to site building plans reviewed at the City of Tucson building permits department, copper pipes and 50-50 solder (50% tin and 50% lead) were to be used above grade away from the concrete slab and copper pipes and silver solder were to be used below grade away from the concrete slab. However, the largest risk for the presence of lead in drinking water is in new buildings or buildings with new plumbing systems. Due to the age of the buildings, the potential for lead to be present in the drinking water is low. However, during the planned remodeling, if any new plumbing, solder, fixtures, and faucets contain lead or are made of brass, lead may be elevated in the drinking water for several months. This can be alleviated by running water to flush out standing water in the pipes each morning before use.

## Mold

During the site reconnaissance, most of the units in the apartment buildings showed some amount of previous water damage (sagging shelves under sinks, damaged tub tile surrounds, etc.). One second floor apartment (#210) reportedly experienced a water leak, which also affected the first floor apartment below it (#110). The lower portion of the drywall in apartment #210 had been removed and apartment #110 had been gutted. Another apartment (#108) showed evidence of water that had pooled in the ceiling. Only three areas of possible visible mold was observed under the bathroom sinks or adjacent to the tub of three apartments (#103, #108, and #213), other than mildewed caulk viewed in many of the apartment showers. However, the interiors of walls and ceilings or under flooring behind water damaged areas were not observed and could contain mold.

## Radon

Through funds provided by EPA, the Arizona Radiation Regulatory Agency conducted a statewide radon survey, testing more than 2,000 homes in Arizona for the presence of radon gas in 1987-88 and 1988-89. Based on this survey, all of Arizona is within EPA's Radon Zone 2,

which has a predicted average screening level of  $\geq 2$  and  $\leq 4$  picocuries per liter (pCi/L). A total of 41 indoor home radon survey tests were conducted for the zipcode area that includes the site (85705). All but one of the results was less than the EPA general guideline of 4.0 pCi/L, and 34 of those results were less than 2.0 pCi/L. One location in this zipcode exceeded 4.0 pCi/L, with a reading of 15.70 pCi/L. In addition, there is one area of the Tucson metropolitan area that is known to have elevated radon, but this area is in the southwest area of town. Based on this survey data, it appears unlikely that the site would exceed the EPA's general guideline of 4.0 pCi/L for radon.

## **Ecological Resources**

### **Wetlands**

No potential wetlands were observed on the site during the site reconnaissance, on reviewed aerial photographs, or on the automated screening list obtained from the United States Fish and Wildlife Service (USFWS) discussed below under *Endangered Species*.

### **Endangered Species**

SCS obtained an automated screening list (Information for Planning and Conservation [IPaC] Trust Resource Report) and Official Species List from the United States Fish and Wildlife Service (USFWS) for potential endangered, threatened, proposed, candidate, or sensitive species for the site area from their Arizona Ecological Services Field Office website (<http://www.fws.gov/southwest/es/arizona>); these lists are included in Appendix I. No critical habitats, refuges, or wetlands were identified in the site area.

In addition, an automated preliminary screening survey for the proposed site project area was performed on July 22, 2015 using Arizona's Environmental Online Review Tool Report (Search ID No. HGIS-01852) on the Arizona Game and Fish Department's (AZGFD) website. A copy of this survey is included in Appendix I; a hard copy of this document has not been submitted to AZGFD. The report lists special status species and special areas within 2 miles of the site, species of greatest conservation need predicted within the site vicinity, and species of economic and recreation importance. The report indicates that the screening tool is not a substitute for a consult with AZDFD or USFWS, or a biological survey.

Due to the lack of natural habitat on the site and predominance of pavement and structures, it is unlikely that most of the species listed in the report would be using the site, other than potentially birds or bats. The AZGFD recommends consideration of the impacts of outdoor lighting on species, avoidance of non-native invasive species in landscaping, and following manufacture's recommended application guidelines for chemical treatments.

### **Biological Agents**

According to the US Occupational Safety and Health Administration (OSHA), biological agents include "bacteria, viruses, fungi, other microorganisms and their associated toxins. They have the ability to adversely affect human health in a variety of ways, ranging from relatively mild, allergic reactions to serious medical conditions, even death."

Mold was previously discussed in this section. Evidence of animal infestations that could potentially carry diseases, such as pigeon droppings, rodent droppings, etc., was not observed. However, insect bait or traps, presumably for cockroaches, were observed beneath sinks in a few apartments; live cockroaches were not observed. A bee hive was observed in a hole in the wall outside two apartments (#101 and #102); Mr. Koenig indicated that an exterminator had already been contacted.

### **Industrial Hygiene/Health and Safety**

Industrial hygiene deals with the potential for hazards and evaluation of exposures or risk in workplace that could result in injury, illness, impairment, or affect the well-being of workers and members of the community. Environmental stressors may include biological (e.g., bloodborne pathogens, mold); chemical; physical (e.g., noise, temperature extremes, illumination extremes, ionizing or non-ionizing radiation); and environmental (e.g., indoor air quality, lead, asbestos, silica) hazards.

No obvious potential industrial hygiene or health and safety issues were observed on the site other than those previously discussed in this section. The surrounding properties are predominantly residential, with a barricade company, a carpenter, and a senior transit company adjoining to the north and west. These companies are unlikely to have impacts to air quality, noise, or other such issues that would impact the site.

### **Regulatory Compliance**

Properties may be subject to a variety of environmental laws and regulations that relate to many aspects of operations conducted at the property. Below is a list of some of these types of regulations that may be implemented under federal, state, or local agencies. Note that this screening summary is not all encompassing and does NOT constitute an environmental audit.

- Resource Conservation and Recovery Act (RCRA) – Facilities that generate, store, treat or dispose of hazardous wastes – Does not apply to site.
- Aboveground or Underground Storage Tanks (ASTs or USTs) – Does not apply to site.
- Toxic Substances Control Act (TSCA) – For example, dry cleaners that use chlorinated solvents; materials that contain polychlorinated biphenyls (PCBs), such as window caulk, electrical transformers, light ballasts – Fluorescent light ballasts may contain PCBs. If there are no labels on the ballasts, they should be treated as if they contain PCBs and be disposed appropriately.
- Clean Air Act (CAA) – Facilities that manufacture and use hazardous or toxic substances, manufacturing operations that emit air pollutants and commercial or residential properties that burn fossil fuels. Properties may be required to obtain permits and install emissions control equipment. – Does not apply to site.

- Clean Water Act (CWA) – Facilities that discharge pollutants into waters of the United States and public sewer systems or stormwater permitting requirements. – Does not apply to site.
- Emergency Planning and Community Right-To-Know Act (EPCRA) – Facilities that store or use certain volumes of hazardous chemicals and extremely hazardous substances may be required to comply with the reporting requirements. – Does not apply to site.
- Occupational Safety & Health Administration (OSHA) – Promulgated regulations pursuant to the Occupational Safety and Health Act that establish operating standards and work practices for employees in certain industrial and commercial facilities. – Workers at the site should be protected and informed regarding potential hazards, such as the presence or potential presence of ACMs, mold, and LBP.

## 11 REFERENCES

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- Arizona Game and Fish Department (AZGFD). July 22, 2015. Arizona Environmental Online Review Tool Report.
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NETR Online. Historical aerial photographs for the years 1958, 1967, 1972, 1980, 1990, 1991, 1992, 1996, 2003, 2004, and 2013 and historical USGS topographic maps for the years 1905, 1916, 1932, 1947, 1957, 1959, 1962, 1967, 1973, 1977, 1984, 1994, 1995, and 2002.

Pima County Assessor and Department of Transportation (PCDOT) websites for aerial photographs (1998, 2002, 2003, 2005-2008, 2010, 2011, 2012, and 2014), parcel information, plat maps, site topography, sanitary sewer locations, and other information.

Pima County Department of Transportation Maps and Records. Historical aerial photographs dated 1946 and 1983.

Pima County Development Services website. On-line search for permits for the site parcels.

Pima County Main Library. Review of Street Directories for the years 1920, 1925, 1930, 1938, 1946, 1950, 1955, 1962, 1965, 1970, 1976, 1980, 1985, 1992, 1995, 2001, 2005, 2010, and 2014.

Surveyor General's Office. Officially filed May 26, 1871. *Survey of Township No. 13 South Range No. 13 East, Gila and Salt River Meridian*. Surveyed in 1871.

United States Fish and Wildlife Service (USFWS). July 21, 2014. Official Species List; Information for Planning and Conservation (IPaC) Trust Resource Report.

United States Geological Survey (USGS). Topographic map dated 1984. *Tucson North, Arizona*.

## 12 QUALIFICATION AND SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

This report, entitled "Phase I Environmental Site Assessment," has been prepared for City of Tucson Housing and Community Development for the property at 3552 North Stone Avenue, located in Tucson, Pima County, Arizona (APN 106-03-0030). It has been prepared in accordance with the guidelines set forth in the ASTM Practice E1527-13, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*. It has been prepared in accordance with accepted quality control practices and has been reviewed by the undersigned. Resumes for the personnel listed below are included in Appendix J.

**Patricia M. Hartshorne, RG** is a Project Manager in SCS's Tucson, Arizona office.

**Bradley F. Johnston, RG** is a Vice President in SCS's Phoenix, Arizona office.

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in 40 CFR Part 312.10. We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

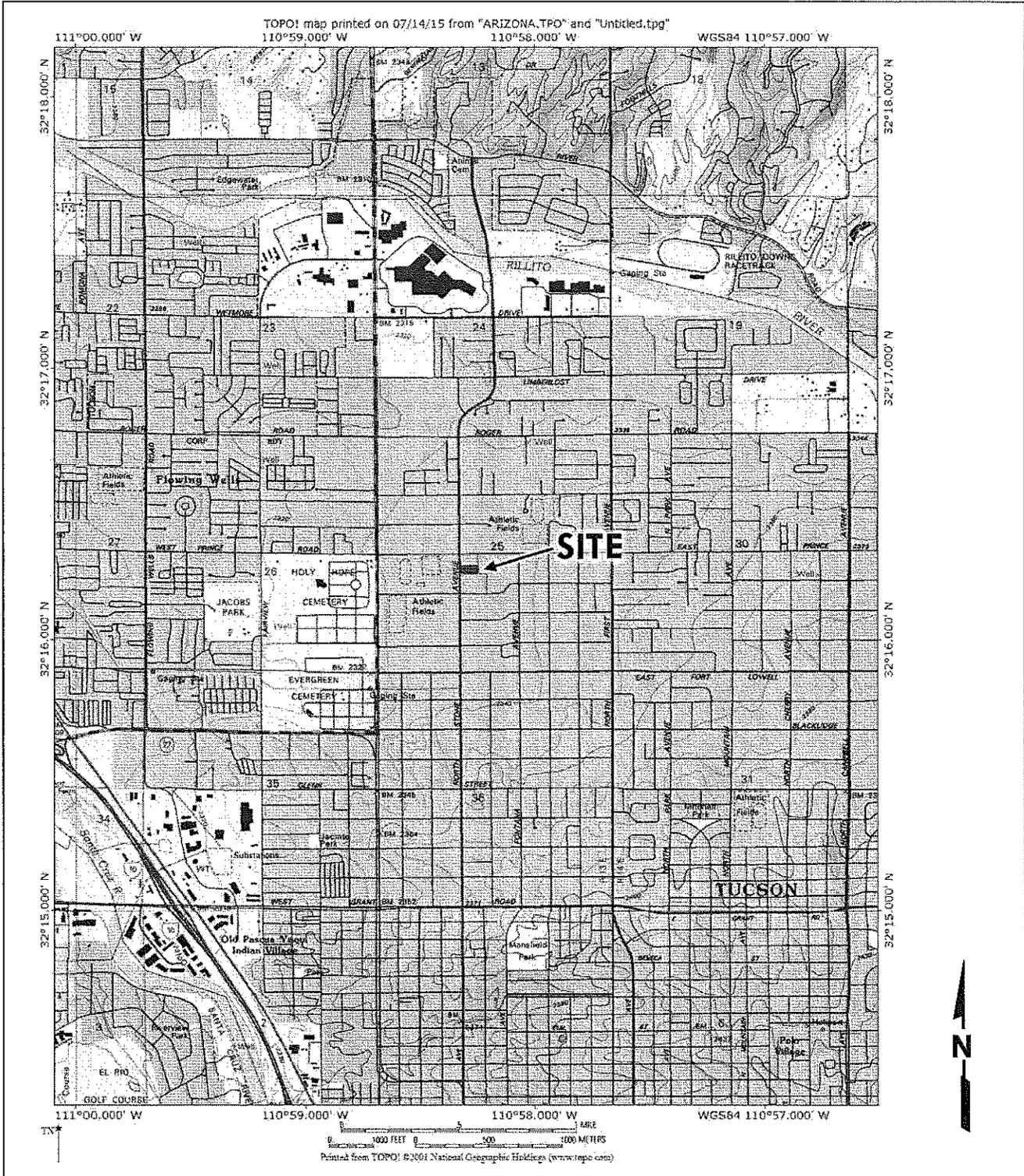
\_\_\_\_\_  
Patricia M. Hartshorne, RG DRAFT  
Date

\_\_\_\_\_  
Bradley F. Johnston, RG DRAFT  
Date

## APPENDICES

**APPENDIX A**

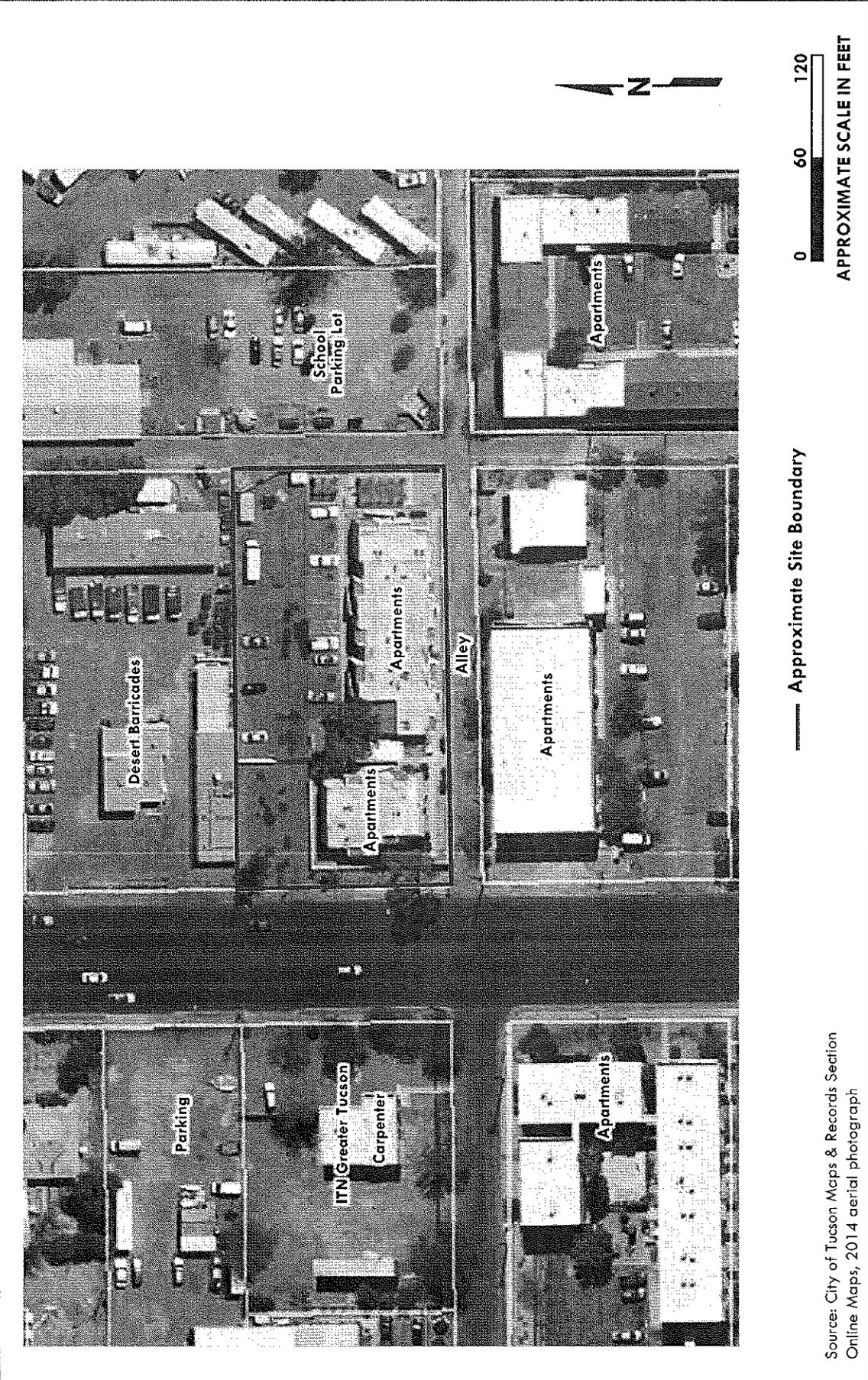
**FIGURES**



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Phase I Environmental Site Assessment  
City of Tucson Housing and Community Development  
3552 North Stone Avenue (APN 106-03-0030)  
Tucson, Arizona 85705

Figure 1  
Site Location Map

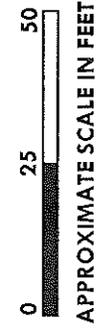
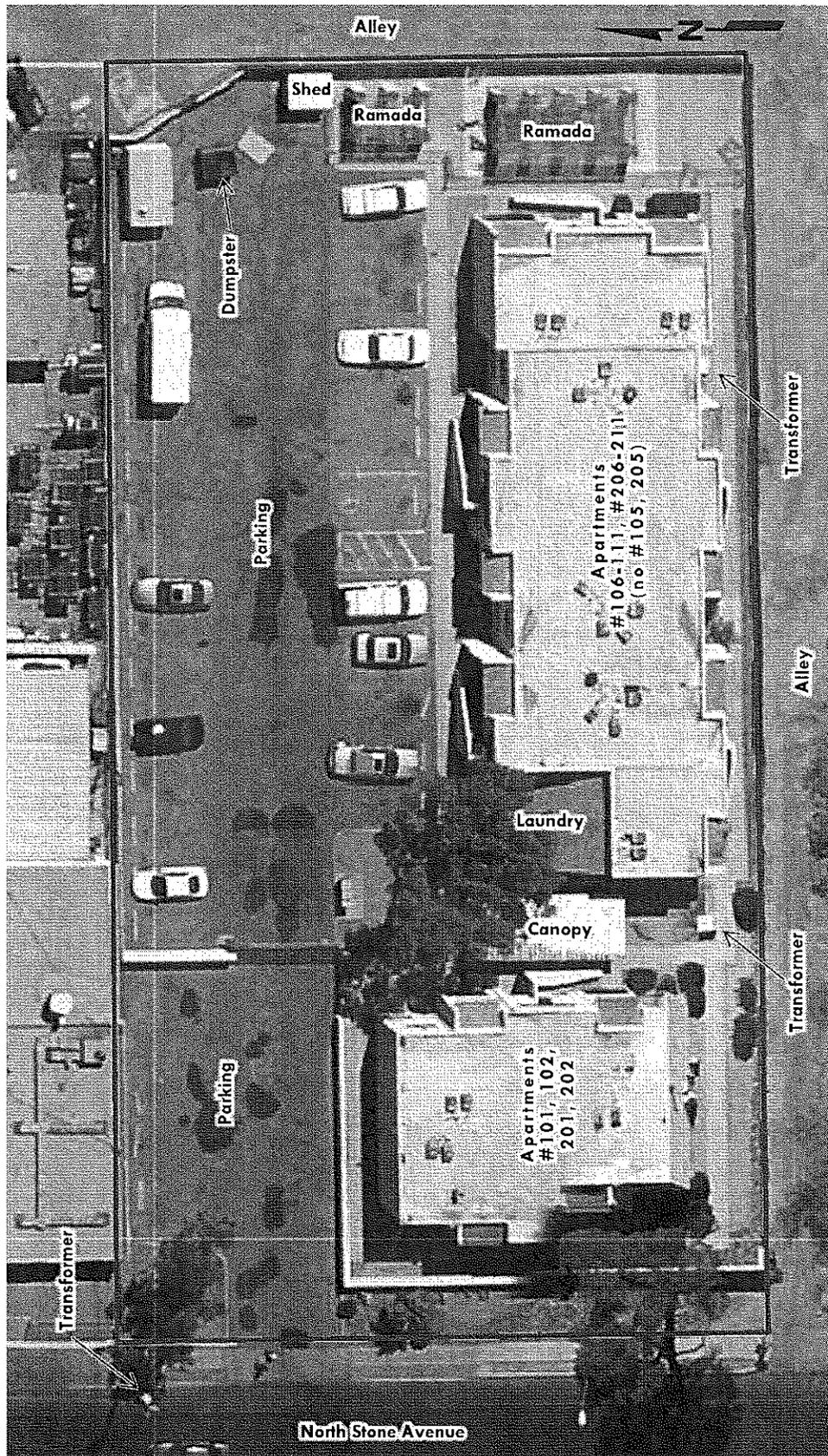


Source: City of Tucson Maps & Records Section  
Online Maps, 2014 aerial photograph

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Figure 2  
Site and Vicinity Map



Approximate Site Boundary

Source: City of Tucson Maps & Records Section  
Online Maps, 2014 aerial photograph

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Figure 3  
Site Plan

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