

PHASE I ENVIRONMENTAL
SITE ASSESSMENT

SOUTHEAST MESA AREA DRAINAGE
MASTER PLAN
MARICOPA COUNTY, ARIZONA

WT JOB NO. 2188JK014.01



**Western
Technologies
Inc.**

The Quality People
Since 1955

DRAFT

PHASE I ENVIRONMENTAL SITE ASSESSMENT

SOUTHEAST MESA AREA DRAINAGE MASTER PLAN MARICOPA COUNTY, ARIZONA

WT JOB NO. 2188JK014.01

Property of
Flood Control District of MC Library
Please Return to
2801 W. Durango
Phoenix, AZ 85009



Western Technologies Inc.

The Quality People
Since 1955

PHOENIX – ARIZONA
3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-3737 • fax 470-1341

Prepared for:

**FLOOD CONTROL DISTRICT
OF MARICOPA COUNTY
2801 WEST DURANGO
PHOENIX, ARIZONA**

April 15, 1998

Reina Gomez
Environmental Scientist

David Regonini, REA
Manager, Environmental Services

OFFICES	ARIZONA	NEVADA	NEW MEXICO
	BULLHEAD CITY 520-758-8378	LAS VEGAS 702-798-8050	ALBUQUERQUE 505-823-4488
	FLAGSTAFF 520-774-8708		FARMINGTON 505-327-4966
	LAKESIDE 520-368-5568	SIERRA VISTA 520-458-0364	
		TUCSON 520-748-2262	

TABLE OF CONTENTS

Page No.

EXECUTIVE SUMMARY	i
1.0 INTRODUCTION	1
1.1 Project Authorization	1
1.2 Project Objective and Purpose	1
1.3 Scope of Work	1
1.4 Statement of Qualifications	2
2.0 SITE INFORMATION	3
2.1 Site Location	3
2.2 Description of Current Property Use	4
2.3 Buildings	4
2.4 Utilities	5
2.5 Electrical Transformers and Other Potential PCB Sources	5
2.6 Aboveground Storage Tanks	6
2.7 Underground Storage Tanks	6
2.8 Hazardous Materials Storage Areas	6
2.9 Waste Indicators	6
2.10 Air Emissions	7
2.11 Wastewater/Effluent Discharges	7
2.12 Surface Water Drainage	7
2.13 Description of Adjoining Land Use	8
3.0 HISTORIC SITE CONDITIONS	9
3.1 Historic Aerial Photographs	9
3.2 Topographical Map Review	10
3.3 City Directory Information	11
3.4 Fire Insurance Maps	13
4.0 INTERVIEWS	14
4.1 Property Owners/Occupants	14
4.2 Regulatory Agency and Service Personnel	16
5.0 PHYSICAL SETTING	17
5.1 Topography	17
5.2 Geology	17
5.3 Surface Water Hydrology	17
5.4 Groundwater Hydrology	17
5.5 Groundwater Quality	18
6.0 REGULATORY AGENCY DATABASE RESEARCH	19
6.1 National Priorities List (NPL)	19
6.2 Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS)	19
6.3 Emergency Response Notification System (ERNS) Database	19
6.4 Resource Conservation Recovery Act (RCRA) Generators Database	20
6.5 RCRA Treatment, Storage, and Disposal Facilities (TSDFs) Database	20
6.6 RCRA Compliance Log	20
6.7 Water Quality Assurance Revolving Fund (WQARF)	21
6.8 The Arizona CERCLA Information & Data Systems (ACIDS)	21



TABLE OF CONTENTS

(continued)

	<u>Page No.</u>
6.9 Underground Storage Tanks (USTs) List	21
6.10 Leaking UST (LUST) List	22
6.11 Landfills/Dumps Directories	22
6.12 Hazardous Materials Incident Logbook	23
6.13 Dry Well Registration	23
7.0 FINDINGS AND CONCLUSIONS	24
7.1 Assessment Findings	24
7.2 Conclusions and Recommendations	28
7.3 Assessment Limitations	29
8.0 REFERENCES	31

APPENDICES

Appendix A:	Figure 1, Vicinity Map
	Figure 2, Site Plan
	Figure 3, Site Plan
	Figure 4, Site Plan
	Figure 5, Site Plan
	Figure 6, Groundwater Map
Appendix B:	Pictures
Appendix C:	Aerial Photograph
Appendix D:	Septic System Permits



This report presents the results of a Phase I Environmental Site Assessment (Phase I) of the property known as the Southeast Mesa Area Drainage Master Plan, Basins 1 through 4, located in Maricopa County, Arizona (the "Property"). WT was retained and authorized by Ms. Theresa Hoff of Flood Control District of Maricopa County to perform this Phase I in accordance with the terms and conditions of Contract No. BS95157RPF.

The objective of this Phase I was to survey the potential for contamination by hazardous substances and petroleum products from past or present uses of the Property or sites within the ASTM-specified minimum distances around the Property. The purpose of this project was to identify the presence or likely presence of recognized environmental conditions on the Property resulting from past and current uses of the Property or sites within the specified study area; and to recommend additional assessment of those recognized environmental conditions, if warranted.

The scope of work for this assessment included: reviews of regulatory agency databases; evaluation of the physical setting of the Property and study area; description of past uses of the Property and adjoining sites; reconnaissance of the Property during a site visit; reconnaissance of adjoining properties during the site visit; interviews; data evaluation; and preparation of a final report. The tasks implemented as part of this assessment meet the substantive requirements for Phase I's published by the American Society for Testing and Materials (ASTM) in Standard Practice E 1527.

Based on WT's evaluation of the data collected during this project, WT concludes that this assessment has revealed no evidence of recognized environmental conditions in connection with the Property, except the following:

- **Suspect Asbestos-Containing Building Materials (ACBMs)** -- There is one collapsed residential structure on Basin 2, one occupied residential structure on Basin 3, and six occupied residential structures and three garage/shed structures on Basin 4. Based on our visual observations, and the dates of construction for these structures, the potential exists for ACBMs to be present. Renovation or demolition activity which may affect ACBMs, requires the property owner or representatives to comply with the federal requirements for demolition/renovation projects which are presented in the **EPA National Emissions Standards for Hazardous Air Pollutants** Asbestos Regulations (NESHAP, 40 CFR 61, Subpart M). WT recommends performing an asbestos survey of these existing structures which will facilitate the NESHAPS notification requirements, and the development of specifications for abatement. Debris on the Property, such as concrete remnants, should also be sampled and tested for asbestos to determine whether or not these materials will require specialized disposal methods.



EXECUTIVE SUMMARY (Continued)

- **Solid Waste and Debris** -- Areas of solid waste and debris were seen on accessible areas of all four basins. No environmental indicators, or evidence of chemical containers, were seen at these debris piles. WT recommends removing this material to a solid waste disposal facility during grubbing and clearing activities.
- **Unknown Excavation** -- A shallow excavation of unknown origin was found on Basin 2. WT recommends excavating a test pit at this excavation to visually evaluate the subsurface. Make provisions for soil sampling and chemical analysis in the event that buried containers or other suspect media are uncovered.
- **Soil Pile** -- A soil pile of unknown origin was seen on Basin 3. WT recommends sampling and chemically analyzing representative portions of these soil piles to evaluate for the presence of elevated constituents, including metals, petroleum hydrocarbons, poly-aromatic hydrocarbons, and volatile organics.
- **Septic Systems** -- The residential lots on the Property utilize septic systems for sanitary waste water discharges. There were no available records describing the specifications of these septic systems. WT recommends abandoning these septic systems according to the guidelines established by the Maricopa County Environmental Services Department. Make provisions for sampling and chemical analysis of water, sludge or soil in the event that non-sanitary wastes are encountered during abandonment. If the septic systems include seepage pits, then WT further recommends abandonment of the seepage pits by excavation, pressure grouting of the vertical discharge lines, or a combination of these two activities. Specific abandonment procedures should be determined in conjunction with the construction details for the planned retention basins.
- **Old Well** -- An old well was observed on the north end of the Tire Store lot. The well appears not to have been used in some time, and WT recommends abandoning this well according to the requirements of the Arizona Department of Water Resources.
- **Buried Debris** -- At the Tire Store, buried items including appliances, motorcycles and bicycles are suspected on the Property. WT recommends screening the suspected area with a magnetometer to evaluate the areal dispersion of the debris. WT further recommends excavating a series of test piles to visually evaluate the nature of the buried materials. Make contingency plans for sample collection and chemical analysis in the event that impacted soils are encountered during the excavation of the test pits.



EXECUTIVE SUMMARY (Continued)

- **Above Ground Storage Tank** -- An above ground storage tank was observed on the ICU Rental lot. WT recommends removal of the tank and soil tests beneath the tank to assess for spillage.
- **Wash Rack** -- A wash rack used to clean equipment is operated on a parcel of land currently owned by ICU Rental. WT recommends sampling soil from this area to evaluate it for elevated levels of petroleum related compounds and cleaning materials.



- Reconnaissance of the Property during a site visit,
- Observation of adjoining properties during a site visit,
- Interviews,
- Evaluation of the information developed through the assessment tasks, and
- Presentation of this final report.

1.4 Statement of Qualifications

This ESA was performed by Ms. Reina Gomez and was reviewed by Mr. David Regonini. These individuals possess sufficient education, training and experience to qualify as environmental professionals under ASTM Practice E 1527, and have the ability to develop conclusions regarding recognized environmental conditions, if any, concerning the Property. Resumes for the key individuals participating on this project, and a Statement of Qualifications for WT, are available upon request from this office.



2.0 SITE INFORMATION

A site visit to the Property was performed by Ms. Reina Gomez of WT on January 28, February 12, and March 24, 1998. A site plan of the Property is included in Appendix A, and pictures of the Property taken during the site visit are included in Appendix B.

2.1 Site Location

Basin 1 is located in the east half of the northwest quarter of the southeast quarter of section 16, Township 1 North, Range 7 East of the Gila and Salt River Base Meridian, Maricopa County, Arizona. The Maricopa County Assessor's Parcel number for Basin 1 is 218-07-024S. Basin 1 is bounded by the Central Arizona Project (CAP) Canal on the north, the 90th Street alignment on the east, by single family residential houses on the south and by native desert land on the west.

Basin 2 is located in the south half of the southwest quarter of section 15, Township 1 North, Range 7 East of the Gila and Salt River Baseline and Meridian, Maricopa County, Arizona. The Maricopa County Assessor's Parcel numbers for Basin 2 include: 220-21-002R; 220-21-003E; and 220-21-004. Basin 2 is bounded by native desert land on the north, the CAP canal on the east, University Drive on the south, and Ellsworth Road on the west.

Basin 3 is located in the northeast quarter of the northwest quarter of section 22, Township 1 North, Range 7 East of the Gila and Salt River Baseline and Meridian, Maricopa County, Arizona. The Maricopa County Assessor's Parcel numbers for Basin 3 include: 220-26-005B; 220-26-007A; 220-26-008; and 220-26-009. Basin 3 is bounded by the CAP canal on the north, residential sites beyond 96th Street on the east, residential sites to the southeast, Boise Street on the south, and the 95th Street alignment on the west.

Basin 4 is located in the southwest quarter of the northwest quarter of section 23, Township 1 North, Range 7 East of the Gila and Salt River Baseline and Meridian, Maricopa County, Arizona. The Maricopa County Assessor's Parcel numbers for Basin 4 include: 220-42-019C; 220-42-020; 220-42-022E; 220-42-023; 220-42-024; 220-42-025; 220-42-026; 220-42-027G; 220-42-027F; 220-42-031C; 220-42-032A; and 220-42-033. Basin 4 is bounded by Akron Street on the north, residential sites to the east, commercial sites fronting on Apache Boulevard to the south, the CAP canal on the southwest, and Crismon Road on the west. The north portions of the commercial sites along Apache Boulevard are included as a part of Basin 4.



2.2 Description of Current Property Use

Basin 1 is undeveloped native desert land (Appendix B, Pictures 1 through 9). WT observed no occupants or uses within the boundaries of this basin. South of Basin 1, there was a single family home which was observed with numerous cars in various states of disrepair, and rubber tires in storage on that site (Appendix B, Picture 10). WT did not see evidence of surface impacts to the Property from this off-site location.

Basin 2 consisted of undeveloped native desert land and an abandoned residential structure (Appendix B, Pictures 11 through 17). WT observed no occupants or uses within the boundaries of this basin. A shallow excavation of unknown origin was observed on the Property (Appendix B, Picture 18).

Basin 3 consists of a single family residential site and undeveloped vacant land (Appendix B, Pictures 19 through 25). The residential use was situated on the west side of 96th Street, near Overchute No. 3. A large dirt mound of unknown origin was observed on the north boundary of the vacant land portion of this basin (Appendix B, Picture 26). An adjoining site was used by a contractor for storage and parking of some excavation equipment, tires and spare wood (Appendix B, Picture 27). WT did not see evidence of surface impacts to the Property from this off-site location.

Basin 4 currently consists of residential and commercial uses and undeveloped vacant land (Appendix B, Pictures 28 through 39). The commercial businesses with portions of land within Basin 4 included ICU Rental, and the Tire Store. A few large dirt mounds of unknown origin were noted on the vacant land portion of this basin as well as a cement pad, an abandoned car, and a dilapidated road (Appendix B, Picture 40 through 42). The portion of land north of ICU Rental was used for cleaning of equipment and storage of cars, U-Haul trucks and trailers, automobile parts, machinery, batteries, tires, and an above ground storage tank. There were two sheds and a dumpster on this parcel (Appendix B, Pictures 43 through 45). The portion of land north of the Tire Store was used mostly for storage of tires and cars, and contained some areas of debris consisting of wood, metal, and vegetation (Appendix B, Picture 46). There is a groundwater well on the north end of the Tire Store lot (Appendix B, Picture 47).

2.3 Buildings

No structures were observed on Basin 1.

On Basin 2, there was one collapsed residential structure.

On Basin 3, there was one single family residential structure located at 246 N. 96th Street (Parcel No. 220-26-009).



Basin 4 consists of seven residential structures, four mobile homes, and four shed/garages. One residential structure was located at 10013 E. Akron Street (Parcel No. 220-42-020). One residential structure, two mobile homes and one shed was located at 10031 E. Akron Street (Parcel No. 220-42-022E). One residential structure was located at 10039 E. Akron Street (Parcel No. 220-42-023). One residential structure was located at 10045 E. Akron Street (Parcel No. 220-42-024). One mobile home and one residential structure was located at 10061 E. Akron Street (Parcel No. 220-42-025). One mobile home, one residential structure and one garage was located at 10065 E. Akron Street (Parcel No. 220-42-26). One residential structure was located at 10109 E. Akron Street (Parcel No. 220-42-27F). Two sheds were located on the north end of ICU Rental (Parcel No. 220-42-32A).

2.4 Utilities

The following utility services to the Property were noted by WT:

- Water: City of Mesa municipal water supply
- Sanitary Sewer: On-site septic systems
- Electricity: Salt River Project and the City of Mesa
- Natural Gas: Southwest Gas
- Solid Waste Disposal: AAA Disposal

2.5 Electrical Transformers and Other Potential PCB Sources

Some older electrical transformers, capacitors and generators may contain polychlorinated biphenyl (PCB) dielectric fluid. PCB is recognized as a toxic substance by the Federal Government under the Toxic Substance Control Act (TSCA). Leakage from transformers containing PCBs onto soil or other permeable surfaces would present an area of environmental concern. The Property was surveyed for the presence of transformers, capacitors, generators, and other potential PCB sources.

WT noted one transformer on Basin 2 and two transformers on Basin 4 (Appendix B, Pictures 48 through 50). These transformers were observed to be in good condition with no evidence of leakage.



2.6 Aboveground Storage Tanks

Aboveground storage tank (ASTs) registration is not generally required unless the tank contains hazardous waste/materials or requires a flammable contents permit from the local fire department.

WT noted one above ground storage tank on Basin 4 on the north portion of ICU Rental. The tank appeared to be in good condition with no evidence of leakage. The tank was installed on a concrete pad, but did not have an enclosure, berm or other means of secondary containment.

No other surface evidence of existing or former ASTs were noted during the site visit.

2.7 Underground Storage Tanks

Underground storage tanks (USTs) are tanks that store regulated substances and have at least 10 percent of their volume, including contents of associated pipes, underground. Surface evidence of existing or former USTs would include pump islands, cut-off pipes, fill ports, vent pipes and asphalt patches.

No surface evidence of existing or former USTs was noted during the site visit.

2.8 Hazardous Materials Storage Areas

Hazardous materials, if present, should be stored in such a manner as to contain any potential leaks, spills or other discharges. Proper storage would also include container integrity, secondary containment capacity of 10% of the total volume or the largest container, whichever is greater, and storage of volatile chemicals in a properly vented fireproof room or cabinet. All containers of hazardous materials should be properly labelled and Material Safety Data Sheets should be present at the facility for all hazardous materials. Records of waste disposal should be maintained at the facility. All ignitable and reactive wastes should be stored at least 50 feet inside the property boundary.

No evidence of hazardous materials usage was noted on the Property during the site visit.

2.9 Waste Indicators

Waste indicators include: stressed vegetation; spillage/leakage of hazardous substances; staining of soil or other permeable surfaces; leachate or waste seeps; waste materials; disposal areas; construction/demolition debris; drums, barrels or containers which



presently or could have formerly contained hazardous substances; unusual odors; and surface water discoloration, odor, sheen or free floating product.

Several areas of construction, landscape and miscellaneous debris were observed on Basin 1 consisting of landscape trimmings, a television, foam, carpeting, paper waste, and cement pieces (Appendix B, Pictures 51 through 53). On Basin 2, WT observed the remains of a collapsed house near the south border and a few areas of general debris along the wash transversing Basin 2. The debris consisted of vegetation, wood scrap, foam, carpeting and lawn furniture (Appendix B, Picture 54 through 56). Basin 4 was observed with an area of construction debris on the vacant land near the southwest border of the Property, which consisted of broken concrete slabs and pipe sections, asphalt pavement and vegetation (Appendix B, Picture 57). Several areas of debris were also noted on the lot associated with the Tire Store consisting of scrap metal, scrap wood, vegetative debris, tires and old appliances (Appendix B, Pictures 58 through 60).

2.10 Air Emissions

Air emissions from a given facility may be indicated by noticeable odors or dust, laboratory hoods, exterior vents and incinerators.

No air emissions were noted emanating from the Property during the site visit.

2.11 Wastewater/Effluent Discharges

Wastewater/effluent discharge would include: existing or former oil/water separators, sumps, dry wells, catch basins, injection wells, groundwater/wastewater treatment systems, septic tanks, leach fields, floor drains, compressor blowdown and exterior pipe discharges.

No surface evidence of the listed wastewater/effluent discharges was noted on the Property during the site visit.

2.12 Surface Water Drainage

Surface drainage on the Property is directed to a series of washes which generally transverse the four proposed basin locations from the northeast to the southwest (Appendix B, Pictures 61 through 66). In Basins 1, 2, and 3, there is a main wash which originates at a drainage overchute across the CAP canal aqueduct. Smaller tributary washes enter these main channels. Storm water flows onto the Property from the northeastern side of the CAP canal through the overchutes. At Basin 4, there are two main washes which transverse the northern and southern portions of the basin. These



*Flood Control District of Maricopa County
WT Job No. 2188JK014.01*

washes lead to overchute numbers 4 and 5, which carry the storm drainage off-site to the southwest over the CAP canal.

2.13 Description of Adjoining Land Use

Land use within the study area consisted of residential and commercial uses, and vacant land. Within the surrounding area, the major east-west arterial streets were University Drive and Apache Trail, and the major north-south arterial streets were Ellsworth Road, and Crismon Road. Commercial development was concentrated along Apache Trail. The CAP canal transverses the study area in a southeasterly direction.

At Basin 1, the adjoining site to the north was the CAP canal, followed by a residential community. Adjoining sites to the south, east, and west included vacant land, and single family residential lots.

At Basin 2, the adjoining site to the north included a small parcel of vacant land, followed by the CAP canal. The CAP canal forms the northeastern side of the basin, and residential development is present on the opposite side of the canal. To the south, University Drive adjoins Basin 2 and is followed by a mobile home park. To the west, Ellsworth Road adjoins Basin 2 and is followed by vacant land.

The CAP canal forms the northeastern border of Basin 3, and is followed by a parcel of vacant land, and a convenience store at the southeast corner of University Drive and 96th Street. Single family residential lots adjoin Basin 3 to the east and south in the vicinity of Boulder Drive and 96th Street. The Boise Street alignment adjoins the south side of Basin 3, and is followed by single family and mobile home lots. A mobile home park adjoins the west side of Basin 3.

At Basin 4, the adjoining site to the north includes Akron Street and residential lots on the north side of the street. A parcel of vacant land, residential lots, and a mobile home park adjoin the northeast and east portions of Basin 4. A recreational vehicle sales, tire shop, rental store, and mechanical shop, followed by Apache Trail, adjoin the south side of the proposed basin. The CAP canal and Crismon Road adjoin the southwest and west portions of Basin 4. There were 55 gallon drums in storage on the mechanical shop site. WT did not see evidence of leakage, staining or corrosion around these drums which would indicate a potential off-site impact (Appendix B, Picture 60).



3.0 HISTORIC SITE CONDITIONS

Historic site conditions of the Property were identified through a review of various standard historical information sources including aerial photographs, topographic maps and street directories.

3.1 Historic Aerial Photographs

Aerial photographs from Rupp Aerial Photography were reviewed. The earliest photograph available for review was dated January 11, 1954. A copy of the 1994 aerial photograph is presented in Appendix C. A brief description of each photograph and its corresponding date follows:

- January 11, 1954 Scale: 1" = 1703'

Basins 1 through 4, and the surrounding areas appear as native desert land. A single structure is depicted on the southwest portion of Basin 2. Apache Trail appears to the south of the Property, and Crismon and Ellsworth Roads appear as dirt roadways.

- December 30, 1957 Scale: 1" = 1760'

No apparent changes to the Property or surrounding areas were noted when compared with the 1954 photograph.

- January 31, 1964 Scale: 1" = 1576'

No apparent changes to the Property or surrounding areas were noted when compared with the 1957 photograph, except that Apache Trail and Crismon Road appear to be paved, and a few commercial structures are noted along Apache Trail. Akron Street along the north side of Basin 4 appears as a dirt road with a few residential structures on it's north side.

- December 6, 1969 Scale: 1" = 1600'

The single structure observed on Basin 2 in the 1954 photograph no longer appears, and a second structure is shown in the center of this basin. No other apparent changes to the Property were noted when compared to the 1964 photograph. Sparse residential development is noted to the south of Basin 3, and to the north of Basin 4. Aerial coverage for Basin 1 was not available at Rupp for 1969.



- January 20, 1979 Scale: 1" = 2640'

A second residential structure appears on the northwest corner of Basin 2. Sparse residential development is noted within Basin 3 in the location of 96th Street and Boulder Street. No other apparent changes to the Property were noted when compared to the 1969 aerial photograph. Three residential structures are shown off-site to the south of Basin 1.

- February 25, 1980 Scale: 1" = 2640'

No apparent changes to the Property were noted when compared with the 1979 photograph. Residential development has increased in the vicinity of 96th Street and Boulder Street near Basin 3. A mobile home park has been built south of Basin 2, across University Drive.

- January 16, 1986 Scale: 1" = 2640'

Residential development is noted on the north side of Basin 4, along Akron Street. No other apparent changes to the Property were noted when compared with the 1980 photograph.

The CAP canal has been constructed through the study area. A residential development appears to the northeast of Basin 2. A mobile home park has been built to the west of Basin 3.

- February 15, 1994 Scale: 1" = 900'

No apparent changes to the Property or surrounding areas were noted when compared with the 1986 photograph, except that the residential structure which was near the northwest corner of Basin 2 no longer appears.

3.2 Topographical Map Review

WT reviewed the Buckhorn and Apache Junction quadrangle topographical maps from the United States Geological Survey (USGS). These maps were dated 1956 with photorevisions in 1982 (Scale: 1" = 2000').

Basin 1 was depicted with no site specific features.

Three small dwellings were depicted on Basin 2. Additional residential development was shown to the northeast and east of Basin 2.



*Flood Control District of Maricopa County
WT Job No. 2188JK014.01*

Basin 3 was depicted with 3 small dwellings on its south portion along Boise Street, and 2 residential structures on the eastern portion of Basin 3, along Boulder Drive. Residential structures and trailer parks were shown to the east, south and west of Basin 3.

Basin 4 was depicted with eight small dwellings south of Akron Street. A residential development was shown to the north of the basin, and a trailer park was shown to the east. Commercial structures were noted along Apache Trail.

The 1958 and 1967 Maricopa County Atlases showed the Property and surrounding areas as vacant land with no site specific features.

3.3 City Directory Information

City Directories for the Phoenix Metropolitan area were reviewed at the City of Phoenix Public Library to determine previous and present tenants of the Property. City directories may be useful in determining the type of facility or business that previous occupants operated at a particular address. All addresses which receive telephone services are listed in the Cole's directories. The earliest directory which contained listings for the area of the Property was dated 1967.

WT reviewed the directories for the indicated years for addresses within the following address ranges:

- Basin 1: 600-700 North 90th Street.
- Basin 2: 9200-9400 East University Drive; 400-600 North Ellsworth Road.
- Basin 3: 9500-9600 East Boise Street; and 250-300 North 96th Street.
- Basin 4: 50-150 North Crismon Road; and 10000-10100 East Akron Street.

These address ranges were selected because they correlate to street alignments which border or pass through the indicated proposed basins. The following table summarizes our findings:

<i>YEAR</i>	<i>LISTED OCCUPANTS</i>
<i>1962</i>	<i>250 N. 96th St. No other listings</i> <i>C.E. Dick Burton</i>
<i>1967</i>	<i>250 N. 96th St. No other listings</i> <i>C.E. Dick Burton</i>



Flood Control District of Maricopa County
WT Job No. 2188JK014.01

YEAR	LISTED OCCUPANTS	
1972	250 N. 96th St. 10031 Akron St. 10039 Akron St. 10045 Akron St. No other listings	C.E. Dick Burton Walter M. Hamaker Dan M. Gish Mary E. McMasters
1977	250 N. 96th St. 10013 Akron St. 10031 Akron St. 10039 Akron St. 10045 Akron St. 10061 Akron St. No other listings	Non-Published Royal Schneider Non-Published Wm N. McMasters Mary E. McMasters R.E. Norby
1982	250 N. 96th St. 10013 Akron St. 10031 Akron St. 10039 Akron St. 10045 Akron St. 10061 Akron St. No other listings	401-409 Non-Published Royal Schneider Non-Published Wm N. McMasters Mary E. McMasters Non-Published
1987	250 N. 96th St. 10013 Akron St. 10031 Akron St. 10039 Akron St. 10045 Akron St. 10061 Akron St. No other listings	Non-Published Royal Schneider Michelle Jackson Non-Published Mary E. McMasters Non-Published
1992	250 N. 96th St. (1993) 10013 Akron St. 10031 Akron St. 10039 Akron St. 10045 Akron St. 10061 Akron St. 10065 Akron St. No other listings	Non-Published Royal Schneider Non-Published C. Armstrong Non-Published R.E. Norby Thurman Packard
1996-97	10031 Akron St. 10039 Akron St. 10045 Akron St. 10061 Akron St. 10065 Akron St. No other listings	Apartments Non-Published M. Chambers and J. Lemoine Non-Published Non-Published



3.4 Fire Insurance Maps

WT reviewed available copies of Sanborn Fire Insurance Maps at the Arizona Department of Environmental Quality. Sanborn Fire Insurance Maps depict site developments, and provide details relating to fire protection and firefighting. These details can include chemical storage areas, chemical usage activities, and features such as storage tanks.

The available Sanborn Fire Insurance Maps did not contain coverage of the Property.



4.0 INTERVIEWS

WT conducted interviews with various individuals associated with the Property, local agency personnel, and utility personnel. The purpose of these interviews was to obtain information about the current and past uses of the Property, as well as information about potentially regulated activities on the Property. Each interviewee was asked various questions pertaining to possible environmental issues on the Property. WT requested responses based on each individual's actual knowledge of the specific circumstance.

4.1 Property Owners/Occupants

The Flood Control District of Maricopa County supplied a list of the parcel owners to WT. A summary of the contacts made by WT is presented below.

Mr. Allen Tom, owner of Basin 2, Parcel 220-21-003E, was contacted on February 5, 1998. Mr. Tom was asked questions regarding current conditions on the Property, activities on the Property, as well as information about prior usage of the Property. He indicated that he has owned the Property for 12 to 15 years, during which time it has remained vacant. When asked about the remains of a house on the Property, he indicated the house was on the land when he acquired it. It had been vandalized numerous times and he decided to knock it down himself 2 years ago to keep it from falling on its own. He was unaware of the small excavated soil area near the north border of the Property and said he has never had a problem with dumping on the Property. He knows of no AST's, UST's or hazardous materials incidents on the Property.

Mr. James Tenney, owner of Parcel No. 220-26-005B within Basin 3, was interviewed on February 12, 1998. Mr. Tenney indicated he has owned the land for 3 years, during which time it has remained vacant. He believes there was a trailer home on the Property a number of years ago, but he has never seen any evidence of this. He indicated that he did not know the source of the soil mounds near the north border of the Property and that the soil was dumped there without his knowledge or approval. Mr. Tenney indicated that he did not know of any impacts from spillage or leakage of materials from the contractor's yard that borders the Property. He knows of no ASTs, USTs, or hazardous materials incidents on the Property.

Ms. Christina Brown who resides at 246 North 96th Street (Parcel No. 220-26-009) within Basin 3, indicated that there is one septic system on her parcel. Water is supplied by a municipal source and there is not a ground water well on the parcel. The heating source is supplied by SWG for natural gas, and by SRP for electricity.



*Flood Control District of Maricopa County
WT Job No. 2188JK014.01*

Mr. Royal Snyder who resides at 10013 East Akron Street (Parcel No. 220-42-019C, 020) within Basin 4, indicated that there is one septic system on his parcel. Water is supplied by a municipal source and there is not a ground water well on the parcel. The heating source is electricity supplied by the City of Mesa.

Mr. David Gypin, son of Arthur and Mary Gypin who reside at 10031 East Akron Street (Parcel 220-42-022E) within Basin 4, indicated that there are two or three septic tanks on his parent's parcel and they were install around 1970. Water is supplied by a municipal source and there is not a ground water well on the parcel. The heating source is electricity supplied by SRP and natural gas supplied by SWG.

Ms. Margarete Heath who resides at 10065 East Akron Street (Parcel 220-42-026) within Basin 4, indicated that there is a septic system on her parcel. She also indicated that there had been a cess pool, but it was replaced with the septic system. Water is supplied by a municipal source and there is not a ground water well on the parcel. The heating source is electricity supplied by SRP.

Ms. Carol McMasters who resides at 10039 East Akron Street (Parcel 220-42-023) within Basin 4, indicated that there is one septic system on her parcel, and that it could be as old as 50 years. Water is supplied by a municipal source and there is not a ground water well on the parcel. The heating source is electricity supplied by SRP. She indicated that her mother, Mary McMasters, who resides at 10045 East Akron Street (Parcel No. 220-42-024) has an old, inoperable septic system and a new septic system which included a fiberglass tank. The new tank was installed about four years ago.

Mr. Paul Fitzgerald who resides at 10061 Akron Street (Parcel No. 220-42-025) within Basin 4, indicated that there are two septic tanks on his parcel. One is 2,000 gallons, is up to code and was pumped 4 years ago. One is smaller than code and is no longer in use. Water is supplied by City of Mesa and there is not a ground water well on the parcel. The heating source is electricity supplied by SRP.

Ms. Barbara Douglas who resides at 235 North 96th Street (Parcel No. 220-29-005B) within Basin 3, indicated that there are two septic tanks on her parcel. One old one is associated with the house, and a newer one (approximately 10 years old) is associated with the mobile home. Water is supplied by City of Mesa and there is not a ground water well on the parcel. The heating source is electricity supplied by SRP.

Mr. Fred Manzanl who operates the Tire Store (Parcel No. 220-42-33) within Basin 4, indicated that he does some minor repair work on some of the cars stored on the lot, but does mostly tire work. There is a septic tank associated with his site, but it is south of the proposed boundary for Basin 4. He knows of no other underground tanks, and does not store any chemicals on the Property. He occasionally comes across buried appliances



*Flood Control District of Maricopa County
WT Job No. 2188JK014.01*

on the Property and knew of some buried motorcycles and bicycles, but was unsure of the exact location of the burial. He has occupied the lot for ten years and indicated that the Property had previously been used as an appliance shop. There was what he believed to be a well near the north fence. The well appeared to have been out of use for some time. Mr. Manzanl also said that he believed the vacant land north of the Property previously had mobile homes on it and associated septic tanks. In particular, he believed there to be a septic tank under the cement pad.

Mr. Mark Bouvier who operates ICU Rental (Parcel No. 220-49-32A) indicated that the north portion of his lot is used mostly for storage of cars, U-Haul trucks and trailers, spare parts, an above ground storage tank and some heavy equipment. Some equipment is washed off on the Property. No chemicals are stored on site. He indicated that the Property is hooked up to the sanitary sewer and he knew of no underground tanks. He also indicated that he has been on the Property for four years. Previous to him, the Property was occupied by another rental yard and a restaurant.

4.2 Regulatory Agency and Service Personnel

WT contacted Mr. Oliver Williams of the Arizona State Fire Marshall's office on January 26, 1998. Mr. Williams was asked to provide copies of records pertaining to underground or aboveground storage tanks at locations within the Property boundaries. WT was verbally informed by Mr. Williams that he had no records of tank removals from the Property.

WT contacted the Maricopa County Environmental Services Department (MCESD) on November 17, 1997, and again on April 1 and 3, 1998, concerning the potential presence of registered septic tanks on the Property. The MCESD produced a copy of a permit for a septic system for 246 North 96th Street, Basin 3, and indicated they had no records for septic systems on Basins 1 and 2. A response for Basin 4 has not yet been received. Any information will be forwarded to MCFCD when it is received.

WT contacted Mr. Vince Martinez of the Salt River Project (SRP) verbally on February 2, 1998. Mr. Martinez was asked to provide any records pertaining to the presence of polychlorinated biphenyls (PCBs) in electrical equipment on the Property that is owned by SRP. He indicated that the PCB-content of both of the transformers identified by WT were unknown.



5.0 PHYSICAL SETTING

5.1 Topography

The Property is situated at elevations ranging from 1,550 feet to 1,580 feet above mean sea level. The topographic relief of the Property is southwesterly at a rate of 60 feet per mile. The Utery and Goldfield Mountains within the Tonto National Forest are located approximately 5 miles to the north. The Central Arizona Project Canal flows through the area of the Property in a southeasterly direction.

5.2 Geology

The Property is located in an area designated by the Arizona Department of Water Resources (ADWR) as the Phoenix Active Management Area (AMA). The Phoenix AMA lies within the Basin and Range Physiographic Province and is bounded to the east by the Mazatzal, Utery, Goldfield, and Superstition Mountains; to the south by the Sacaton, Sierra Estrella, and South Mountains and the Buckeye Hills; to the west by the White Tank Mountains; and to the north by the Hieroglyphic, Wickenburg, and New River Mountains and the New River Mesa. The bordering mountains are composed chiefly of igneous and metamorphic rock.

The Phoenix AMA is divided into several sub-basins. The sub-basins are broad alluvial basins filled with over a thousand feet of sedimentary deposits consisting primarily of silt, sand, clay, gravel, and cobbles. The East and West Salt River Valley Sub-basins (the two main sub-basins in the Phoenix AMA) are separated by the Phoenix Mountains, Papago Buttes, and Union Hills. The Property is located in the West Salt River Valley Sub-basin.

5.3 Surface Water Hydrology

Surface drainage patterns follow the topographic contours of the surrounding terrain. A series of washes flow southwesterly across the proposed basins. At Basins 1, 2, and 3, overchutes across the CAP canal carry surface drainage onto the Property. At Basin 4, surface drainage flows onto the Property in two main washes, and subsequently flows down stream through two overchutes crossing the CAP canal.

5.4 Groundwater Hydrology

Three main water-bearing units comprise the basin-fill deposits. The units, in ascending order, are the Tertiary Lower Conglomerate Unit (LCU), the Quaternary and Tertiary Middle Fine-grained Unit (MFU), and the Quaternary Upper Alluvial Unit (UAU), (U.S. Bureau of Reclamation, 1976). The upper alluvial unit is the primary source of groundwater in the East Salt River Valley Sub-basin. Groundwater is usually unconfined,



*Flood Control District of Maricopa County
WT Job No. 2188JK014.01*

but semi-confined conditions exist in areas where there is an increase of fine-grained materials.

According to the latest ADWR publication, Report No. 27 dated 1995, the depth to groundwater in the area of the Property is approximately 550 feet below ground surface (bgs). The regional groundwater flow, based on a 50-foot contour interval, is southwesterly.

WT checked the ADWR Groundwater Site Inventory Database (GWSI) for ground water well registrations in the vicinity of the Property. One well designated as (A-1-7)23 BCC was found in the database. According to ADWR personnel, this well was a test hole drilled in 1980 to a total depth of 825 feet and was owned by the U.S. Bureau of Reclamation. Location information for this well places it approximately on the east side of Crismon Road, north of Apache Boulevard, in the vicinity of the CAP canal.

5.5 Groundwater Quality

The Arizona Department of Environmental Quality (ADEQ) annually prepares a report entitled, "The Annual Report on Arizona Groundwater Quality Sampling Results & Enforcement Actions", which discusses groundwater quality throughout the state.

WT's review of these annual reports for the years 1987 through 1996 revealed no measurements of groundwater quality beneath the Property or within one mile of the Property.



6.0 REGULATORY AGENCY DATABASE RESEARCH

Various databases from the United States Environmental Protection Agency (USEPA) and the Arizona Department of Environmental Quality (ADEQ) were consulted by WT to identify whether the Property or off-site locations within the specified minimum search distances appear on these lists. A summary of the database findings follows:

6.1 National Priorities List (NPL)

The NPL is a list of the Nation's Highest Priority sites for remedial action. Sites to be included on the NPL must surpass a pre-established hazardous ranking score, be on the State Priority List or meet the criteria of a Special Situation as defined by the EPA. The release date for this information is January 17, 1997. The minimum search distance is one mile.

- *The Property is not listed in this database.*
- *No sites within one mile are listed in this database.*

6.2 Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS)

The CERCLIS list is a compilation by the USEPA of sites that have been or are currently under investigation for releases of hazardous substances as regulated under the Comprehensive Environmental Response Compensation Liability Act (CERCLA). The release date for this information is March 31, 1997. The minimum search distance is ½ mile.

- *The Property is not listed in this database.*
- *No sites within ½ mile are listed in this database.*

6.3 Emergency Response Notification System (ERNS) Database

The Emergency Response Notification System (ERNS) collects and documents information from spills reported by federal organizations, such as the EPA, the Coast Guard, the Department of Transportation (DOT), the National Response Center, and in Arizona, from the ADEQ, Arizona DOT, and local emergency response organizations. The release date for this information is December 2, 1997 and covers entries since January 1, 1983. The minimum search distance is ⅓ mile.

- *The Property is not listed in this database.*



- The following site within 1/8 mile are listed in this database:

REF. NO.	FACILITY	LOCATION	MATERIAL	QUANTITY	DATE
1	Texaco Star Mart	9948 East Apache Trail	Waste Oil/ Lubricants	Unknown	4/21/92

6.4 Resource Conservation Recovery Act (RCRA) Generators Database

The RCRA database lists facilities that have notified the EPA of hazardous waste activity. The notifiers may engage in generation, transportation, treatment, storage, and/or disposal of hazardous wastes. Generators are listed as either large, small or conditionally-exempt generators. Large-quantity generators (LQG) produce at least 1000 kg/month of non-acutely hazardous waste or 1 kg/month of acutely hazardous waste. Small-quantity generators (SQG) produce 100 - 1000 kg/month of non-acutely hazardous waste. Conditionally-exempt generators (CEG) are those which generate less than 100 kg/month of non-acutely hazardous waste. "Non-regulated" indicates that the facility filed a notification and/or a permit application, but claims not to generate, transport, treat, store or dispose of hazardous waste or the facility falls into other specified categories not regulated under RCRA. The release date for this information is September 23, 1997. The minimum search distance is 1/8 mile.

- *The Property is not listed in this database.*
- *No sites within 1/8 mile are listed in this database.*

6.5 RCRA Treatment, Storage, and Disposal Facilities (TSDFs) Database

The RCRA database also identifies those facilities that have obtained either a final or an interim status permit for the treatment, storage or disposal of hazardous wastes and known facilities operating without a permit. The release date for this information is June 25, 1997. The minimum search distance is one mile.

- *The Property is not listed in this database.*
- *No sites within one mile are listed in this database.*

6.6 RCRA Compliance Log

ADEQ's Hazardous Waste Compliance Unit has listed facilities that have undergone a Resource Conservation and Recovery Act (RCRA) inspection or compliance action for



Flood Control District of Maricopa County
WT Job No. 2188JK014.01

potential violations of the Arizona State Hazardous Waste Management Act. The release date for this information is November 17, 1997. WT reviewed this database to determine if the RCRA notifiers or TSDFs identified above were listed in the compliance log.

- *None of the identified RCRA notifiers or TSDFs were listed in this database.*

6.7 Water Quality Assurance Revolving Fund (WQARF)

WQARF is Arizona's state equivalent program to Superfund. The ADEQ Office of Waste Programs Remedial Projects Section, published a Booklet titled "WQARF and Federal Superfund Program" which discusses and summarizes ongoing WQARF remedial projects throughout the State of Arizona. The release date for this information is May 1997. The minimum search distance is one mile.

- *The Property is not listed in this database and is not within a defined WQARF study area.*
- *No sites within one mile are listed in this database.*

6.8 The Arizona CERCLA Information & Data Systems (ACIDS)

ACIDS is a list maintained by the ADEQ Office of Waste Programs that contains locations subject to environmental contamination investigation by ADEQ. The inclusion of a particular facility on this list does not necessarily mean that the location is contaminated, is causing contamination or is in violation of state or federal statutes and regulations. This list implies that due to the nature of activities conducted at these locations, the potential for the previously mentioned conditions exists. The release date for this information is May 5, 1997. The minimum search distance is ½ mile.

- *The Property is not listed in this database.*
- *No sites within ½ mile are listed in this database.*

6.9 Underground Storage Tanks (USTs) List

The ADEQ maintains a database of registered USTs in the State of Arizona. The release date for this information is January 30, 1997. The minimum search distance is ¼ mile.

- *The Property is not listed in this database.*
- *The following sites within ¼ mile are listed in this database:*



REF. NO.	FACILITY	LOCATION	QUANTITY	STATUS
1	Former Circle K #417	9949 East Apache Trail	2: 10,000 gal. gasoline	Removed
2	Former East Valley Auto Sales	10310 East Apache Trail	1: 750 gal. used oil	Removed
3	Texaco	9948 East Apache Trail	4: 12,000 gal. gasoline 1: 12,000 gal. diesel	Active Active
4	Circle K	9615 East University Dr.	3: 10,000 gal. gasoline	Active

6.10 Leaking UST (LUST) List

The ADEQ maintains a database of USTs that have been reported as leaking. The release date for this information is October 1, 1997. The minimum search distance is ½ mile.

- *The Property is not listed in this database.*
- *The following sites within ½ mile are listed in this database:*

REF. NO.	FACILITY	LOCATION	ADEQ FILE NO.	STATUS
1	Circle K #849	9615 East University	3409.01	Closed 8/8/95
2	Former Circle K #417	9949 East Apache Trail	2838.01	Open
3	Superstition Main # 141240	9639 East Apache Trail	2564.01	Open
4	Former Circle K #596	9205 East Apache Trail	2753.01	Open
5	Texaco 60-349-0324	9948 East Apache Trail	4765.02 4765.01	Open Open
6	Superstition Crismon Soc. # 141242	222 South Crismon	4237.01	Open

6.11 Landfills/Dumps Directories

The Directory of Arizona Active Municipal Solid Waste Landfills, Rubbish Landfills, and Private Solid Waste Landfills; the Directory of Arizona Inactive Municipal Solid Waste Landfills, Rubbish Landfills, and Private Solid Waste Landfills; and the Directory of Arizona Closed Solid Waste Landfills are publications prepared by the ADEQ and list



landfills and dumps identified by private and government sources. The release date for each of these lists is October 8, 1996. The minimum search distance is ½ mile.

- *The Property is not listed in this database.*
- *No sites within ½ mile are listed in this database.*

6.12 Hazardous Materials Incident Logbook

The Hazardous Materials Incident Logbook (HAZMAT Log) documents chemical spills and incidents referred to the ADEQ Emergency Response Unit. This unit has been in operation since 1984. The release date for this information is October 9, 1997, and covers entries from 1984 through June 1997. The minimum search distance is ¼ mile.

- *The Property is not listed in this database.*
- *The following site within ¼ mile is listed in this database:*

REF. NO.	FACILITY	LOCATION	MATERIAL	TYPE	DATE
1	Unknown/DEA	202 North 96th Street	Drug lab chemicals	Threat	5/15/97

6.13 Dry Well Registration

The ADEQ Dry Well Registration list was reviewed to identify registrations for dry wells that may be on the Property. The release date for this information is October 1, 1997.

- *There are no dry wells registered to the Property.*



7.0 FINDINGS AND CONCLUSIONS

7.1 Assessment Findings

Based on the results of this project, WT makes the following findings and conclusions:

Current Site Conditions

Basin 1

- Basin 1 is currently native and undeveloped vacant land. No occupants, current land uses, or structures were noted.
- Drainage on the Property appears to flow within natural washes in a southwesterly direction, and originates at an overchute which carries run-off over the CAP canal.
- No electrical transformers, or evidence of ASTs or USTs were found.
- Debris piles along the main wash through Basin 1 consisted of landscape trimmings, a television, foam, carpeting, paper waste, and broken cement. Environmental indicators such as stressed vegetation, staining, corrosion or chemical odors were not seen in around these debris piles.

Basin 2

- Basin 2 is currently native and undeveloped vacant land. No occupants or current land uses were noted.
- A collapsed and abandoned residential structure was present on the southwestern portion of Basin 2. Field observations and the apparent age of construction suggest the potential for asbestos-containing building materials to be present within the collapsed building.
- Drainage on the Property appears to flow within natural washes in a southwesterly direction, and originates at an overchute which carries run-off over the CAP canal.
- No evidence of ASTs or USTs were found.
- One pole-mounted electrical transformer belonging to SRP was installed on Basin 2. This transformer was in good condition and exhibited no signs of leakage. According to SRP, the PCB-content of this transformer is unknown.



*Flood Control District of Maricopa County
WT Job No. 2188JK014.01*

- A debris pile along the main wash through Basin 2 consisted of landscape trimmings, wood scrap, foam, carpeting, and lawn furniture. Environmental indicators such as stressed vegetation, staining, corrosion or chemical odors were not seen in around these debris piles.
- A shallow rectangular excavation of unknown origin was seen on the northern portion of Basin 2.

Basin 3

- The west portion Basin 3 is currently native and undeveloped vacant land.
- One residential structure occupies a lot on the northeastern portion of Basin 3. The potential exists for there to be asbestos-containing building materials within this structure.
- Drainage on the Property appears to flow within natural washes in a southwesterly direction, and originates at an overchute which carries run-off over the CAP canal.
- The current property owner has indicated that sanitary wastewater is directed to an on-site septic system, and that there is not a ground water well on the lot.
- No electrical transformers, or evidence of ASTs or USTs were found.
- A large stockpile of excavated soil from an unknown origin was present on the northern portion of Basin 3. Environmental indicators such as stressed vegetation, staining, corrosion or chemical odors were not seen around the soil stockpile.

Basin 4

- The south portion of Basin 4 is currently native and undeveloped vacant land and storage areas for the Tire Store and ICU Rental.
- The north portion of Basin 4 consists of nine residential lots, two of which are vacant. There are seven residential structures, two garage/shed structures, and four mobile homes. The potential exists for there to be asbestos-containing building materials within the residential and garage/shed structures.
- The current property owners have indicated that sanitary wastewater is directed to on-site septic systems on each of the residential lots, and for the Tire Store. The septic system at the Tire Store is reportedly not on the portion of that site which is within Basin 4.



- There is one inoperable ground water well on the Tire Store lot.
- One pole-mounted transformer was installed along the south side of Akron Street and one on the west boundary of the ICU Rental lot. These transformers were in good condition and exhibited no signs of leakage. According to SRP, the PCB-content of these transformers is unknown.
- One AST was observed on the ICU Rental lot. The tank appeared to be in good condition with no evidence of leakage, but it did not have secondary containment.
- No evidence of USTs were observed on the Property.
- Drainage appears to flow within natural washes in a southwesterly direction towards two sets of overchutes which carry the drainage across the CAP canal.
- An area of construction debris was seen on the western portion of the vacant land on Basin 4, and it consisted of broken concrete slabs and pipe sections, asphalt pavement, and vegetation. Several areas of scrap metal, scrap wood and vegetative debris were seen on the lots associated with the Tire Store and ICU Rental. Environmental indicators such as stressed vegetation, staining, corrosion or chemical odors were not seen in or around these debris piles.

Historic Site Conditions

- Native and vacant land, and sparse residential development, have persisted on the Property and the surrounding area. These uses were seen as early as 1954 in aerial photographic evidence. City directory listings confirm the historic residential uses on parts of the Property.

Adjacent Land Use

- Land uses around the Property consisted primarily of native and vacant land, and sparse residential development.
- Some commercial development was noted along Apache Trail, which is a major east-west arterial street passing through the southern portion of the study area. To a lesser degree, commercial/retail uses were noted on the east end of University Drive, which is also an east-west arterial street.
- A private lot with automobiles in various states of disrepair adjoined the south side of Basin 1, and a contractor's yard used to store equipment and materials adjoined



the south side of the eastern portion of Basin 2. WT did not observe evidence of surface impacts to the Property from either of these off-site locations.

- The CAP canal transverses the study area in a southeasterly direction and forms a northeastern boundary for Basins 1 through 3, and a southwestern boundary for Basin 4.

Regulatory Database Research

- WT found no database entries pertaining to the Property.
- WT found no NPL, WQARF, or TSDf sites within the one mile minimum search distance.
- WT found no CERCLIS, ACIDS, or open/closed Landfills within the ½ mile minimum search distance.
- WT found no RCRA Notifiers or RCRA Compliance sites within the ¼ mile minimum search distance.
- WT found one ERNS site within the ¼ mile minimum search distance. This incident involved an unknown amount of waste oil and lubricants at a Texaco Star Mart on the northwest corner of Crismon Road and Apache Trail.
- WT found one HAZMAT site within the ¼ mile minimum search distance. This incident involved the threat of a release at a drug lab which was investigated by the Drug Enforcement Agency.
- WT found four sites with a total of eleven registered UST within the ¼ mile minimum search distance. Of the eleven USTs, three are reported as removed and eight are reported as currently active.
- WT found six leaking UST sites within the ½ mile minimum search distance. One of these sites has been categorized as closed by the ADEQ, meaning it has been remediated to ADEQ's satisfaction. The five remaining open leaking USTs are located down- to cross-gradient from the Property. Based on the closure status of the one leaking UST, and the down- to cross-gradient position of the five open leaking USTs, WT does not expect leakage from these USTs to have impacted the Property.
- WT found no dry wells registered to the Property.



7.2 Conclusions and Recommendations

WT has performed a Phase I Environmental Site Assessment, in conformance with the scope and limitations of ASTM Practice E 1527, of the property known as the 4½ acre parcel of vacant land, located at Higley Road, South of Broadway Road, Mesa, Arizona. Any exceptions to or deletions from ASTM Practice E 1527 are described in Section 7.3 of this report.

This assessment has revealed no evidence of recognized environmental conditions in connection with the Property, except for the following:

- **Suspect Asbestos-Containing Building Materials (ACBMs)** -- There is one collapsed residential structure on Basin 2, one occupied residential structure on Basin 3, and six occupied residential structures and three garage/shed structures on Basin 4. Based on our visual observations, and the dates of construction for these structures, the potential exists for ACBMs to be present in these structures. Renovation or demolition activity which may affect ACBMs, require the property owner or representatives to comply with the federal requirements for demolition/renovation projects which are presented in the EPA National Emissions Standards for Hazardous Air Pollutants Asbestos Regulations (NESHAP, 40 CFR 61, Subpart M). WT recommends performing an asbestos survey of these existing structures which will facilitate the NESHAPS notification requirements, and the development of specifications for abatement. Debris on the Property, such as concrete remnants, should also be sampled and tested for asbestos to determine whether or not these materials will require specialized disposal methods.
- **Solid Waste and Debris** -- Areas of solid waste and debris were seen on accessible areas of all four basins. No environmental indicators, or evidence of chemical containers, were seen at these debris piles. WT recommends removing this material to a solid waste disposal facility during grubbing and clearing activities.
- **Unknown Excavation** -- A shallow excavation of unknown origin was found on Basin 2. WT recommends excavating a test pit at this excavation to visually evaluate the subsurface. Make provisions for soil sampling and chemical analysis in the event that buried containers or other suspect media are uncovered.
- **Soil Pile** -- A soil pile of unknown origin was seen on Basin 3. WT recommends sampling and chemically analyzing representative portions of these soil piles to evaluate for the presence of elevated constituents, including metals, petroleum hydrocarbons, poly-aromatic hydrocarbons, and volatile organics.



- **Septic Systems** -- The residential lots on the Property utilize septic systems for sanitary waste water discharges. There were no available records describing the specifications of these septic systems. WT recommends abandoning these septic systems according to the guidelines established by the Maricopa County Environmental Services Department. Make provisions for sampling and chemical analysis of water, sludge or soil in the event that non-sanitary wastes are encountered during abandonment. If the septic systems include seepage pits, then WT further recommends abandonment of the seepage pits by excavation, pressure grouting of the vertical discharge lines, or a combination of these two activities. Specific abandonment procedures should be determined in conjunction with the construction details for the planned retention basins.
- **Old Well** -- An old well was observed on the north end of the Tire Store lot. The well appears not to have been used in some time, and WT recommends abandoning this well according to the requirements of the Arizona Department of Water Resources.
- **Buried Debris** -- At the Tire Store, buried items including appliances, motorcycles and bicycles are suspected on the Property. WT recommends screening the suspected area with a magnetometer to evaluate the areal dispersion of the debris. WT further recommends excavating a series of test piles to visually evaluate the nature of the buried materials. Make contingency plans for sample collection and chemical analysis in the event that impacted soils are encountered during the excavation of the test pits.
- **Above Ground Storage Tank** -- An above ground storage tank was observed on the ICU Rental lot. WT recommends removal of the tank and soil tests beneath the tank to assess for spillage.
- **Wash Rack** -- A wash rack used to clean equipment is operated on a parcel of land currently owned by ICU Rental. WT recommends sampling soil from this area to evaluate it for elevated levels of petroleum related compounds and cleaning materials.

7.3 Assessment Limitations

The scope of this assessment was limited to visual and physical observations made during the site visit, interviews with knowledgeable persons, interviews with public agency and public utility company personnel, and reviews of reasonably ascertainable published and unpublished reports, literature, and aerial photographs. As a result, these conclusions are based on information supplied by others, their professional expertise and actual knowledge, and interpretations by qualified personnel.



The purpose of this assessment was to assess the likelihood of recognized environmental conditions associated with the Property attributable to past and current uses of the Property and sites within the specified study area. Recognized environmental conditions are: the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. The term includes hazardous substances and petroleum products even under compliance with laws. The term is not intended to include de minimis conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. As a result, this assessment does not highlight the presence of the following conditions unless they were the express concerns of contacted personnel, report and literature authors, or the work scope:

- Naturally occurring toxic and hazardous substances in the subsurface soils, rock, and water.
- Toxicity of substances common in current habitable environments, such as stored household products, building materials, and consumables.
- Contaminants or contaminant concentrations that are not a concern now but may be under future regulatory standards.

No environmental site assessment can wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connection with a property. The performance of an assessment according to ASTM Practice E 1527 is intended to reduce, but not eliminate, uncertainty regarding the potential for recognized environmental conditions in connection with a property, recognizing reasonable limits of time and cost. Therefore, if none are identified as a result of this assessment, such a conclusion should not be construed as a guaranteed absence of recognized environmental conditions.

We have performed our services for this project in accordance with our agreement and understanding with our client. This document and the information contained herein have been prepared for and may be relied upon by our client.

The following exceptions to the ASTM Practice E 1527 are noted:

- The report format is different and has been adapted to local standards.



8.0 REFERENCES

- The ASTM, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, E-1527, dated 1997.
- Rupp Aerial Photography, dated 1/11/54, 12/30/57, 1/31/64, 12/6/69, 1/20/79, 2/25/80, 1/16/86, 2/15/94.
- The Buckhorn Quadrangle 7.5 Minute Topographic Map, dated 1956 and photorevised 1982.
- The Apache Junction Quadrangle 7.5 Minute Topographic Map, dated 1956 and photorevised 1982.
- Cole's City Directories dated: 1962, 1967, 1972, 1977, 1982, 1987, 1992, 1996-97.
- ADWR, Report No. 27, dated 1995.
- ADEQ, 1987 Annual Report on Groundwater Quality and Enforcement Actions, dated January 1, 1988.
- ADEQ, 1988 Annual Report on Groundwater Quality and Enforcement Actions, dated January 1, 1989.
- ADEQ, 1989 Annual Report on Groundwater Quality and Enforcement Actions, dated July 1, 1990.
- ADEQ, 1990 Annual Report on Groundwater Quality and Enforcement Actions, dated July, 1991.
- ADEQ, 1991-1992 Annual Report on Groundwater Quality and Enforcement Actions, dated July, 1993.
- ADEQ, 1993-1994 Annual Report on Groundwater Quality and Enforcement Actions, dated June 30, 1994.
- ADEQ, 1995 Annual Report on Groundwater Quality and Enforcement Actions, dated December 1, 1995.
- ADEQ, 1996 Annual Report on Groundwater Quality and Enforcement Actions, dated December 1, 1996.



*Flood Control District of Maricopa County
WT Job No. 2188JK014.01*

- EPA National Priority List, dated January 17, 1997.
- EPA CERCLIS list, dated March 31, 1997.
- EPA ERNS database, dated December 2, 1997.
- EPA RCRA Notifiers Database, dated September 23, 1997.
- ADEQ WQARF and Superfund Booklet, dated May 1997.
- ADEQ ACIDS list, dated May 5, 1997.
- ADEQ RCRA Compliance Log, dated November 17, 1997.
- ADEQ Hazardous Waste TSDF's list, dated June 25, 1997.
- ADEQ UST Registration List, dated January 30, 1997.
- ADEQ Leaking UST List, dated October 1, 1997.
- ADEQ Directory of Arizona Active and Inactive Municipal Solid Waste Landfills, Rubbish Landfills, and Private Solid Waste Landfills, dated October 8, 1996.
- ADEQ Directory of Arizona Closed Solid Waste Landfills, October 8, 1996.
- ADEQ HAZMAT Incident Logbook, dated October 9, 1997.
- ADEQ Dry Well Registration List, dated October 1, 1997.





DRAFT

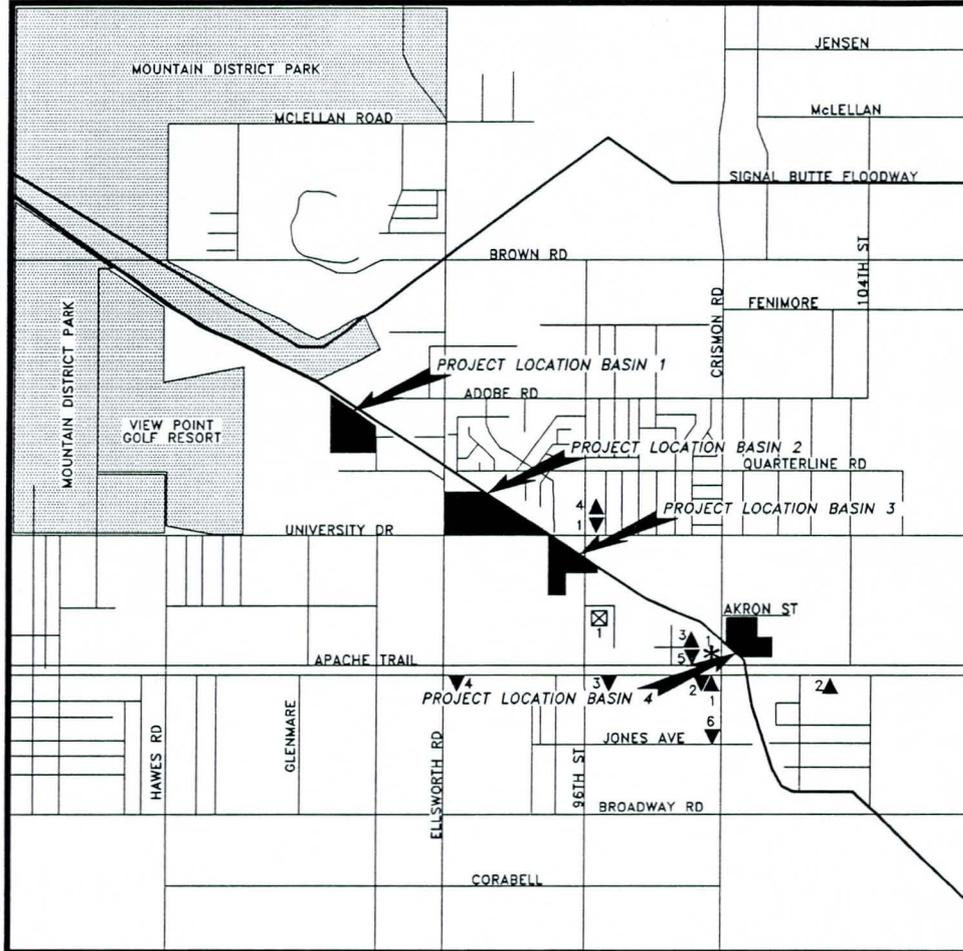
**APPENDIX A:
FIGURES**



Figure 1 – Vicinity Map

Southeast Mesa Area Drainage Master Plan

Phase I Environmental Site Assessment



LEGEND:

- ▲ UST LOCATION & REFERENCE NUMBER
- ▼ LEAKING UST LOCATION & REFERENCE NUMBER
- * ERNS LOCATION & REFERENCE NUMBER
- ☒ HAZARDOUS MATERIALS INCIDENT LOCATION & REFERENCE NUMBER



NOT TO SCALE

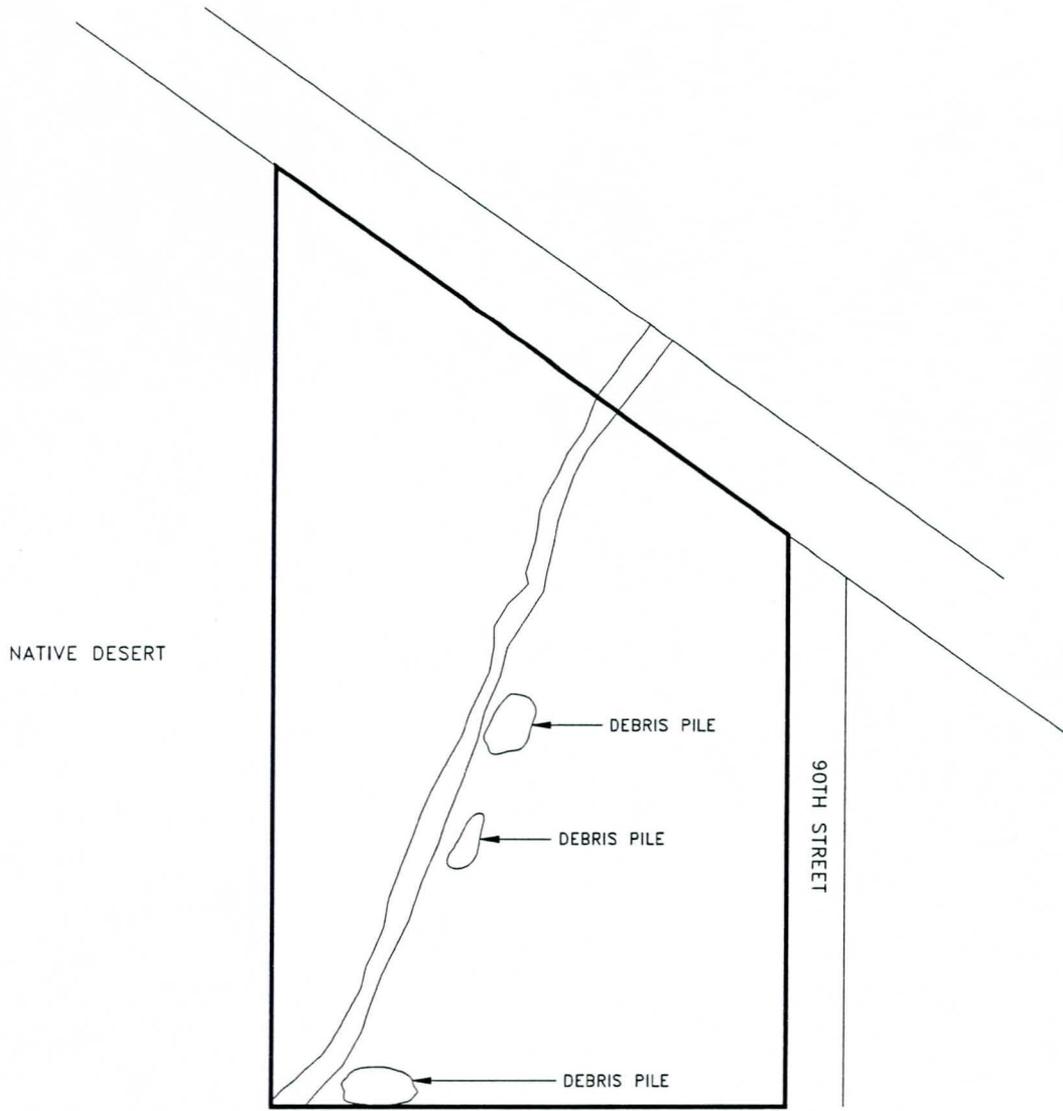
Reviewed: R. Gomez	Review Date: 02/18/98
Client: Flood Control District of Maricopa County	Prepared: L. Fuentes
Western Technologies Inc.	
Job No. 2188JK014	Figure: 1



Figure 2 - Site Plan / Basin 1

Southeast Mesa Area Drainage Master Plan

Phase I Environmental Site Assessment



DECATUR ROAD



NOT TO SCALE

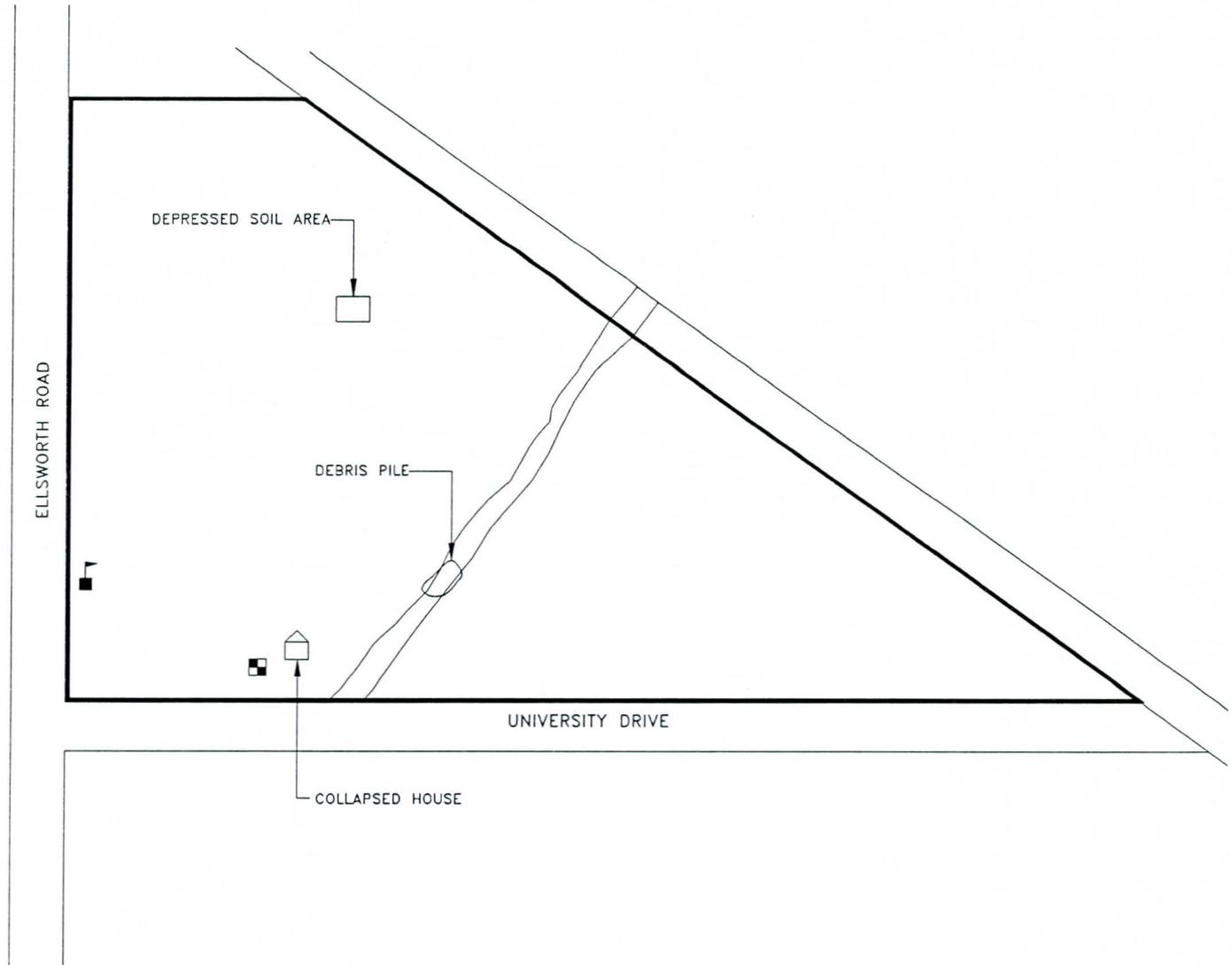
Reviewed: R. Gomez	Review Date: 02/18/98
Client: Flood Control District of Maricopa County	Prepared: L. Fuentes
Western Technologies Inc.	
Job No. 2188JK014	Figure: 2



Figure 3 – Vicinity Map / Basin 2

Southeast Mesa Area Drainage Master Plan

Phase I Environmental Site Assessment



LEGEND

-  MAILBOX
-  TRANSFORMER



NOT TO SCALE

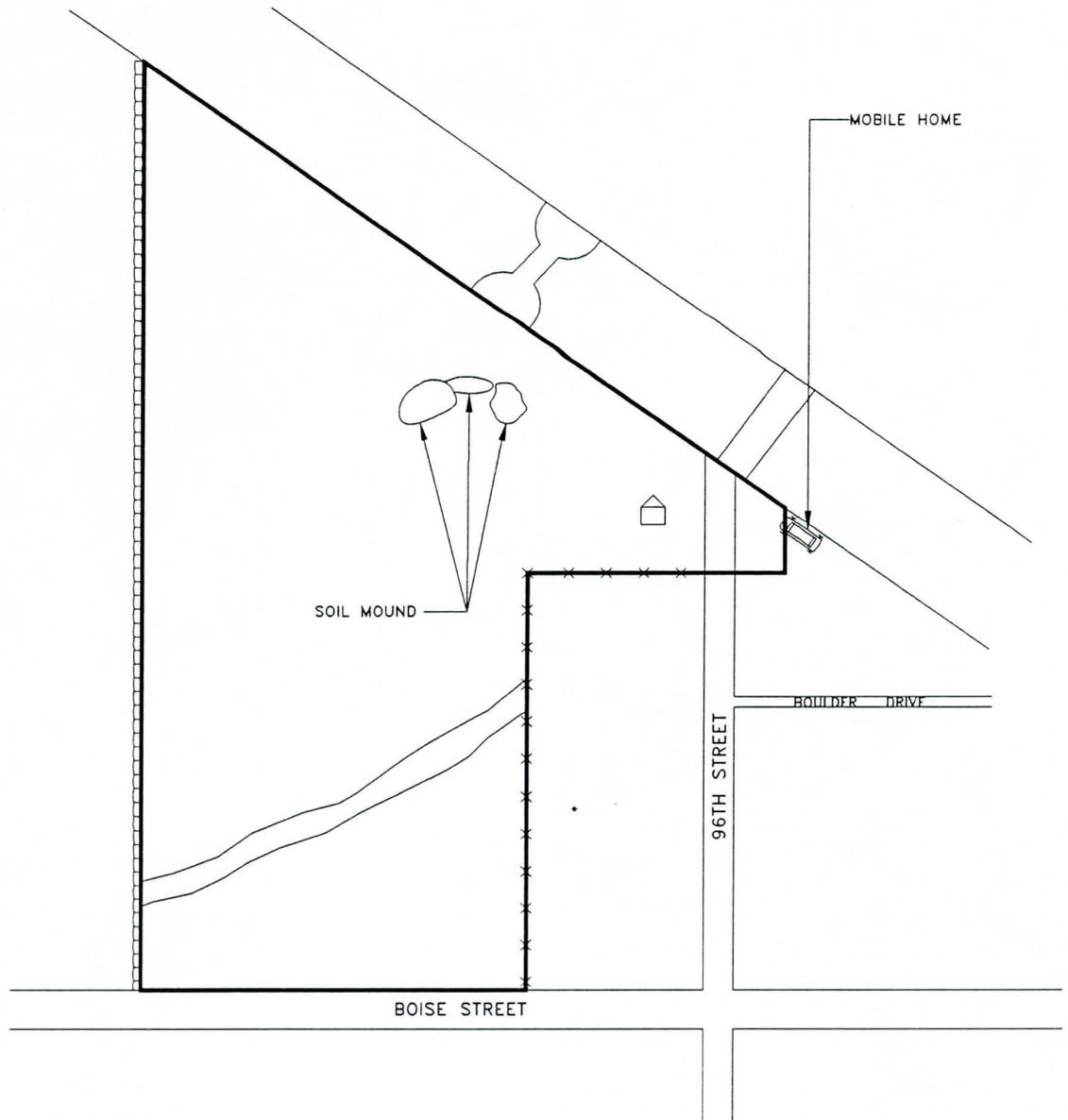
Reviewed: R. Gomez	Review Date: 02/18/98
Client: Flood Control District of Maricopa County	Prepared: L. Fuentes
Western Technologies Inc.	
Job No. 2188JK014	Figure: 3



Figure 4 - Vicinity Map / Basin 3

Southeast Mesa Area Drainage Master Plan

Phase I Environmental Site Assessment



- LEGEND**
- ×-×-× CHAINLINK FENCE
 - BLOCK WALL
 - 🏠 HOUSE



NOT TO SCALE

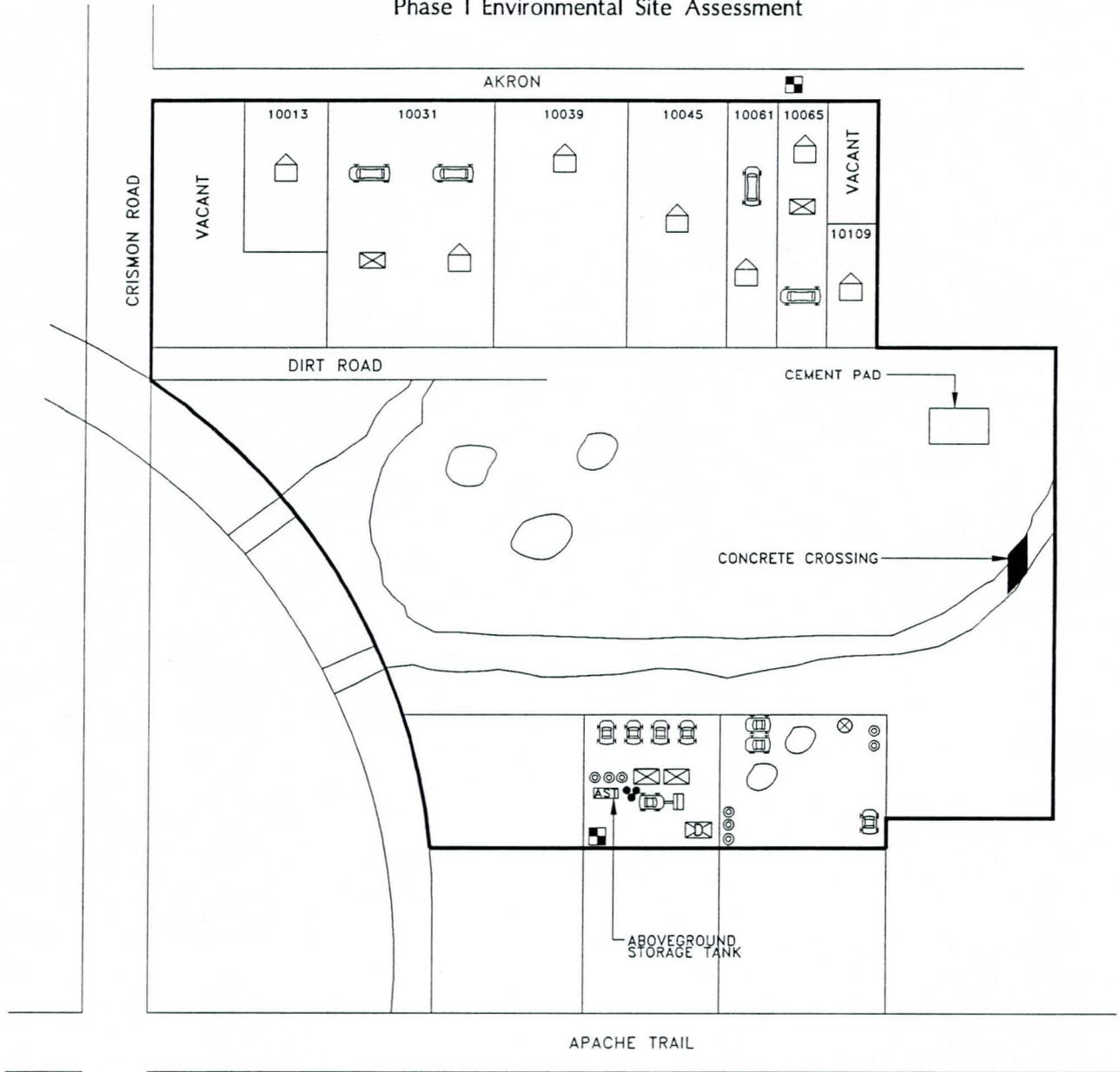
Reviewed: R. Gomez	Review Date: 02/18/98
Client: Flood Control District of Maricopa County	Prepared: L. Fuentes
Western Technologies Inc.	
Job No. 2188JK014	Figure: 4



Figure 5 - Vicinity Map / Basin 4

Southeast Mesa Area Drainage Master Plan

Phase I Environmental Site Assessment



LEGEND

- MOBILE HOME
- HOUSE
- GARAGE OR SHED
- TRANSFORMER
- DEBRIS PILE
- CAR/TRUCK
- BULL DOZER
- DUMPSTER
- WELL
- BATTERIES
- TIRES



NOT TO SCALE

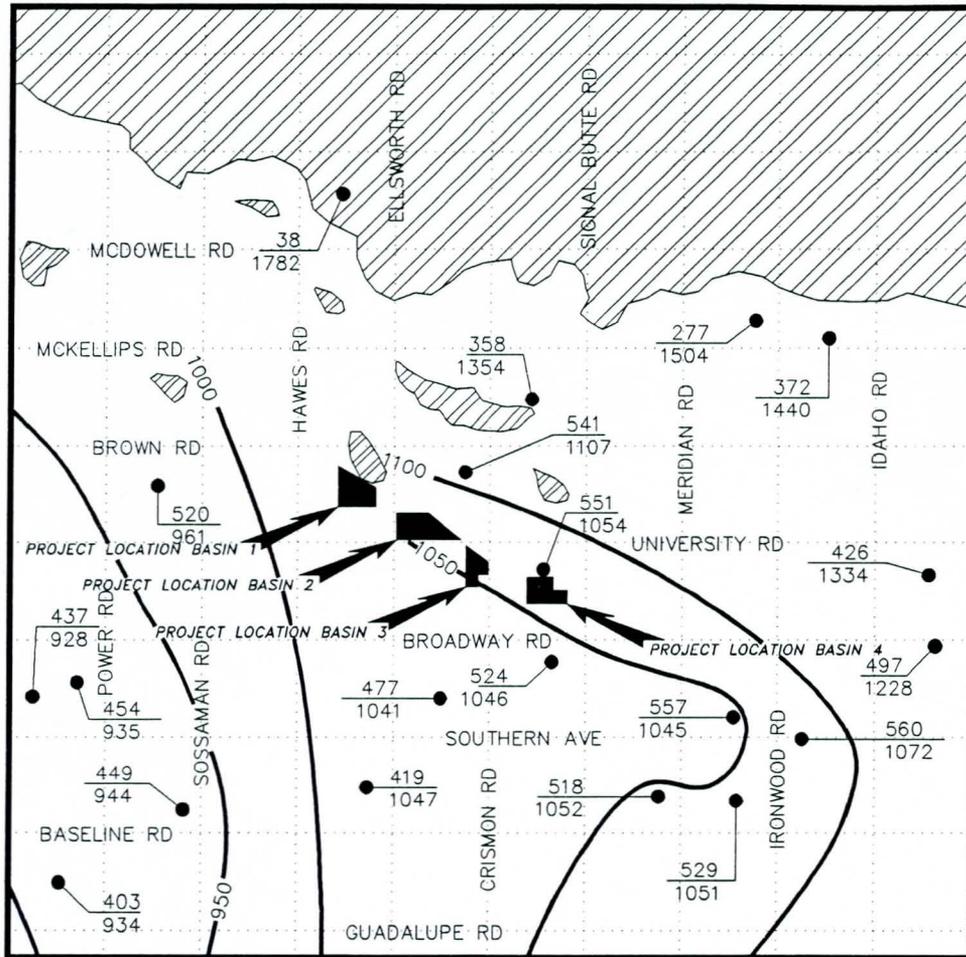
Reviewed: R. Gomez	Review Date: 02/18/98
Client: Flood Control District of Maricopa County	Prepared: L. Fuentes
Western Technologies Inc.	
Job No. 2188JK014	Figure: 5



Figure 6 - Groundwater Map

Southeast Mesa Area Drainage Master Plan

Phase I Environmental Site Assessment



LEGEND:

- WELL IN WHICH DEPTH TO WATER WAS MEASURED IN 1991-92--Upper number, 198, is depth to water in ft below land surface. Lower number, 924, is the altitude of the water level in feet.
- WELL IN WHICH DEPTH TO WATER WAS MEASURED WITH SIGNIFICANTLY HIGH WATER LEVEL IN 1991-92--Upper number, 113, is depth to water in ft below land surface. Lower number, 1110, is the altitude of the water level in feet.
- WATER LEVEL CONTOUR--Shows altitude of the water level. Contour interval 50 feet. Datum is mean sea level.
- ROCK OUTCROPPINGS & MOUNTAINS

*Section from Arizona Department of Water Resources--D.W.R. Hydrological Map Series Report No. 27, Sheet 1 of 3.



NOT TO SCALE

Reviewed: R. Gomez	Review Date: 02/18/98
Client: Flood Control District of Maricopa County	Prepared: L. Fuentes
Western Technologies Inc.	
Job No. 2188JK014	Figure: 6





DRAFT

**APPENDIX B:
PICTURES**

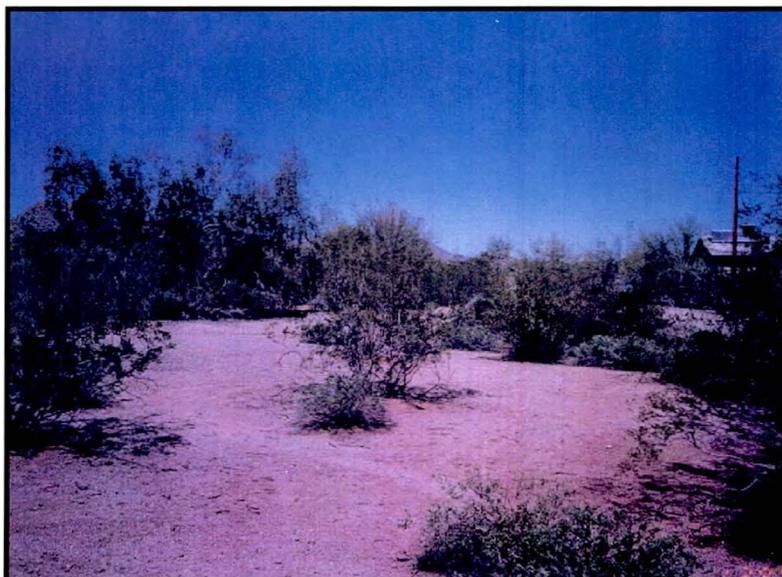


Flood Control District of Maricopa County / Southeast Mesa Drainage Master Plan
Phase I Environmental Site Assessment / WT Job No. 2188JK014



Picture No. 1
Northeast Corner of Basin 1 Facing
South Along the 90th Street Alignment

Picture No. 2
Northeast Corner of Basin 1 Facing
West Along the CAP Canal



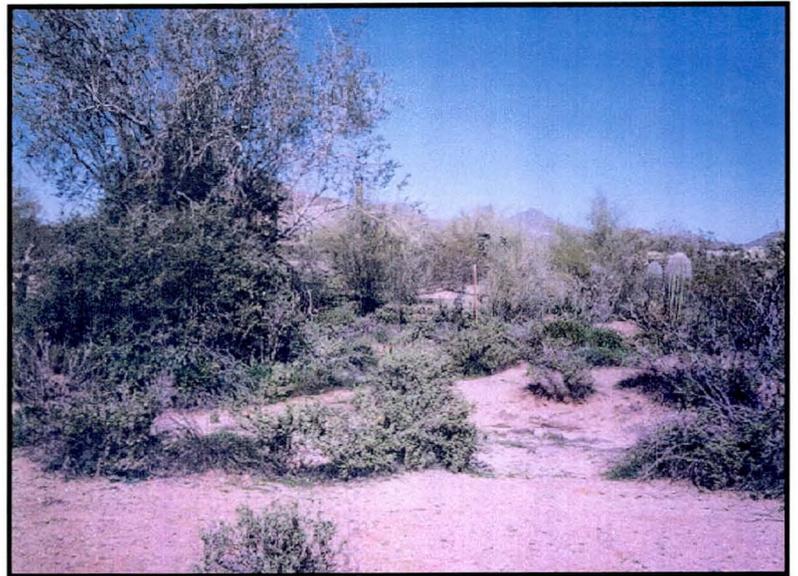
Picture No. 3
Southeast Corner of Basin 1 Facing
North Along the 90th Street Alignment

Flood Control District of Maricopa County / Southeast Mesa Drainage Master Plan
Phase I Environmental Site Assessment / WT Job No. 2188JK014



Picture No. 4
Southeast Corner of Basin 1 Facing West

Picture No. 5
South Center of Basin 1 Facing North



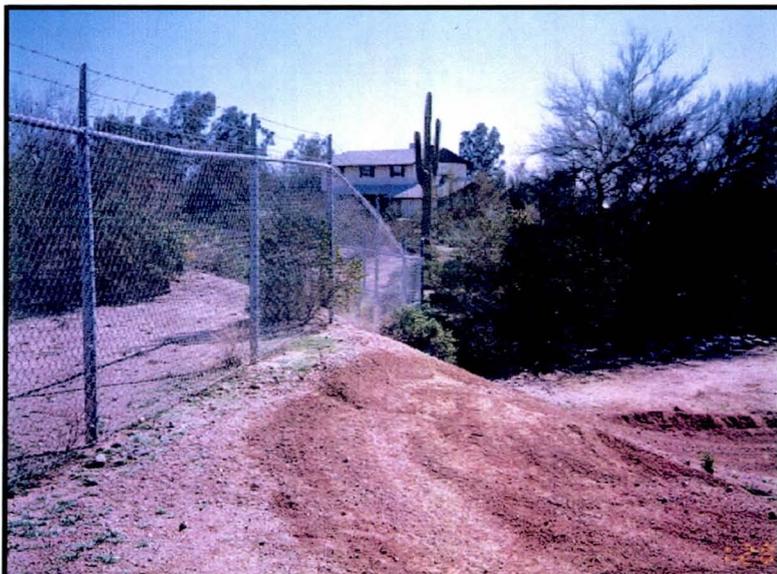
Picture No. 6
Southwest Corner of Basin 1 Facing East

Flood Control District of Maricopa County / Southeast Mesa Drainage Master Plan
Phase I Environmental Site Assessment / WT Job No. 2188JK014



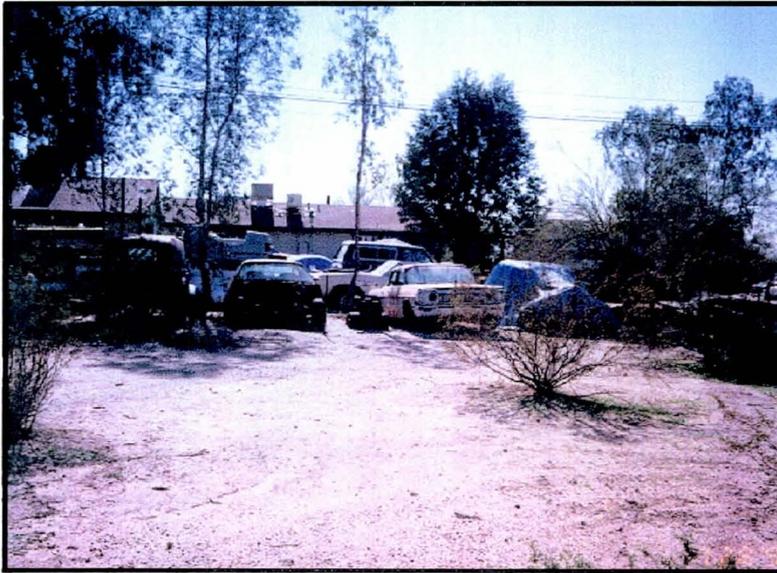
Picture No. 7
Southwest Corner of Basin 1 Facing North

Picture No. 8
Northwest Corner of Basin 1 Facing South



Picture No. 9
Northwest Corner of Basin 1 Facing East Towards Overchute 1

Flood Control District of Maricopa County / Southeast Mesa Drainage Master Plan
Phase I Environmental Site Assessment / WT Job No. 2188JK014

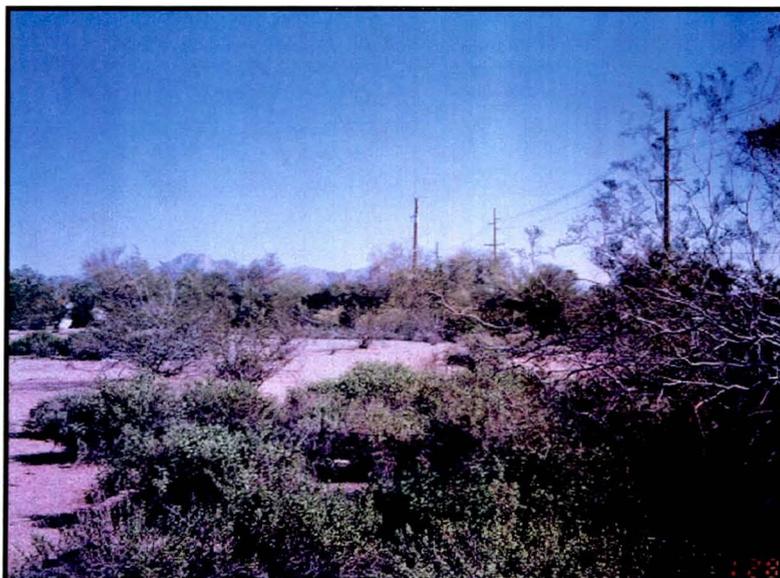
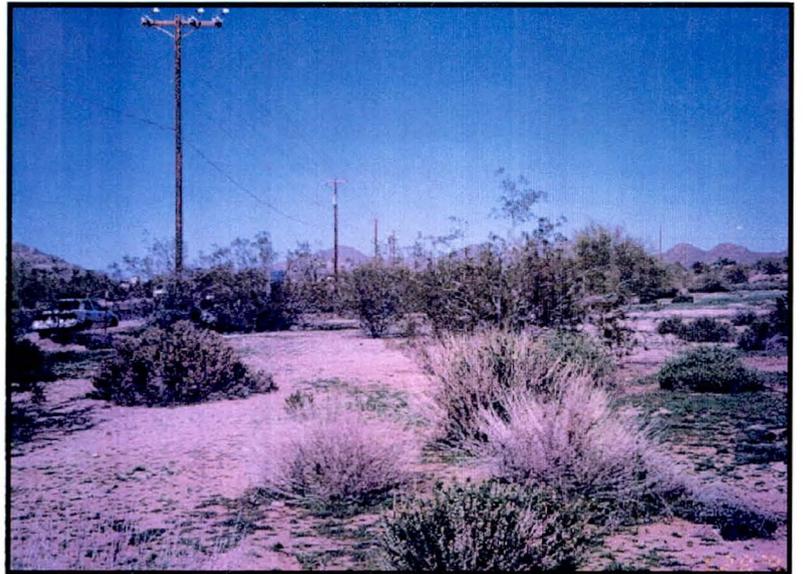


Picture No. 10

Vehicles in Disrepair at an Off-site Residential Property Adjoining Basin 1

Picture No. 11

Southwest Corner of Basin 2 at University Drive and Ellsworth Road, Facing North Along Ellsworth Road



Picture No. 12

Southwest Corner of Basin 2 at University Drive and Ellsworth Road, Facing East Along University Drive

Flood Control District of Maricopa County / Southeast Mesa Drainage Master Plan
Phase I Environmental Site Assessment / WT Job No. 2188JK014

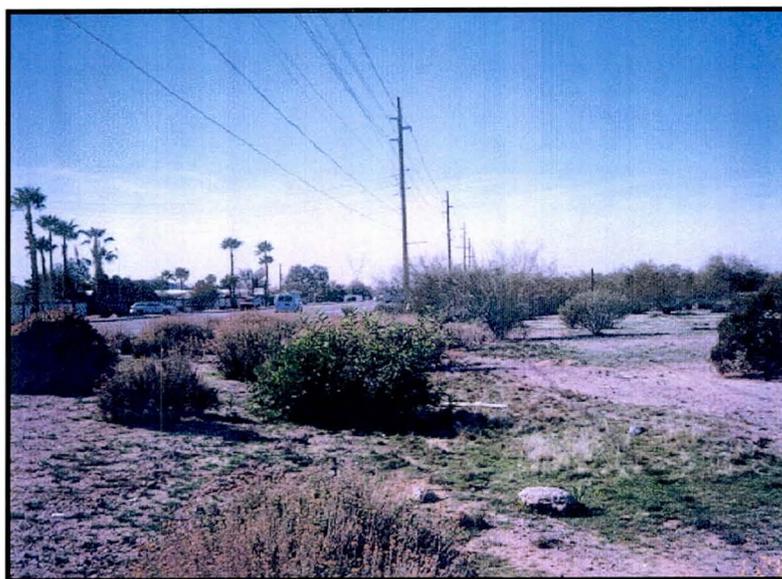


Picture No. 13

South Central Portion of Basin 2 Facing North

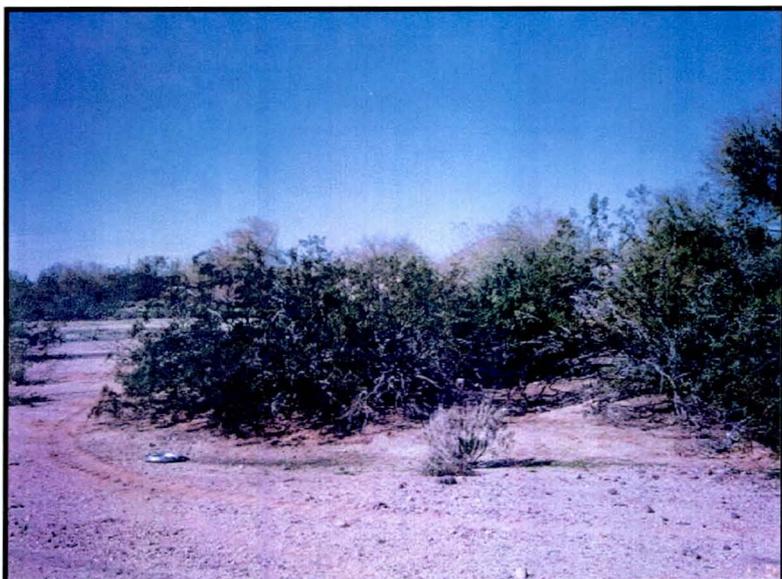
Picture No. 14

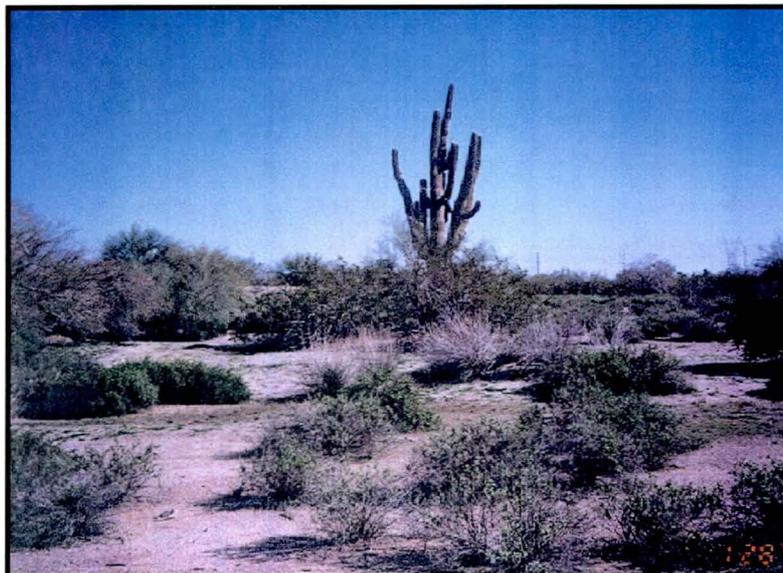
Southeast Corner of Basin 2 Facing West Along University Drive



Picture No. 15

Southeast Corner of Basin 2 Facing Northwest



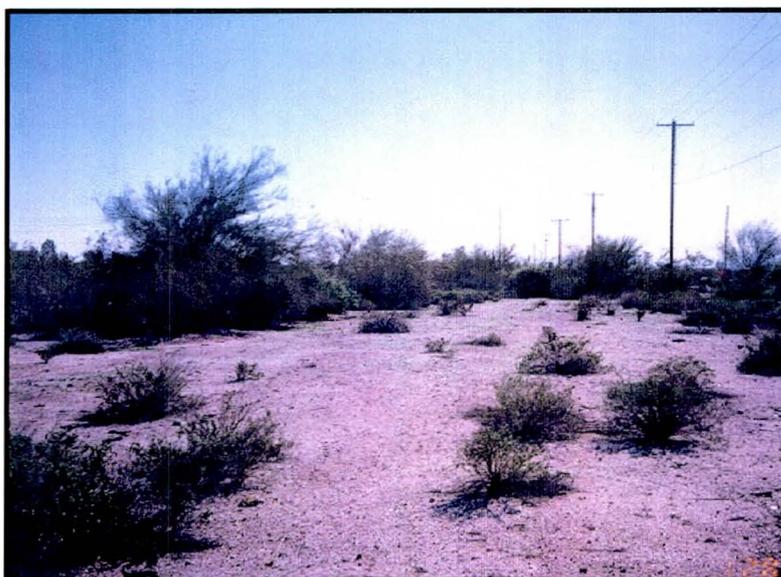


Picture No. 16

Northwest Corner of Basin 2 Facing East from Ellsworth Road, Toward the CAP Canal

Picture No. 17

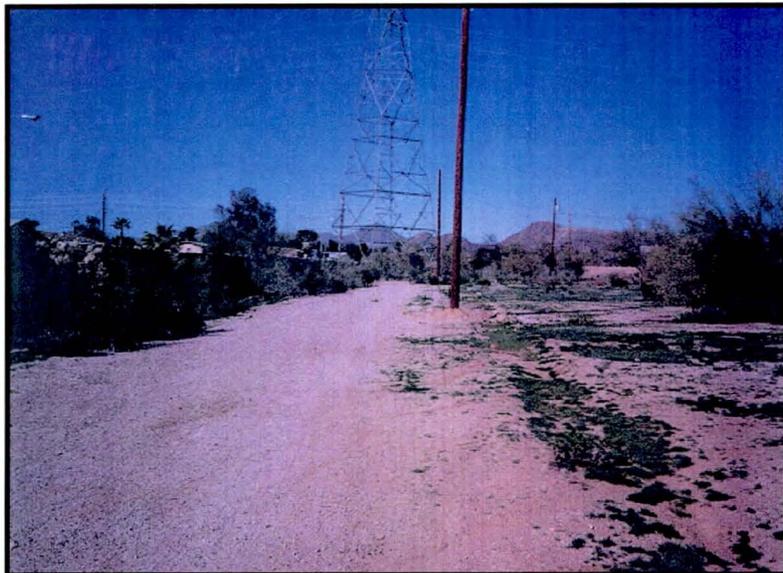
Northwest Corner of Basin 2 Facing South Along Ellsworth Road



Picture No. 18

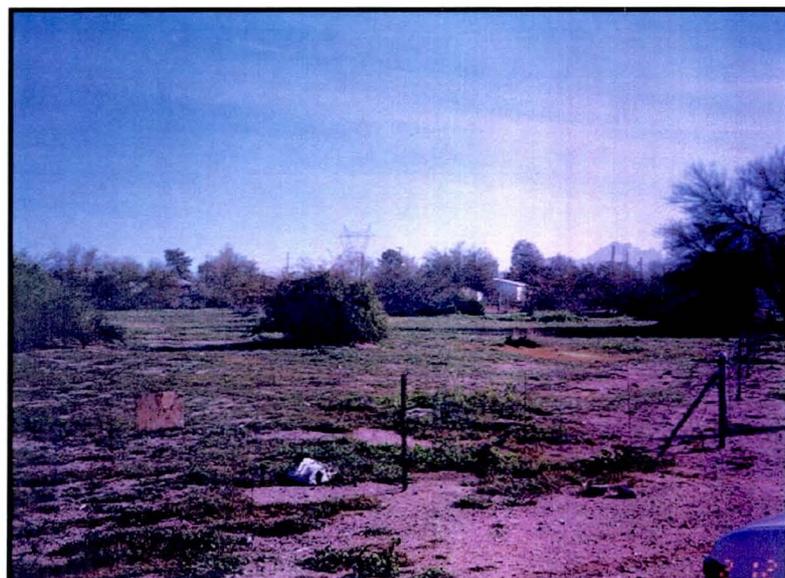
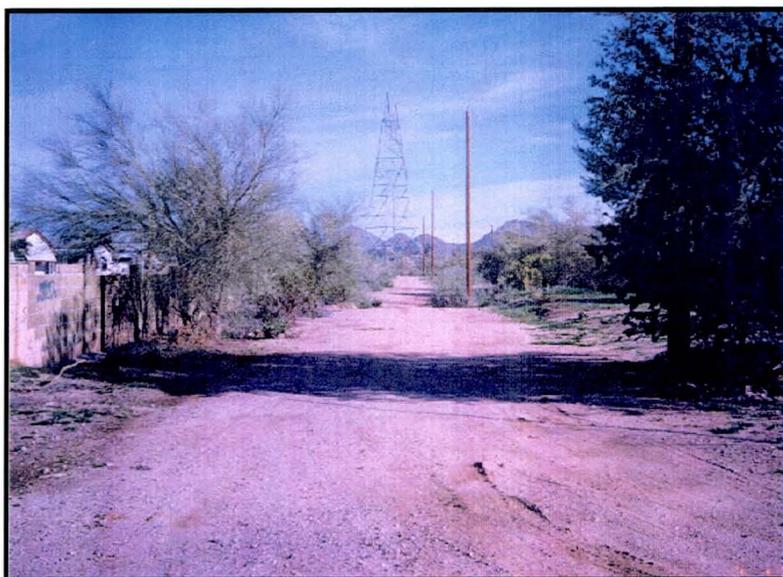
Depressed Soil Area of Unknown Origin on Basin 2

Flood Control District of Maricopa County / Southeast Mesa Drainage Master Plan
Phase I Environmental Site Assessment / WT Job No. 2188JK014



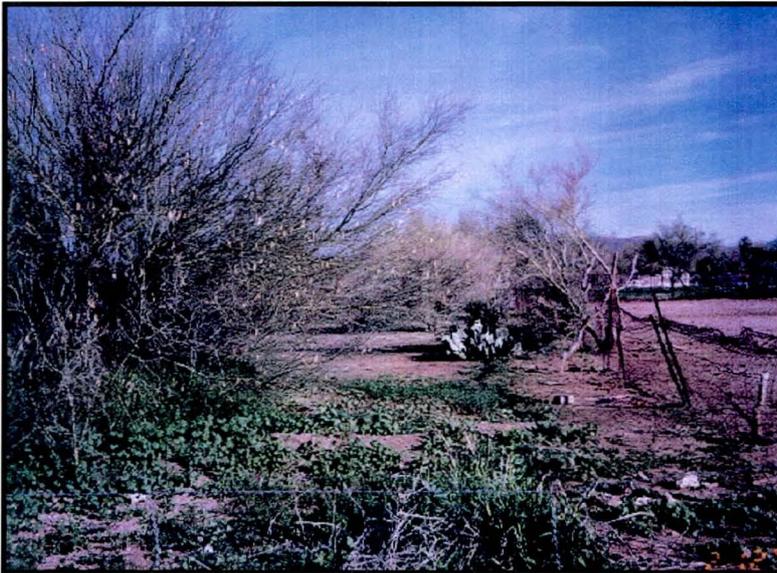
Picture No. 19
West Side of Basin 3 Looking North
Along the 95th Street Alignment

Picture No. 20
Southwest Corner of Basin 3 Facing
North Along the 95th Street Alignment
From Boise Street



Picture No. 21
Southwest Corner of Basin 3 Facing
East Along Boise Street From the 95th
Street Alignment

Flood Control District of Maricopa County / Southeast Mesa Drainage Master Plan
Phase I Environmental Site Assessment / WT Job No. 2188JK014



Picture No. 22

Southeast Corner of Basin 3 on Boise Street Facing North

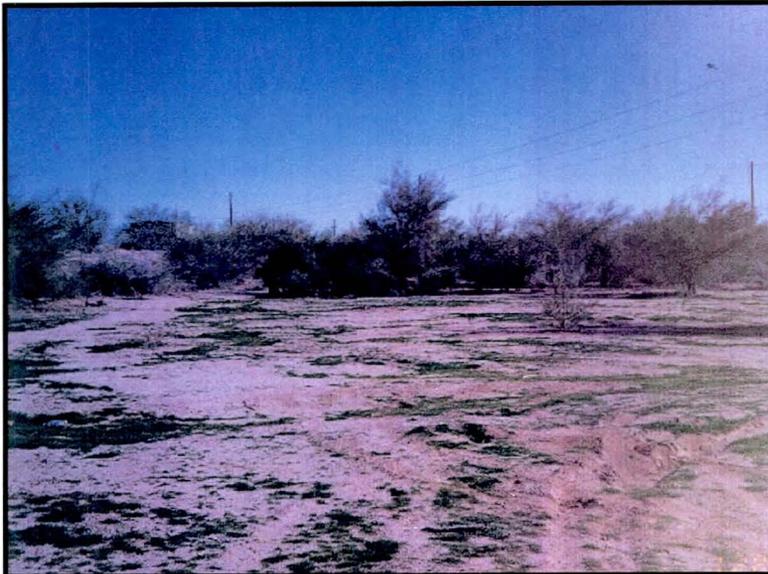
Picture No. 23

The Northeast Section of basin 3 at 96th Street Near Overchute No. 3



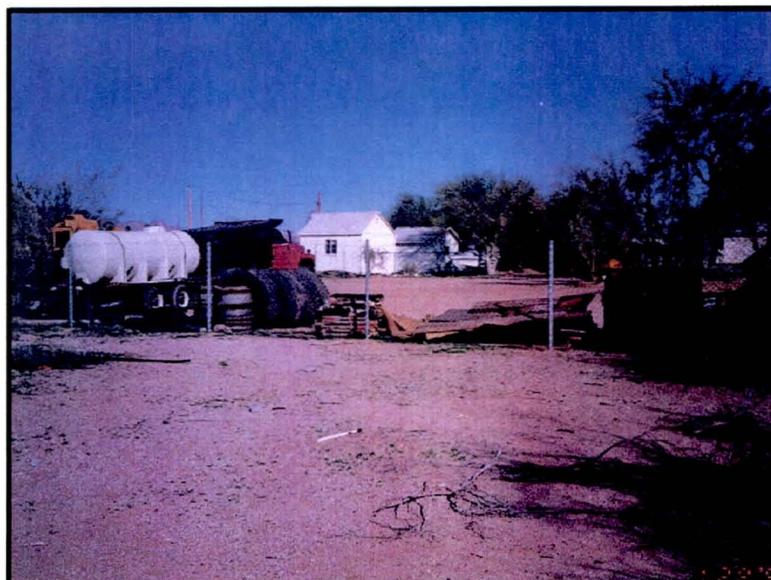
Picture No. 24

Central Portion of Basin 3 Facing East

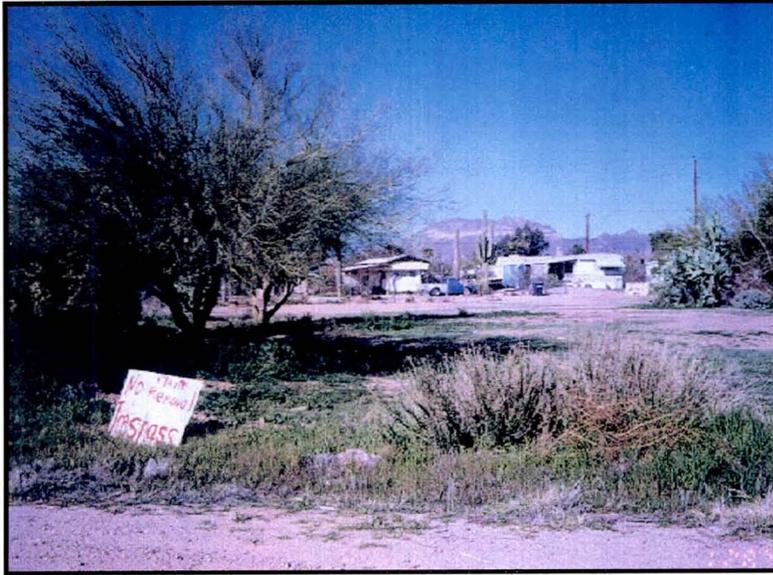


Picture No. 25
Northwest Corner of Basin 3 Facing
East Towards the CAP Canal

Picture No. 26
Soil Mound of Unknown Origin Within
Basin 3



Picture No. 27
Contractor's Equipment Stored on
Residential Lot on the West Side of
96th Street Adjoining Basin 3

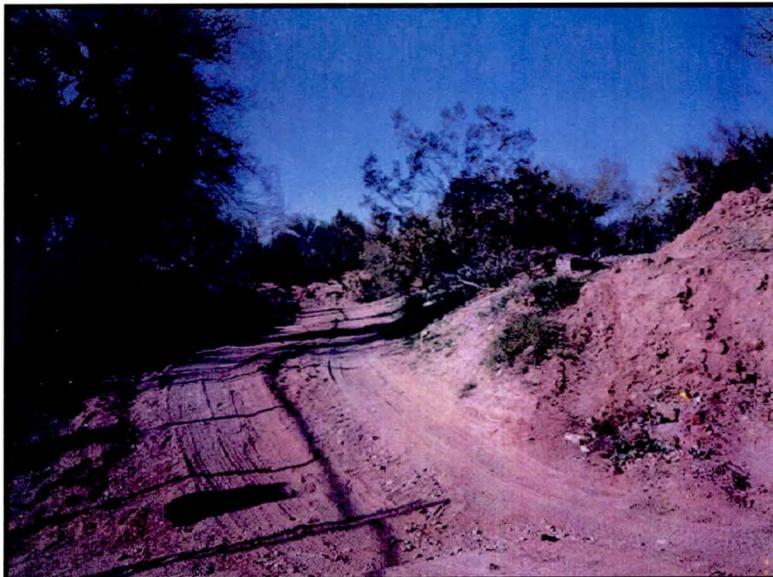


Picture No. 28

Southwest Corner of Basin 4 at
Crismon Road Facing North

Picture No. 29

Southwest Corner of Basin 4 at
Crismon Road Facing East



Picture No. 30

Southwest Corner of Basin 4 at the
CAP Canal Facing North



Picture No. 31

Southwest Corner of Basin 4 at the
CAP Canal, Showing the Wash Leading
to Overchute No. 5

Picture No. 32

Southeast Corner of Basin 4 Facing
North



Picture No. 33

Southeast Corner of Basin 4 Facing
West

Flood Control District of Maricopa County / Southeast Mesa Drainage Master Plan
Phase I Environmental Site Assessment / WT Job No. 2188JK014

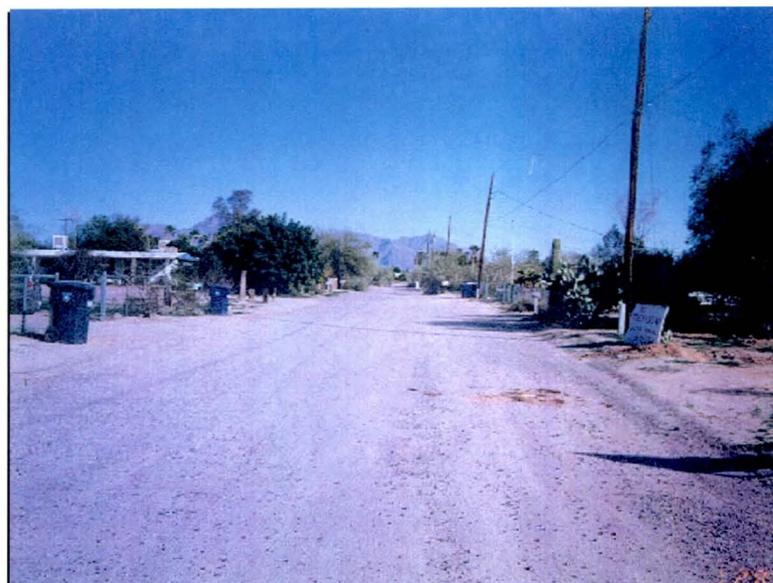
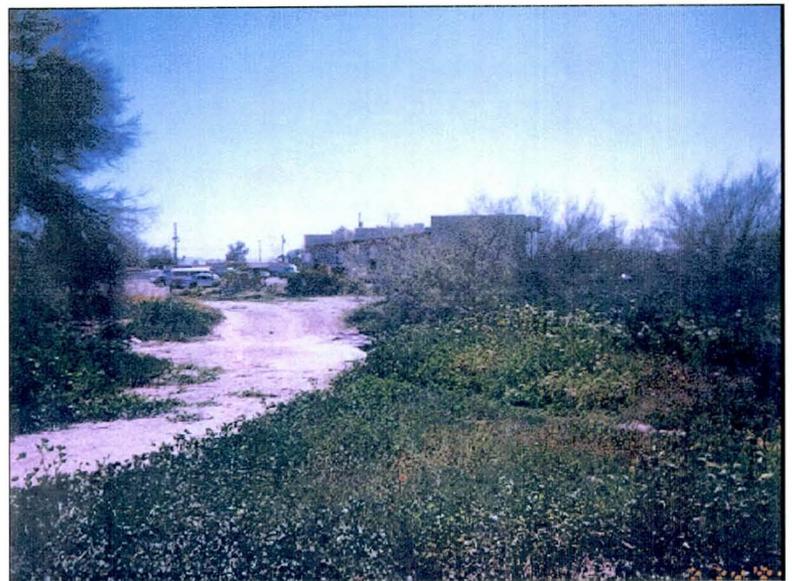


Picture No. 34

Northeast Corner of Basin 4 Facing West

Picture No. 35

Northeast Corner of Basin 4 Facing South



Picture No. 36

Northwest Corner of Basin 4 Facing East Along Akron Street

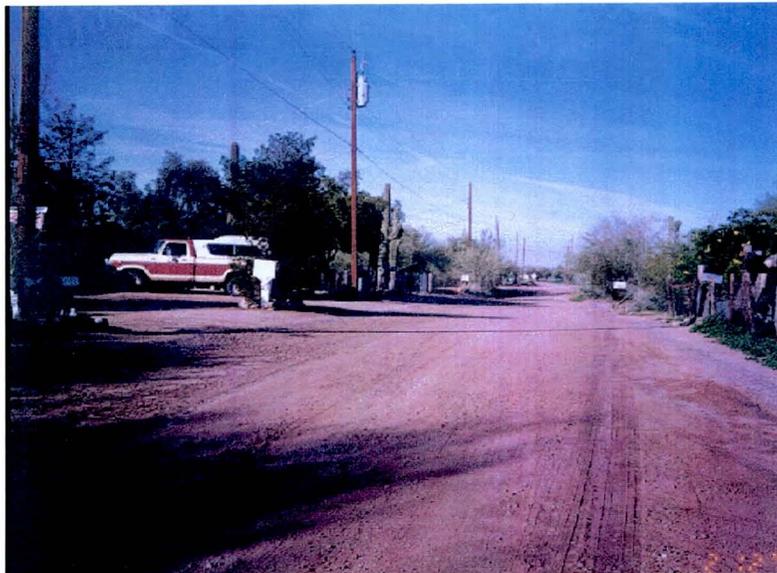
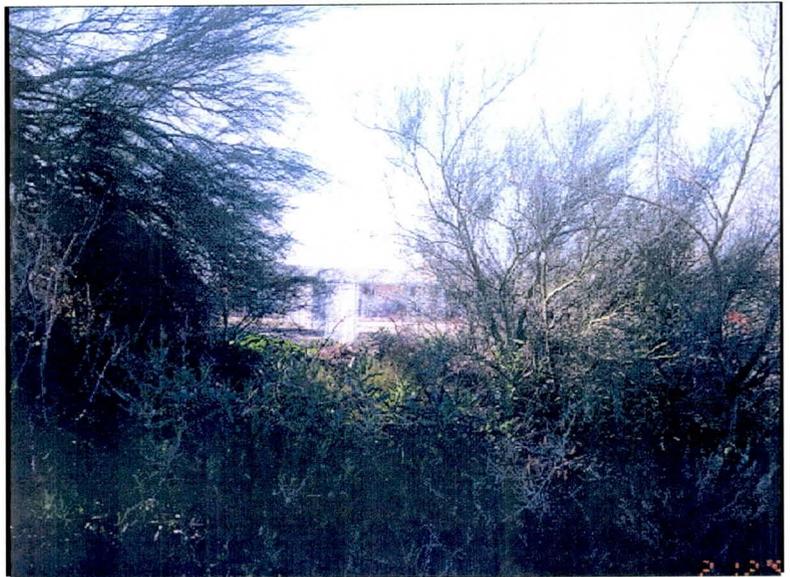


Picture No. 37

Northwest Corner of Basin 4 at Akron Street and Crismon Road Facing South

Picture No. 38

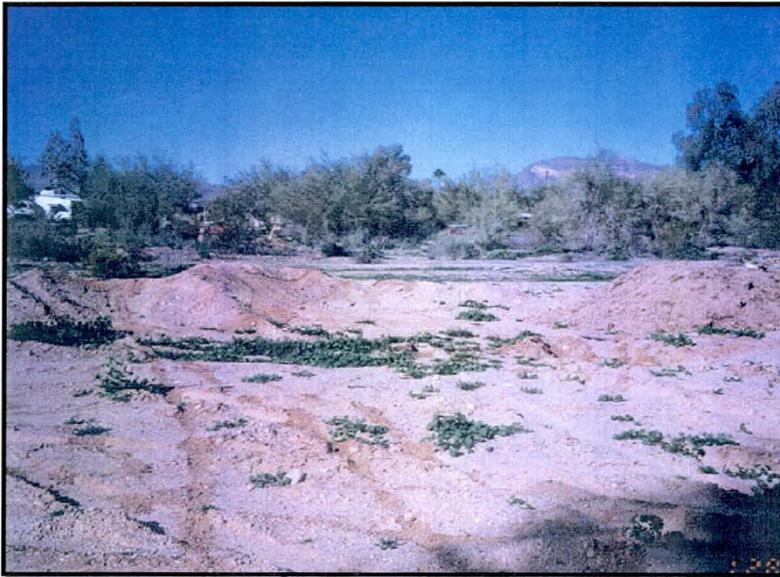
Northeast Corner of Basin 4 Facing South from Akron Street



Picture No. 39

Northeast Corner of Basin 4 Facing West Along Akron Street

Flood Control District of Maricopa County / Southeast Mesa Drainage Master Plan
Phase I Environmental Site Assessment / WT Job No. 2188JK014

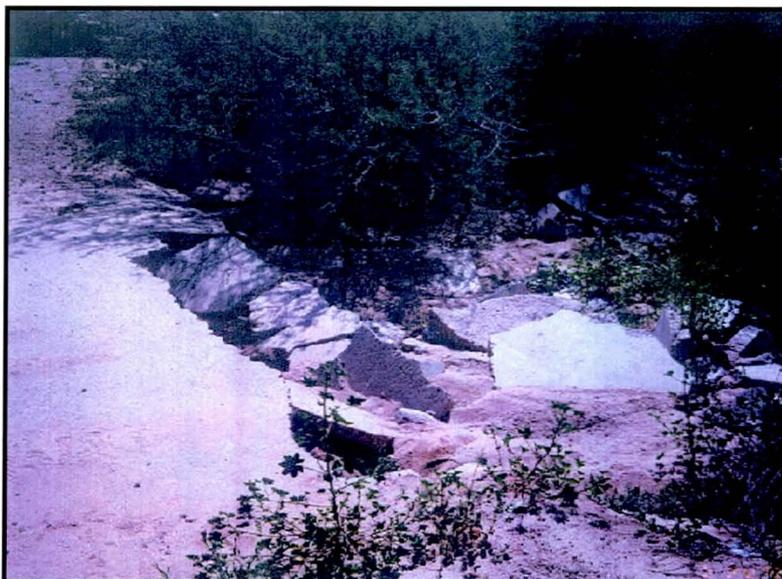
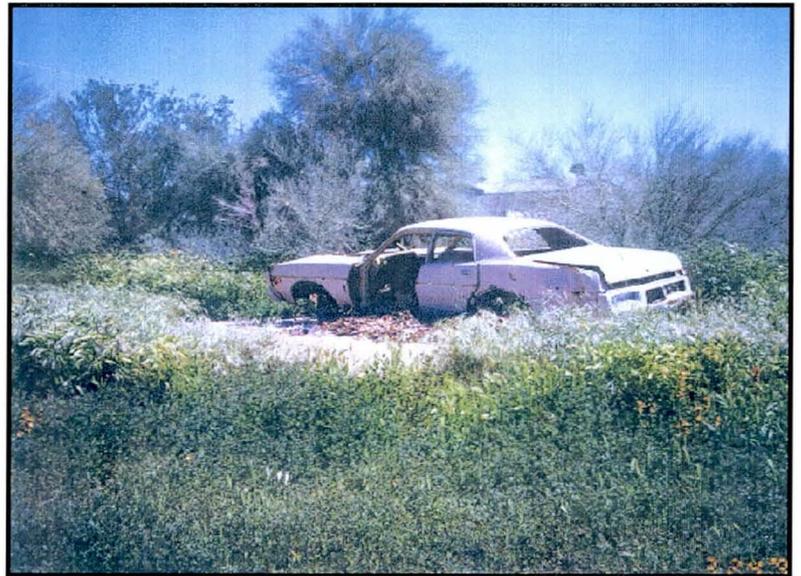


Picture No. 40

Soil Mounds of Unknown Origin on the West Portion of the Vacant Land - Basin 4

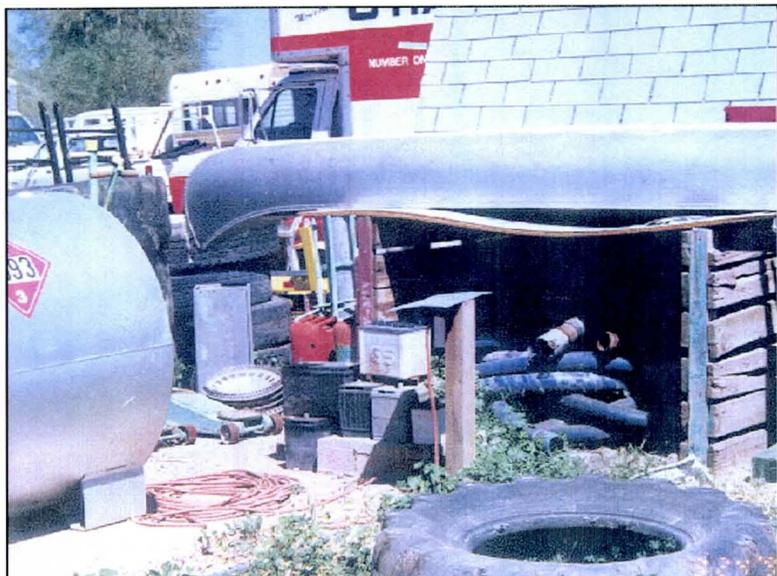
Picture No. 41

Abandoned Car on Cement Pad Near Northeast Corner of Basin 4



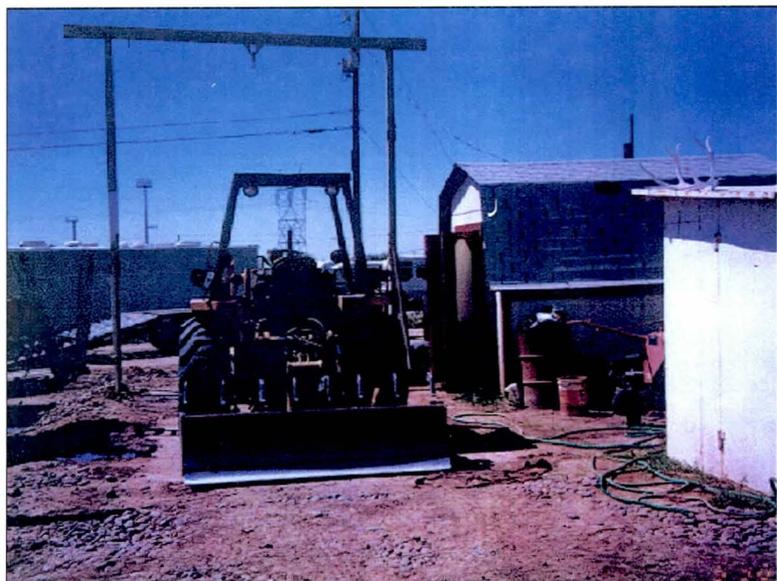
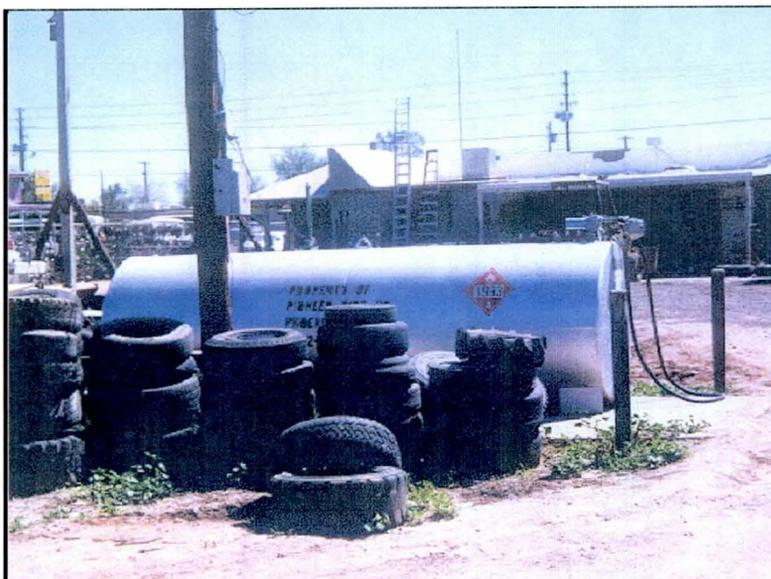
Picture No. 42

Eroded Concrete Crossing Wash on East Boundary of Basin 4



Picture No. 43
Old Batteries Stored on ICU Rental Lot
on Basin 4

Picture No. 44
Aboveground Storage Tank and Tires
on ICU Rental Lot on Basin 4



Picture No. 45
Equipment Washing Area on ICU
Rental Lot on Basin 4

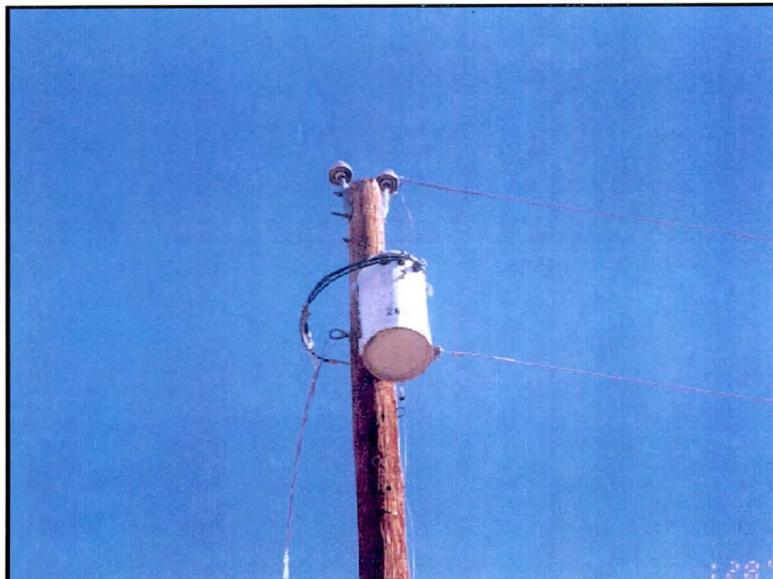


Picture No. 46

Northeast Corner of Tire Store Lot
Facing West

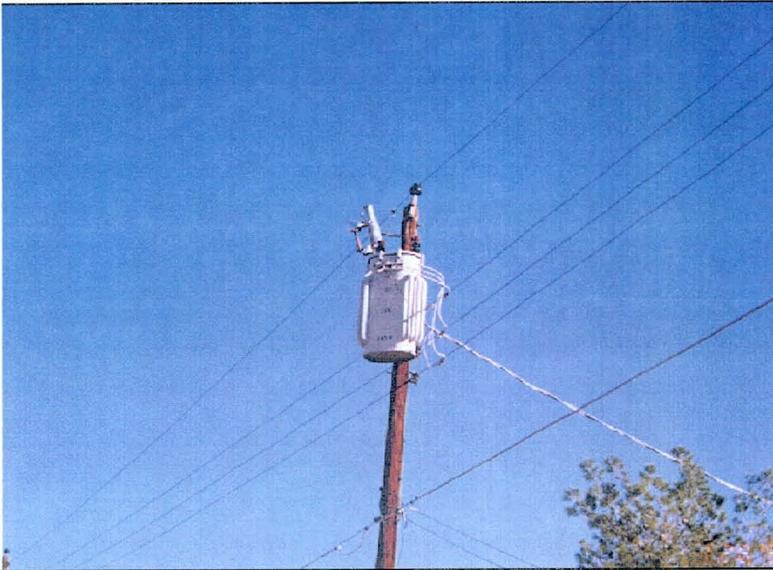
Picture No. 47

Groundwater Well No Longer Used on
Basin 4



Picture No. 48

Pole Mounted Transformer on Basin 2
by the Collapsed Residential Structure

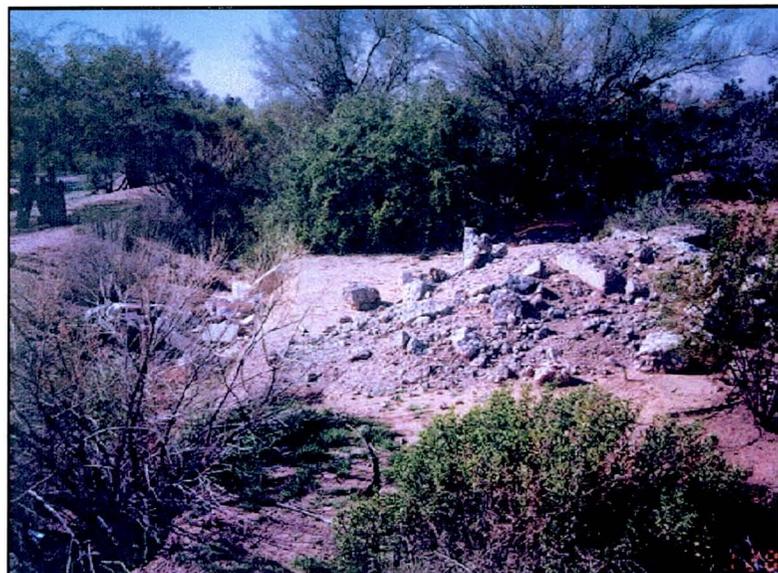


Picture No. 49

Pole Mounted Transformer on Basin 4
at the East End of Akron Street

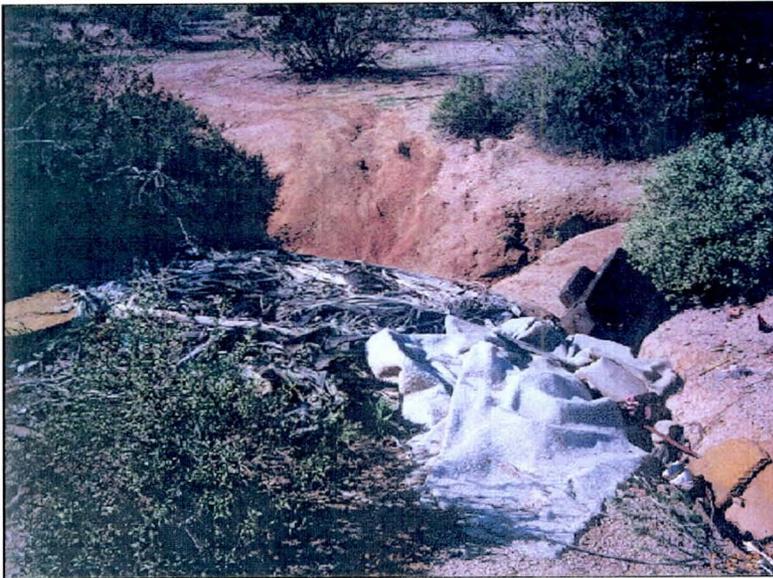
Picture No. 50

Pole Mounted Transformer on ICU
Rental Lot on Basin 4



Picture No. 51

Construction Debris and General
Debris Consisting of Concrete,
Carpeting and Paper Waste at
Southwest Corner of Basin 1

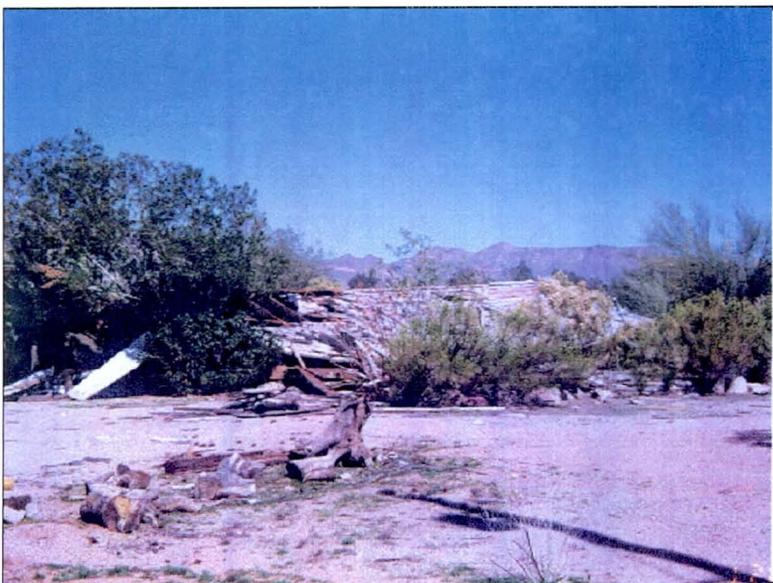


Picture No. 52

General Debris Within the Main Wash Across Basin 1. Debris Includes Landscape Trimmings, a Television, Foam, Carpeting and Cement Pieces

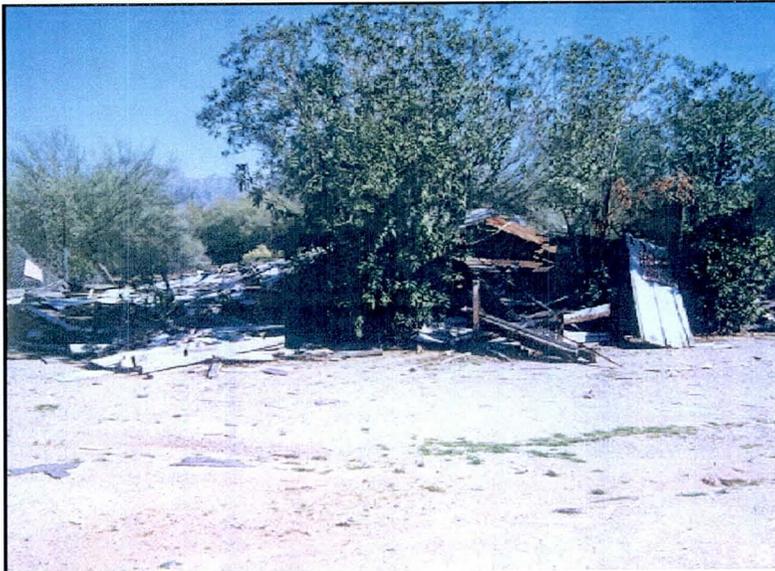
Picture No. 53

Dead Vegetation Along the Banks of the North Portion of the Wash on Basin 1. Material Could Have Accumulated During High Flows



Picture No. 54

Collapsed Residential Structure on the Southwestern Portion of Basin 2 Facing Northeast

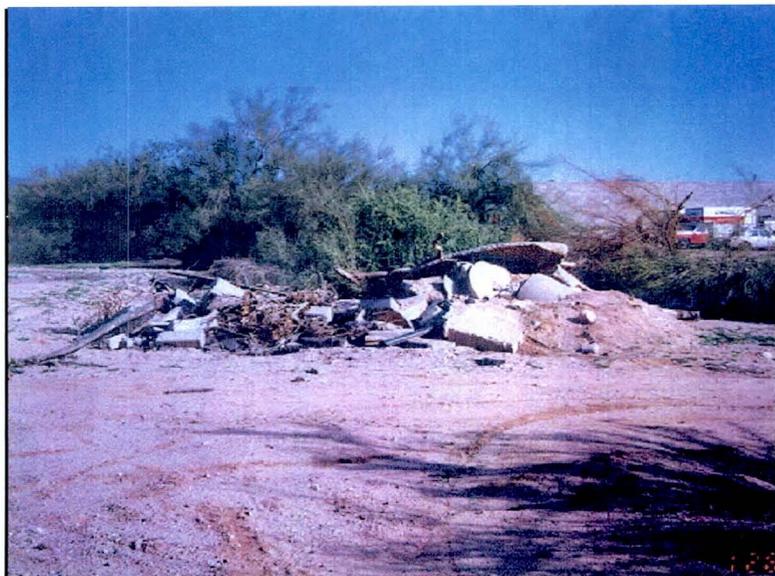


Picture No. 55

Second View of the Collapsed Residential Structure Facing East

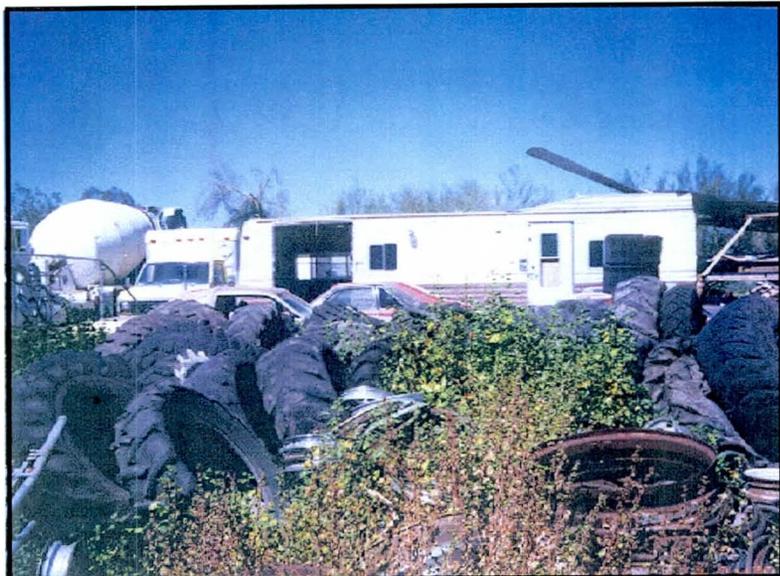
Picture No. 56

General Debris Consisting of Vegetation, Wood Scrap, Foam, Carpeting and Lawn Furniture Along the Southern Portion of the Main Wash Crossing Basin 2



Picture No. 57

Construction Debris Along the Southern Wash on Basin 4 Consisting of Broken Concrete Slabs and Pipe Sections, Asphalt Pavement and Vegetation

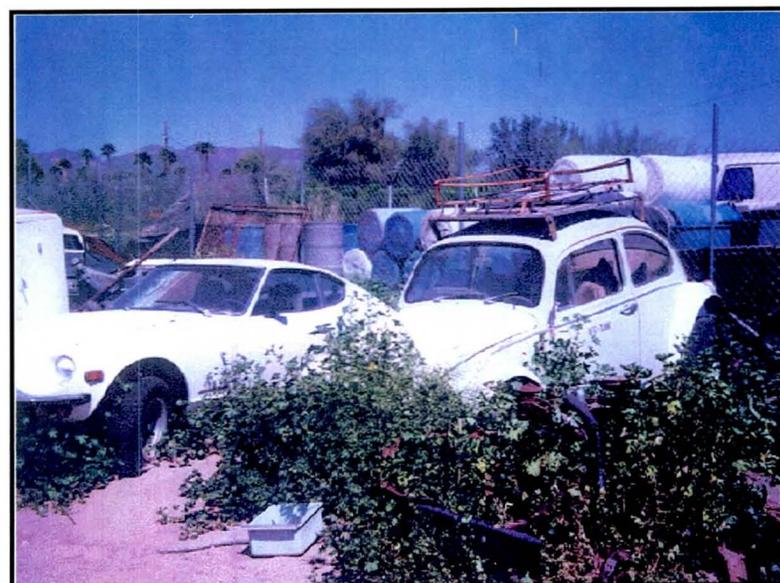
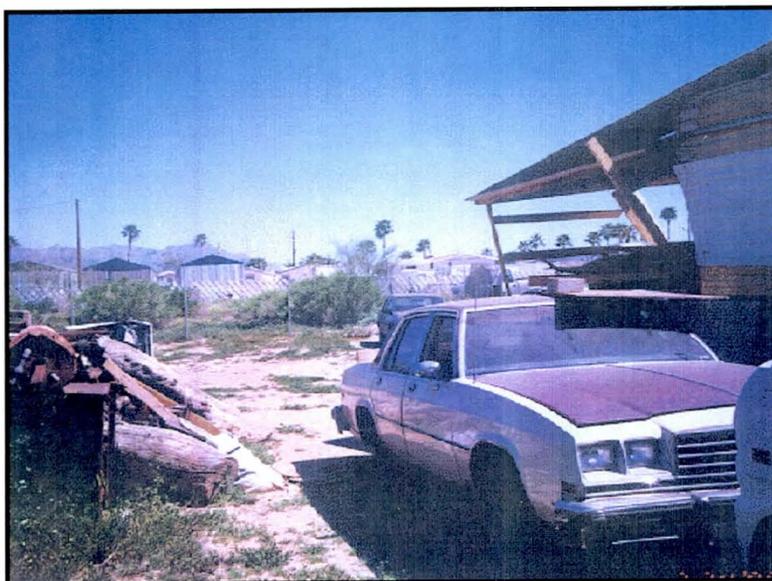


Picture No. 58

Debris Pile on Tire Store Lot Consisting of Tire, Scrap Metal, Vegetation Debris, Fence and Appliances

Picture No. 59

Debris Pile on Tire Store Lot Consisting of Scrap Wood, Scrap Metal and Appliances



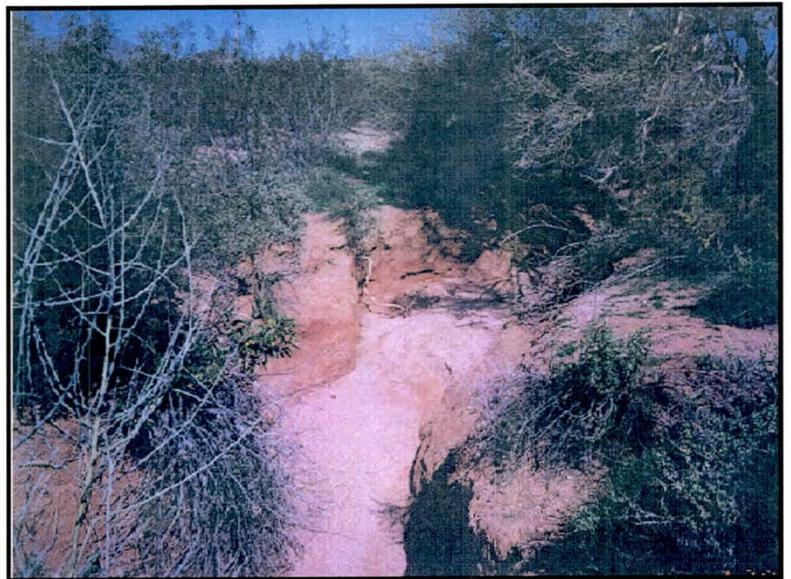
Picture No. 60

Debris Pile on Tire Store Lot Consisting of Scrap Wood and Car Parts



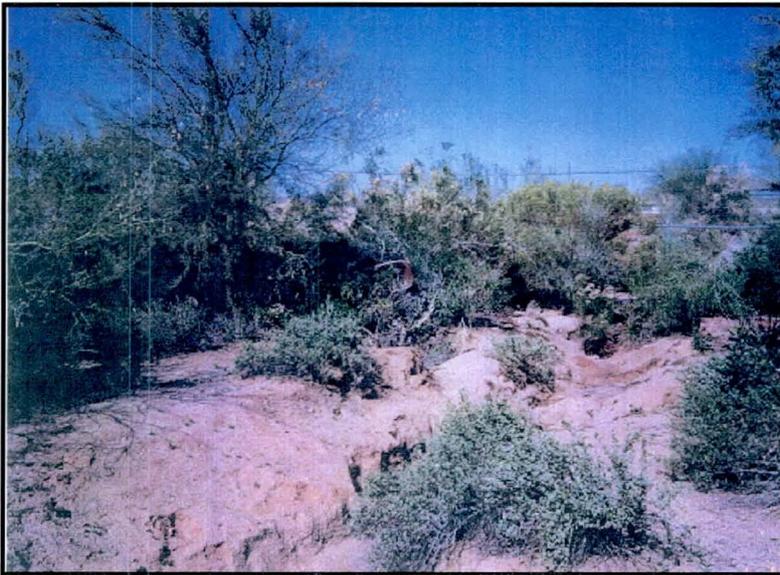
Picture No. 61
Overchute No.1 Near Northwest
Corner of Basin 1

Picture No. 62
Wash Extending From Overchute No.1
on Basin 1



Picture No. 63
Overchute No.2 Along the North Side
of Basin 2 at the CAP Canal

Flood Control District of Maricopa County / Southeast Mesa Drainage Master Plan
Phase I Environmental Site Assessment / WT Job No. 2188JK014

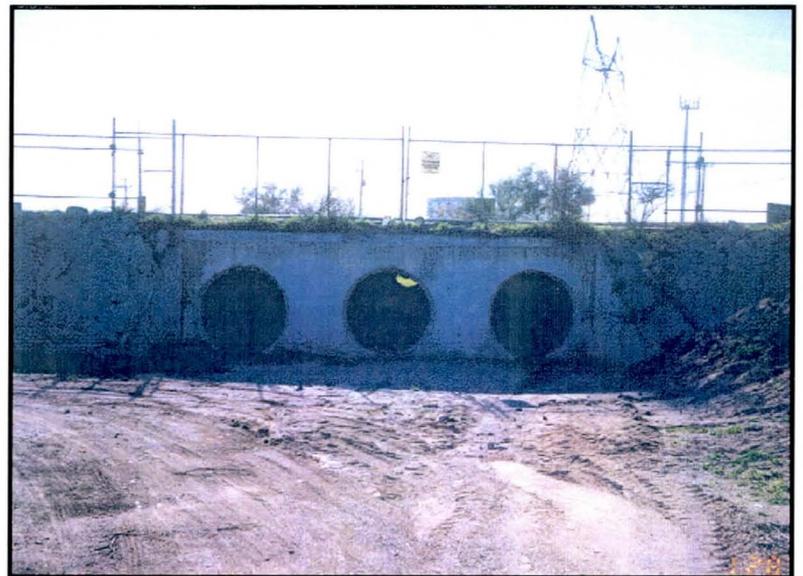


Picture No. 64

Wash Extending From Overchute No. 2
on Basin 2

Picture No. 65

Overchute No. 4 at the Southwest
Border of Basin 4



Picture No. 66

Tributary Drainage Into the Northern
Wash Across Basin 4



DRAFT

**APPENDIX C:
AERIAL PHOTOGRAPH**



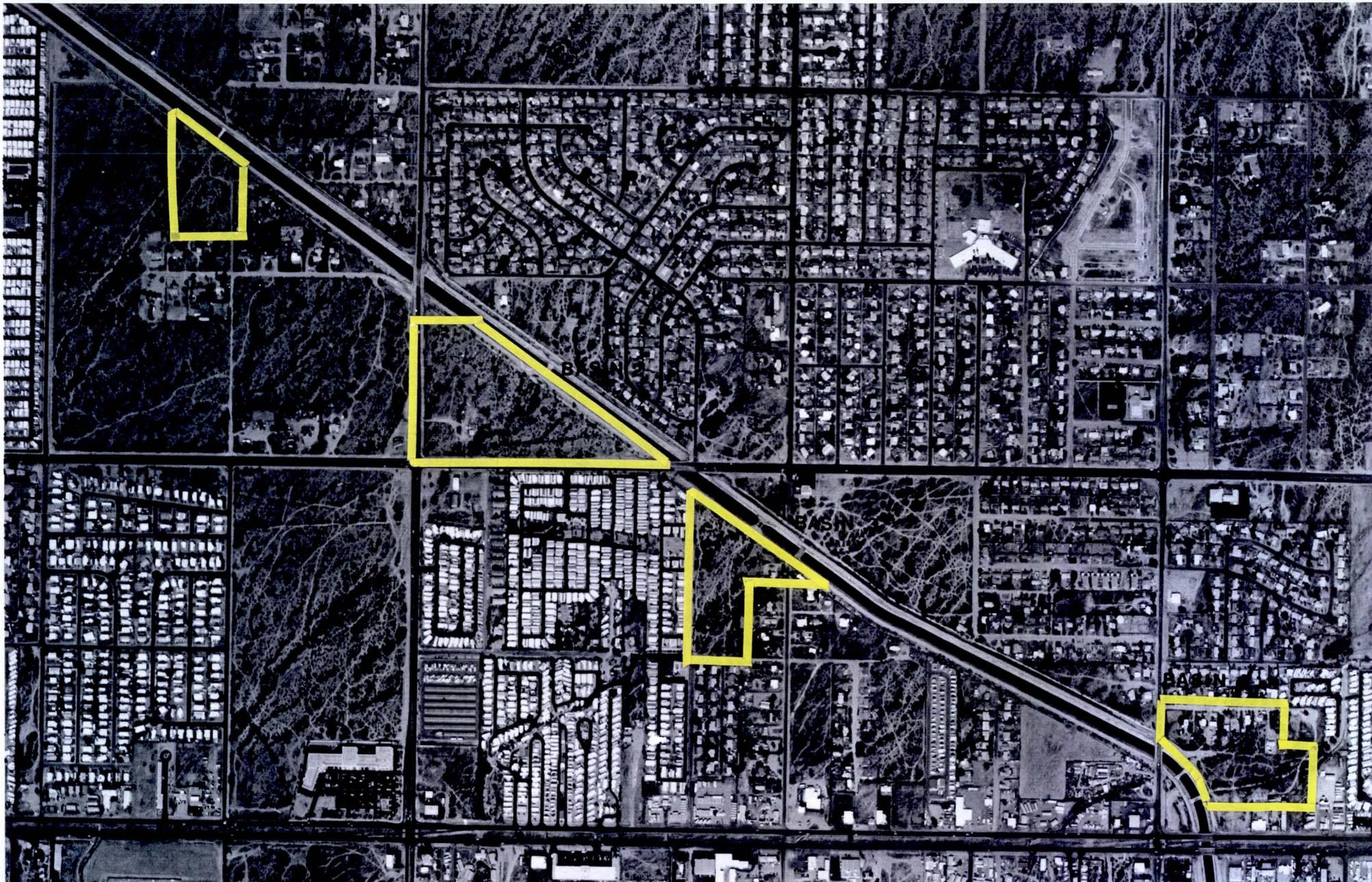


PHOTO SOURCE: RUPP AERIAL PHOTOGRAPHY, INC.



1" = 900'

Reviewed: R. Gomez	Review Date: 03/25/98
Client: Flood Control District of Maricopa County	Photo Date: 02/18/94
Western Technologies Inc.	
Job No. 2188JK014	Figure: 7



DRAFT

**APPENDIX D:
SEPTIC SYSTEM PERMITS**



MARICOPA COUNTY HEALTH DEPARTMENT
Division of Environmental Health
1825 E. Roosevelt
Phoenix, Arizona

1646
OB

APPLICATION FOR PERMIT

The undersigned hereby applies for permit to (install)(alter) sewage disposal facilities at:

Street Address 246 N. 96 St. - Mesa

Subdivision Name _____ Lot No. _____

Name of Establishment _____

Name of Property Owner Elmore Road

For COMMERCIAL INSTALLATION TEMPORARY

Type of business _____

Maximum number of users (patrons, employees, members, etc.) _____

Industrial Wastes (if any) to _____ Treated? _____

For DOMESTIC INSTALLATION TEMPORARY

Total Number of Bedrooms 2

	Yes	No
Family Room	_____	_____
Den	_____	_____
Garbage Grinder	_____	_____

Size of Septic Tank to be installed (liquid capacity below overflow line) 750 gallons.

Type of material tank is constructed of _____

Proposed Method of Effluent Disposal:

Leach Lines: Number _____, Total length _____, Width _____

Leach Beds: Number _____, Size: Length _____ ft., Width _____ ft.

Seepage Pit: Number 1, Diameter 36", Effective depth 36', Lined Asph

Other replace old system

I, the undersigned, do hereby agree to assume complete responsibility to insure that these installations will be made in full compliance with all regulations of the Maricopa County Health Department and the Arizona State Department of Health which are applicable at the time of the installations. I also understand that failure to comply with said regulations is subject to fine or imprisonment or both.

Date _____

* M. L. H. Applicant's Signature _____ Mailing Address D. ... Telephone Number

Permit Number 1646 Date Issued 4/26/67 By [Signature]

1646

RECORD OF PERCOLATION TEST

Percolation test	TIME	10	20	30	40	50	60	70	80	Stabilized Rate
Date _____	drop									
hour _____	(inches)									

Time	Water Level	Amount of Fall	Time	Water Level	Amount of Fall

RECORD OF INSPECTION

- (1) SEPTIC TANK (Partitioned?)
 - a. Dimensions (effective) L. W. D.
 - b. Liquid Capacity 2505 gal
 - c. Distance from Foundation 10 ft.
 - d. Plumbing: house drain-tight joints inlet - Not in yes no
outlet pitch 4+ in/ft.
 - e. Pipe Material Orangeburg
 - f. Approved: yes X no
- (2) DISTRIBUTION BOX No. X level
- (3) SEEPAGE PIT No. 1 Lined Yes ft. Apart
 - a. Diameter 36 in.
 - b. Depth (overall) 37 ft.
 - c. Depth (effective) 34 ft.
 - d. Distance from Foundation 25 ft.
 - e. Distance from Water Lines 104 ft.
 - f. Distance from Lot Lines 104 ft.
 - g. Distance from Septic Tank 8 ft.
- (4) LEACHING AREA Bed Trenches
 - a. Dimensions L. W. D.
 - b. Pitch in/ft.
 - c. Pipe Material
 - d. Type of Fill
 - e. Distance from Foundation
 - f. Distance from Lot Lines
 - g. Distance from Water Supply ft.
 - h. Approved: yes no
- (5) EFFLUENT DISPOSAL - OTHER METHOD
- (6) CESSPOOL - TEMPORARY
 - a. Diameter in.
 - b. Depth (overall) ft.
 - c. Depth (effective) ft.
 - d. Distance from Foundation ft.
 - e. Distance from Water Lines ft.
 - f. Distance from Lot Lines ft.
 - g. Distance from Septic Tank ft.
 - h. Approved: yes no

Inspection No. _____

Remarks: _____

Inspection No. _____

Remarks: _____

Inspection No. _____

Remarks: _____

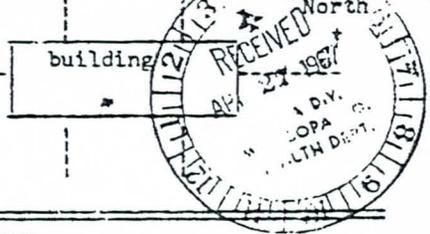
INSPECTOR: Tony Stewart

DATE APPROVED: 4-28-67

DISAPPROVED: _____

Other Comments: OK Pending correct connection of septic tank inlet.

X - Location of Septic Tank and Disposal Area



Water Company _____

Private Well _____

Location _____

1646

ST. 246 N. 96th St. Mead.

SUB _____

OWNER Ellmore Beach. (same add.)

ROOMS 4 (2 bed - living - kitchen)
Replace system

WASHER No

GRINDER No

RECORD OF PROGRESS

APPROVED BY [Signature] Date 4-12-67

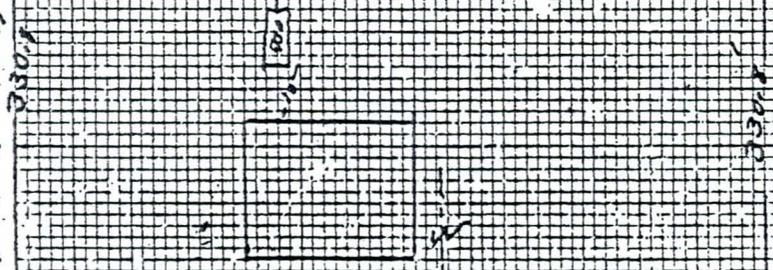
P.E.S. APPROVED BY F.T.C. Date 4-26-67

P.E.S. BY _____ Date _____

FIELD IS BY [Signature] Date 4/26/67

21645

3' x 3' x 3' foundation



Scale 1/4" = 1'-0"
N →

137199

96th

Copyright © 1957 by the International
Building Agency, Inc.