

APPENDIX A

Biological Resources Report by Southwest Biological Consultants



SOUTHWESTERN FIELD BIOLOGISTS

BIOLOGICAL CONSULTANTS

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88708313-110

☐ Ref

Proprietors:
Frank Reichenbacher
Lari-Ann Clifford-Reichenbacher

7 August 1996

Steven Smith
Hydro-Search, Inc.
4636 East University Drive
Phoenix, Arizona 85034

**SUBJECT: Draft Biological Assessment of West Osborn Complex State Superfund Site,
West Osborn Road, Phoenix, Arizona**

Dear Mr. Smith,

Enclosed find a revised draft Biological Assessment (BA) for the West Osborn Complex State Superfund Site as per Aaron LaRoque's request for changes dated 6 August 1996. I also made other minor changes that were associated with the change requested by Aaron. These changes are circled in the previous draft document dated 29 July 1996 (enclosed).

If you have any further questions regarding this environmental compliance document, please feel free to contact me.

Sincerely,

Russell B. Duncan
Russell B. Duncan

enclosures



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6 August 1996

Steven Smith
Hydro-Search, Inc.
4636 East University Drive
Phoenix, Arizona 85034

DRAFT

**SUBJECT: Draft Biological Assessment of West Osborn Complex State Superfund Site,
West Osborn Road, Phoenix, Arizona**

Dear Mr. Smith,

The following draft report details the results of a biological resource survey and Biological Assessment (BA) of the West Osborn Complex State Superfund Site in the 3500-3900 Block of West Osborn Road, Phoenix, Maricopa County, Arizona (Figure 1 and 2). The site is located between 35th and 39th avenues west of Interstate 17. A site visit was conducted on 18 June 1996. The main intent of the visit and this report was to assess the possible effects of State Superfund operations on federally listed, proposed, and candidate species for listing as threatened or endangered under the Endangered Species Act of 1973 (Table 1). The site was also inspected for the presence of plants covered under Arizona Native Plant Law.

The section of Phoenix in which the property is located is fully developed. Much of the area supports single family housing, apartment complexes, schools, as well as industry. The area is bounded to the north by the Grand Canal and to the south by Osborn Road. Ornamental, non-native plant species are common throughout the area, and because the area is fully developed, little or no native vegetation remains. Remnant native species include those that are adaptable to disturbed places, e.g. Mexican paloverde (*Parkinsonia aculeata*), mesquite (*Prosopis velutina*), and desert broom (*Baccharis sarothroides*). In addition, salt cedar (*Tamarix pentandra*) and tree tobacco (*Nicotiana glauca*) are present. Salt cedar and tree tobacco are non-native, introduced weed species that have become naturalized in the American Southwest. Introduced herbaceous weeds are also common, e.g. red brome grass (*Bromus rubens*) and brassica (*Brassica campestris*).

The area is highly disturbed from urban and industrial growth, and by prior agricultural development which included construction of the Grand Canal. Soils are highly compacted and continue to be disturbed as a result of ongoing use of the property. Prior to development, the area supported Sonoran Desert scrub representative of the Lower Colorado Valley Subdivision dominated by creosotebush (*Larrea divaricata*) and other short statured shrubs.

Table 1. Listed, proposed, and candidate species under jurisdiction of the U.S. Fish and Wildlife Service in Maricopa County Arizona and evaluated for potential effects resulting from operations at the West Osborn Complex State Superfund Site, 3900 block of West Osborn Road, Phoenix, Arizona.

Common name	Scientific Name	Federal Listing Status	Observed in Project Area (Yes or No)	Suitable Habitat Present in Project Area (Yes or No)
Plants				
Arizona agave	<i>Agave arizonica</i>	E	N	N
Arizona cliffrose	<i>Purshia subintegra</i>	E	N	N
Arizona hedgehog cactus	<i>Echinocereus triglochidiatus arizonicus</i>	E	N	N
Animals				
Desert pupfish	<i>Cyprinodon macularius</i>	E	N	N
Gila topminnow	<i>Poeciliopsis occidentalis occidentalis</i>	E	N	N
razorback sucker	<i>Xyrauchen texanus</i>	E	N	N
Yuma clapper rail	<i>Rallus longirostris yumanensis</i>	E	N	N
American peregrine falcon	<i>Falco peregrinus anatum</i>	E	N	N
Southwestern willow flycatcher	<i>Empidonax traillii extimus</i>	E	N	N
Lesser long-nosed bat	<i>Leptonycteris curasoae yerbabuenae</i>	E	N	N
Bald Eagle	<i>Haliaeetus leucocephalus</i>	T	N	N
Mexican spotted owl	<i>Strix occidentalis lucida</i>	T	N	N
Cactus ferruginous pygmy owl	<i>Glaucidium brasilianum cactorum</i>	PE	N	N

STATUS CODES:

Fed.	U.S. Fish and Wildlife Service
E	= Listed Endangered
T	= Listed Threatened
PE	= Officially proposed for listing as Threatened or Endangered
C	= Taxa on which sufficient data exists to warrant listing as T or E

Wildlife observed on the lot and in the 3900 block of Osborn Road included tree lizards (*Urosaurus ornatus*) and native and introduced bird species typically found in urbanized areas of central and southern Arizona, e.g. mourning dove (*Zenadura macroura*), rock dove or domestic pigeon (*Columa livia*), mockingbird (*Mimus polyglottos*), starling (*Sturnus vulgaris*), and house sparrow (*Passer domesticus*). The Grand Canal, like other canals in the greater metropolitan Phoenix area, supports fishes, primarily non-native species, e.g. minnows, Family Cyprinidae; catfishes, Family Ictaluridae; sunfishes, Family Centrarchidae; and others. In addition, Salt River Project has introduced white amur or grass carp (*Ctenopharyngodon idellus*) into some canals to assist in the control of aquatic vegetation. The canal environment also supports non-native populations of crayfish, bullfrog (*Rana catesbeiana*). Native populations of Woodhouse's toad (*Bufo woodhousei*) also thrive in the waters of irrigation canals and ditches in the Phoenix metropolitan area. In addition, the introduced spiny softshell turtle (*Trionyx spinifera*) sometimes enters the irrigation canal systems of Phoenix and is likely to be found in the Grand Canal. State Superfund activities in the West Osborn Complex area are not likely to affect these species.

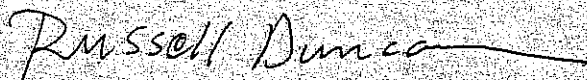
Survey Results and Project Effects

No federally listed, proposed, or candidate species for listing as threatened or endangered were observed at the West Osborn Complex Superfund Site. The project site does not support habitat suitable for any of the species identified in Table 1. There are no known native fishes that are under jurisdiction of the FWS in the Grand Canal, and there is no suitable riparian habitat along the canal capable of supporting Yuma clapper rail or southwestern willow flycatcher. Due to the fact that this area of Phoenix is totally developed, the site or surrounding area does not contain habitat capable of supporting threatened or endangered species (Table 1). Therefore there will be "no effect" to any of the species listed in Table 1 as a result of State Superfund operations at the West Osborn Complex.

The Mexican paloverde and mesquite trees in the area are considered "Salvage Assessed" under the Native Plant Law, Protected Group of Native Plants, i.e. a permit is required to remove said plants from the property for salvage purposes. All of the specimens observed in the area were considered poor quality specimens to justify salvage in areas where ground disturbance will take place during State Superfund site operations. Therefore, it is our opinion that the remnant native shrubs and trees can be destroyed during site operations. The salt cedar and tree tobacco are introduced species and are not covered under Arizona Native Plant Law.

If you have any questions regarding this environmental compliance document, please feel free to contact me.

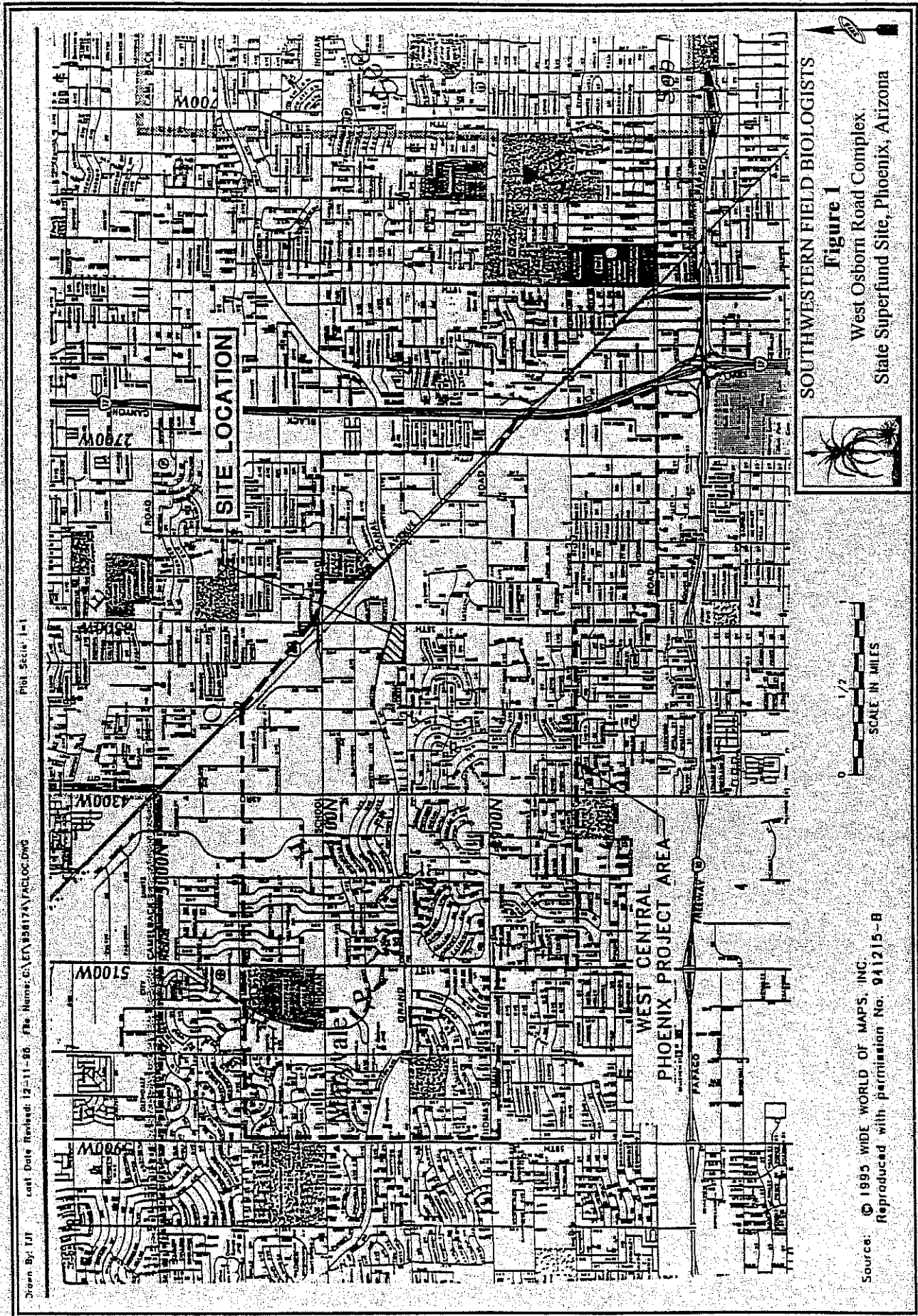
Sincerely,



Russell B. Duncan

Attachments (Project Feature Maps)

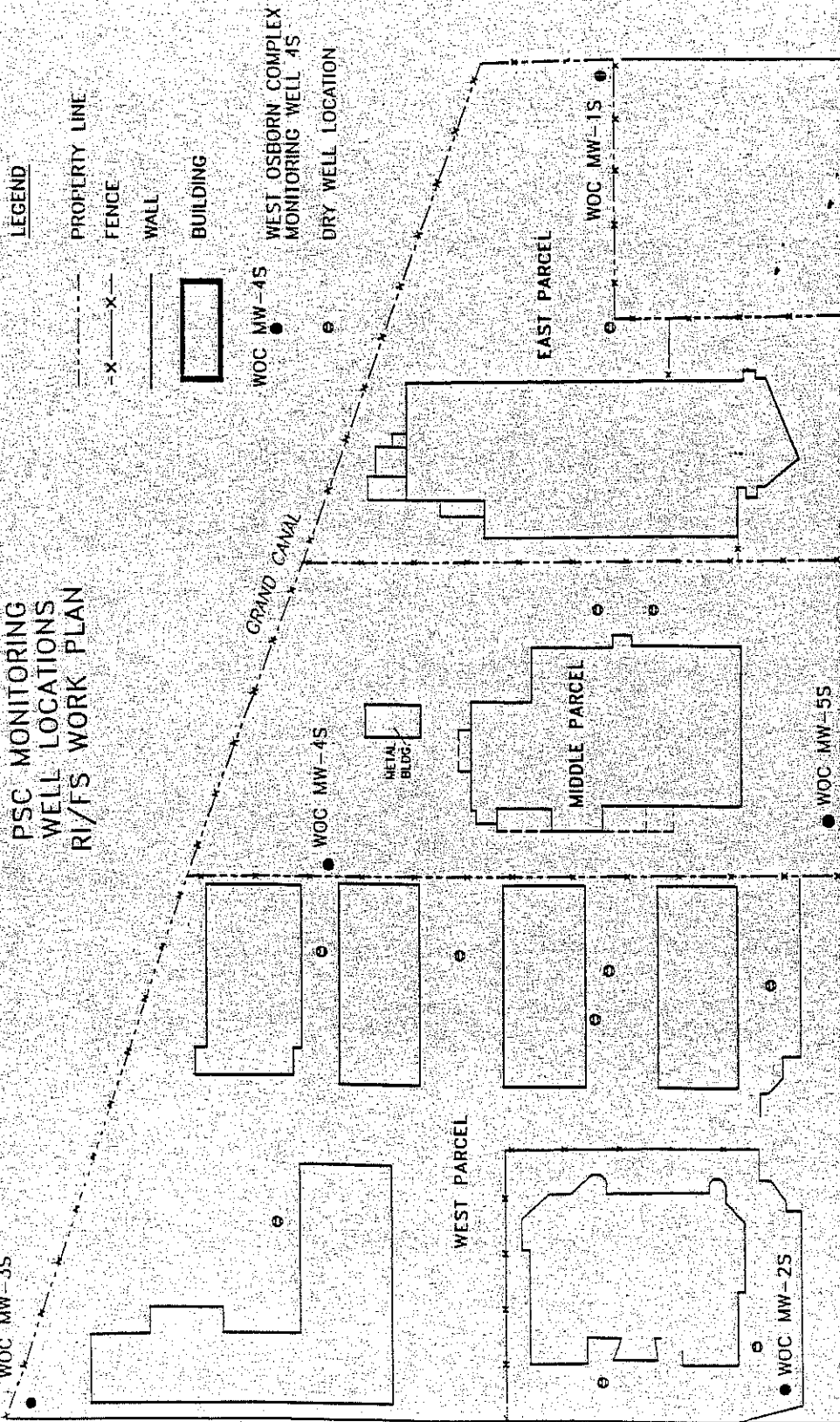
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Drawn By: JJJ Date: 12-11-95 File Name: C:\EN\95617\PSWELLS.DWG Plot: 1=150

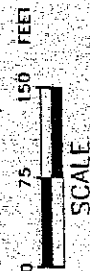
PSC MONITORING WELL LOCATIONS RI/FS WORK PLAN



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Figure 2

West Osborn Road Complex (Detail)
State Superfund Site, Phoenix, Arizona



A.2 CULTURAL RESOURCES

A.2.1 Zoning

To evaluate zoning issues, a cultural resource study area was defined that is 1.5 miles square. It extends from Turney Avenue on the north to Virginia Avenue on the south. Its western boundary is 41st Avenue, and its eastern boundary is 29th Avenue. The approximate center of the study area is the southeast corner of the WOC at 35th Avenue and Osborn Road. Four City of Phoenix zoning maps provide coverage of the study area: H-6, H-7, G-6, and G-7. Zoning characteristics are summarized below.

Residential

Four categories of *Residential* zoning are present on the zoning maps.

- R1-6: Single-family attached and detached dwellings, foster homes.
- R-3, R-3A: All types of dwellings, foster homes, group home, recovery home.
- R-5: Multi-family district. All types of dwellings, foster homes, group homes, apartment, hotel or motel (with cocktail lounge, gift shop, newsstand and related accessory uses), mental care facility, private club, professional office, teaching studio, branch financial institution, administrative offices, nursing home, personal care home, and recovery home.
- P.A.D.10 and P.A.D.14: Planned Area Development. Area is planned for development of a certain type of buildings. P.A.D.10 is identified on the zoning map as townhomes, and P.A.D.14 is identified on the zoning map as apartments.

The residential zones are located primarily in the southwest and northeast portions of the study area. The residential zones incorporate approximately 36.25% of the total study area.

Commercial

Five categories of *Commercial* zoning are present on the zoning maps.

- C-1: Neighborhood Retail District. Uses permitted in R-5, antique shop, art gallery, retail bakery, barber shop, beauty shop, camera shop, candy store, catering service, clothing store, delicatessen, drug store, florist, grocery, hobby store, hardware, jeweler, malt shop, office, restaurant, variety store, plant nursery, restaurant with liquor, veterinary offices.
- C-2: Intermediate Business District. Uses permitted in C-1, assembly hall, bar, bingo as a primary use, bowling alley, drive-in restaurant, repair garage (no body or fender shop), kiddieland laboratory (medical, technical, research), mortuary, commercial parking lot, pawn shop, pool hall, beauty school, radio and television repair, sign painter's shop, theater, veterinary offices, veterinary hospitals.

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- C-3: General Commercial District. Uses permitted in C-2, amusement park, auctioneers, auto body and fender shop, candy manufacture, dance hall, furniture wholesaling, hardware wholesaling, ice cream manufacture, insecticide storage, lumber yard, milk bottling, monument works, penny arcade, produce wholesaling, plumbing shop, roofing materials yard, trade school, trailer rental, transfer business, used car lot, plant nursery, drive-in theater, trailer sales.
- CP or IND.PK.: Commerce Park (IND.PK. formerly identified as an Industrial Park), in conjunction with SU, RP, or BP. SU is Single Uses Option: fabrication and assembly of finished products, scientific or research laboratories, churches. RP is Research Park Option: professional offices, administrative offices, research laboratories, medical and dental laboratories, churches. BP is Business Park Option: research park uses, wholesaling, warehousing, assembly of finished products, barber and beauty shops, financial institutions, restaurants, hotels, motels, gasoline sales. GCP is General Commerce Park Option: business park uses, pharmacy, bakeries, food packaging and freezing, schools, general retail sales, motion picture productions, television broadcast studios.
- P.S.C: Planned Shopping Center District. Uses permitted in C-1, except residences and additional uses such as floor covering store, music store, sound systems and equipment, assembly hall, bar and cocktail lounge, bowling alley, indoor theater, school of cosmetology, drive-in restaurant, clinical or research laboratory, radio and television broadcasting studios.

The commercial zones are located fairly evenly throughout the study area. The commercial zones incorporate approximately 12.5% of the total study area.

Industrial

Two distinctive categories of Industrial zoning are present on the zoning maps.

- A-1: Light Industrial District. Uses permitted in C-3 (General Commercial District), animal hospital, boat manufacture, brewery, cement products manufacturing, contractors equipment and storage yard, electrical appliances manufacture, farm implement assembly, freight yard, furniture manufacturing, gasoline bulk (tank farm), grain elevator, ice plant, junk yard (including auto wrecking), millwork, plating and polishing shop, public utility plant, welding shop, airport for public or private uses.
- A-2: Heavy Industrial District. Uses permitted in A-1, and additional uses such as ammonia manufacture, bottled gas manufacture, cotton gin, distillery, fertilizer manufacture, flour mill, foundry, livestock slaughter, paint and varnish manufacture, railroad shops, steel fabrication stockyard.

The industrial zones are located primarily in the northern and southeastern portions of the study area. The industrial zones incorporate approximately 51.25% of the total study area.

A.2.2 Long Range Plan

The industrial zones are located primarily in the northern and southeastern portions of the study area. The industrial zones incorporate approximately 51.25% of the total study area.

A.2.2 Long Range Plan

The City of Phoenix Planning Commission has established a General Plan for Phoenix 1985-2000. The plan is based on the Urban Village Concept that adheres to the basic principles of balancing housing vs. jobs, concentrating intensity in village cores, and promoting the uniqueness of each village. The plan serves as a general guide to the City Council, Planning Commission, City Staff, and the public regarding development in the City. The plan emphasizes goals and policies necessary to implement the urban village concept, as well as responds to city-wide and regional needs. The plan takes into consideration ten elements. They are:

- Land use. The land use element sets forth the goals and policies underlying the urban village concept, and defines core, gradient and periphery.
- Public services. Water, wastewater, refuse disposal, drainage and other utility services. In order to ensure the quality of life, existing facilities must be maintained and improved.
- Conservation. The plan considers the protection and conservation of our water, energy, and air as fundamental importance.
- Safety. The safety element provides guidelines for alleviating natural and man-made hazards. It covers soil and geologic, fire and noise hazards, hazardous materials, airport and aircraft safety, and emergency preparedness.
- Circulation. The circulation element sets forth goals and policies to provide for a suitable transportation system to move people and goods to, from, and within Phoenix.
- Housing. The housing element is designed to assure equal housing opportunity regardless of sex, race, creed, color, disability, or economic level.
- Public buildings. The City of Phoenix is dedicated to providing City facilities that serve the community's administrative, maintenance, public health and safety, and cultural and educational needs.
- Rehabilitation and Redevelopment. The conservation, rehabilitation and redevelopment element consists of goals and policies for the elimination of slum and blight and for community conservation and maintenance and revitalization of neighborhoods, redevelopment of residential, commercial and industrial uses, and neighborhood involvement in the planning process.
- Bicycling. Bicycling is particularly popular in Arizona. Integration of bike routes into the land use fabric will add to the quality of life in Phoenix.

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- Recreation. The parks and recreation element proposes the comprehensive allocation of land for parks, open space and trails.

The study area is located in the Maryvale Village area. The characteristics of the Maryvale Village are: "blue-collar" family community; small lot single-family homes; western gateway via I-10. The General Plan for the study area shows that the subject property is planned as an industrial area. The study area as a whole includes industrial areas, 2-5 dwelling units/acre areas, 15+ dwelling units/acre areas, and commercial areas, with the majority of the study area planned for industrial uses. The majority of the east 1/2 of the study area is planned for industrial use areas, along with areas scheduled as residential and commercial areas. The majority of the northern 1/2 of the western 1/2 of the study area is planned for industrial use, with a small portion scheduled for 2-5 dwelling units/acre area. The majority of the southern 1/2 of the western 1/2 of the study area is planned as a 2-5 dwelling units/acre area, along with a small areas of commercial and 15+ dwelling units/acre areas. This General Plan for the study area reflects current site conditions observed by Hydro-Search.

A.2.3 Schools

Two schools are located in the study area. The Alhambra Traditional School is located at 3736 West Osborn Road. The school is located adjacent to the subject properties western boundary. The second school is identified on the 1952 7.5-minute Quadrangle Topographic Map for the Fowler Quadrangle, photorevised in 1982, as the Coe School. The school was added to the map on the 1982 edition. The school is located near the southwest corner of the study area on 39th Avenue, just north of Virginia Avenue. It is unknown if the school is still in use because there was no listing for the Coe School in the telephone directory and no listing for schools with the same address as the Coe School.

A.2.4 Parks & Recreation

The Parks, Recreation and Library Department of the City of Phoenix was contacted to identify parks and recreation areas located in the study area.

A gravel road runs along the Grand Canal located in the study area which is categorized as a bicycle path by the City of Phoenix. Portions of 43rd Avenue and Osborn Road have a bicycle lane. Signs along the road and markings on the pavement identify the bicycle lanes. The City of Phoenix Parks, Recreation and Library Department's Central District/ Glenrosa Office is located as 4020 West Glenrosa Avenue which is located in the northwest corner of study area. No other parks or recreation areas were identified in the study area.

A.2.5 Population and Census Data

Population statistics were obtained from the Arizona State Data Center, Population Statistics Unit, Department of Economic Security (DES). Information obtained regarding population statistics used for this report include: population by race, age, sex, income, employment, units in structure and value; and gross rent.

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The data obtained from the DES is the 1990 Census of Population and Housing. The census is broken down into one square mile tracts, which is broken down into block groups which have no specific size or shape. The block groups allowed Hydro-Search to narrow the data down to the specified study area for a more accurate reflection of population statistics. Thirteen separate block groups were identified for the cultural resources. Data are summarized below.

Existing Population

According to the 1990 census, the total population of the study area is 11,588. Table A-3 summarizes the populations by races.

Population by Race, by Sex, by Age

Data on age, sex, and race was compiled in the 1990 census. Table A-4 summarizes the median age of people in the study area by race and sex.

Labor Statistics of Population

Data on industry/occupation and income of people and families in the study area was compiled in the 1990 census. Table A-5 summarizes the number of people in the study area who work in various occupations.

The total number of people employed in the study area is 9,888.

Income data collected by the 1990 census is based on household, family, and nonfamily income in 1989. The total median income for households in the study area is \$21,171. The total median income for families is \$21,566. The total median income for nonfamily households is \$18,252.

Real Estate

Data was compiled by the 1990 census regarding dwellings construction dates and values. Table A-6 shows the number and specific size of dwellings in the study area.

According to the 1990 census, the mean value of dwelling units in the study area is \$53,183. The majority of dwellings were constructed during the 1950s and 1960s. For dwellings which are rented, the median gross rent in the study area is about \$427.

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**Table A-3
Population Data by Race**

Race	Population
Not of Hispanic Origin	
White	6,176
Black	673
American Indian, Eskimo, or Aleut	210
Asian or Pacific Islander	189
Other Race	49
Hispanic Origin	
White	2,268
Black	3
American Indian, Eskimo, or Aleut	83
Asian or Pacific Islander	55
Other Race	1,882

**Table A-4
Population by Race, Sex, and Median Age**

Race	Median Age Male	Median Age Female
White	33	34
Black	37	18
American Indian, Eskimo, or Aleut	34	28
Asian & Pacific Islander	29	10
Hispanic	27	21
Other	28	28

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**Table A-5
Occupation Statistics**

Occupation / Industry	Number of People Employed (Employed persons 16 years and over)
Agriculture, forestry, & fisheries	65
Mining	0
Construction	425
Manufacturing	948
Transportation	293
Communications & other public utilities	116
Wholesale trade	387
Retail trade	747
Finance, insurance, & real estate	284
Services	1,302
Public administration	255
Managerial & professional specialty	675
Technical, sales & administrative support	1,447
Service occupations (private household, protective, service except protective and household)	790
Farming, forestry, & fishing occupations	83
Precision production, craft, & repair occupations	978
Operators, fabricators, & laborers	1,077

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Table A-6
Dwellings in Study Area (1990 Census)

Units in Structure	Total Units	% of Total
1, detached	2,904	62.5
1, attached	62	1.3
2	12	0.3
3 or 4	125	2.7
5 to 9	112	2.4
10 to 19	159	3.4
20 to 49	178	3.8
50 or more	836	18
Mobile home or trailer	195	4.2
Other	61	1.3
Total Units	4,644	

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