

**SAFE HARBOR AGREEMENT WITH THE  
CITY OF PHOENIX FOR VOLUNTARY  
ENHANCEMENT/RESTORATION  
ACTIVITIES BENEFITTING THE YUMA  
CLAPPER RAIL, SOUTHWESTERN  
WILLOW FLYCATCHER, CACTUS  
FERRUGINOUS PYGMY OWL, BALD  
EAGLE, GILA TOPMINNOW, BROWN  
PELICAN, AND DESERT PUPFISH AT  
THE RIO SALADO PROJECT AREA,  
PHOENIX, MARICOPA COUNTY,  
ARIZONA**

**November, 2008**

**Involved Parties:**

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**Agreement/Tracking Number: TE-XXXXXX-0**

**This Agreement covers the following species:** bald eagle (*Haliaeetus leucocephalus*), Yuma clapper rail (*Rallus longirostris yumanensis*), brown pelican (*Pelecanus occidentalis*), and southwestern willow flycatcher (*Empidonax traillii extimus*).

**The enrolled lands include:** the Salt River from approximately 24<sup>th</sup> Street downstream to 19<sup>th</sup> Avenue, Phoenix, Maricopa County, Arizona.

**Agreement Duration:** The Agreement becomes effective upon final signature below and will be in effect for 50 years, unless terminated earlier as provided herein.

**SAFE HARBOR AGREEMENT WITH THE CITY OF PHOENIX FOR VOLUNTARY ENHANCEMENT/RESTORATION ACTIVITIES BENEFITTING THE YUMA CLAPPER RAIL, SOUTHWESTERN WILLOW FLYCATCHER, CACTUS FERRUGINOUS PYGMY OWL, BALD EAGLE, GILA TOPMINNOW, BROWN PELICAN, AND DESERT PUFFISH AT THE RIO SALADO PROJECT AREA, PHOENIX, MARICOPA COUNTY, ARIZONA**

**November, 2008**

## **1. INTRODUCTION**

This Safe Harbor Agreement (Agreement) is made and entered into as of the date of the last signature by and between the City of Phoenix (Permittee) and the U.S. Department of the Interior, Fish and Wildlife Service (Service), hereinafter collectively called the "Parties." The purpose of this Agreement is to provide and maintain environmental restoration along the Salt River within the Rio Salado Project Area to the direct and indirect benefit of seven threatened and endangered species and other biological resources. This Agreement follows the Service's Safe Harbor Agreement final policy (FR 64:32717) and final regulations (FR 64:32706) pursuant to (50 CFR 17.22 and 17.32), and implements the intent of the Parties to follow the procedural and substantive requirements of Section 10(a) (1) (A) of the Endangered Species Act (ESA).

This Agreement covers proposed voluntary management activities affecting lands owned or controlled by the Permittee, and covers bald eagle (*Haliaeetus leucocephalus*), Yuma clapper rail (*Rallus longirostris yumanensis*), southwestern willow flycatcher (*Empidonax traillii extimus*), and the brown pelican (*Pelecanus occidentalis*). The Gila topminnow (*Poeciliopsis occidentalis occidentalis*) and desert pupfish (*Cyprinodon macularius*) are discussed in this Agreement because habitat would be restored, but any actual reintroduction of these species would occur in coordination with the Arizona Game and Fish Department under their programmatic Safe Harbor Agreement for these species. The cactus ferruginous pygmy-owl (*Glaucidium brasilianum cactorum*) is not a listed entity but is discussed in this Agreement because the Service recently issued a 90-day finding that a petition to list the species presents substantial information indicating that listing may be warranted (73 FR 31418, June 2, 2008). Under this Agreement, the Permittee will enhance and maintain 595 acres of land suitable for species habitats for a period of 50 years by enhancing Sonoran Desert and riparian habitat within and adjacent to The Salt River Channel from approximately 24<sup>th</sup> Street to 19<sup>th</sup> Avenue, Phoenix, Arizona. Enhancements will include, but are not necessarily limited to, planting and maintaining native vegetation.

The Safe Harbor program encourages proactive conservation efforts by non-Federal landowners while providing them certainty that future property-use restrictions will not be imposed if those efforts attract listed species to the enrolled lands or result in increased numbers or distributions of species already present. In return for voluntary conservation commitments, the Agreement will extend to the Permittee assurances allowing future alteration or modification of the enrolled property back to its original baseline conditions. This Agreement also authorizes public uses of the enrolled lands in a manner that is consistent with providing habitat for endangered species.

Without this cooperative government/private effort, the enrolled lands would not otherwise be utilized by the species in the foreseeable future.

When signed, this Agreement will serve as the basis for the Service to issue a permit under ESA Section 10(a)(1)(A) for the incidental take of covered, listed species associated with, maintenance of voluntary conservation efforts and public use of the enrolled lands. In the event of a decision by the Permittee to return any enrolled site or sites within the Rio Salado Project area to baseline conditions, and after a 60-day notification that would provide the Service a reasonable opportunity to capture and/or relocate any potentially affected covered species, the permit would authorize the Permittee to return the site or sites to baseline conditions. Neither this Agreement or the associated Section 10(a)(1)(A) permit would authorize deliberate direct take of covered species (e.g., capture, collection, or hunting). The Parties anticipate that the maximum level of take authorized under this Agreement and its associated permit may never be realized. Permit issuance will not preclude the need for the Permittee to abide by all other applicable Federal, State, and local laws and regulations that may apply.

As long as the Permittee implements the agreed-upon voluntary conservation measures and maintains baseline responsibilities on the enrolled lands, the Permittee may maintain landscape, control invasive species, provide for public recreational uses, maintain flood conveyance capacity, or make any other lawful use of the enrolled lands, even if such uses result in the incidental loss of species individuals or occupied habitat. Whenever possible, prior to conducting such an action the Permittee must give the Service a minimum 60-day advance notice and an opportunity to rescue and relocate individuals of the species in question.

## 2. LIST OF COVERED SPECIES

<u>Common name</u>	<u>Scientific name</u>	<u>Status</u>
Bald eagle	<i>Haliaeetus leucocephalus</i>	Threatened
Yuma clapper rail	<i>Rallus longirostris yumanensis</i>	Endangered
Southwestern willow flycatcher	<i>Empidonax traillii extimus</i>	Endangered
Brown pelican	<i>Pelecanus occidentalis</i>	Endangered

## 3. BACKGROUND

The enrolled lands are owned by the Permittee and are being developed for the purposes of habitat recovery and passive recreation. Improvements include installing wetlands, aquatic strand habitat, and vegetative covers associated with cottonwood (*Populus* spp.), willow (*Salix* spp), mesquite (*Prosopis* sp.), and palo verde (*Cercidium* sp.) plant communities. The development of these habitat improvements currently is in progress. Prior to these conservation efforts, the enrolled lands were owned and operated by private landowners for a variety of uses. Predominant uses included sand and gravel mining, landfill operations, and materials salvaging. These activities, in addition to the interruption of the river's natural flood regime caused by

upstream dams, resulted in the devastation of riparian habitat within the enrolled lands. Prior to the Permittee's conservation efforts, most areas of the enrolled lands were barren or contained mostly nonnative species with relatively little habitat value. After the conservation efforts are implemented, the lands will be managed with the primary goal of habitat conservation. Passive recreation activities will be managed with the goal of having minimal impact to the habitat.

### **Yuma clapper rail**

The Yuma clapper rail was listed as endangered without critical habitat on March 11, 1967 (32 FR 4001) under Federal endangered species legislation enacted in 1966 (Public Law 89-669) because of low numbers of birds and loss of breeding habitat along the lower Colorado River.

The Yuma clapper rail is a medium sized marsh bird with a long, down-curved beak. The species' range extends from the Colorado River Delta in Mexico north along the Colorado River to Laughlin Bay, Nevada, and along the Gila and Salt Rivers east to Picacho Reservoir in central Arizona. New information suggests the clapper rail is extending its range north along the Colorado River, east along the Bill Williams/Big Sandy River drainage and north along the Salt River. Habitat requirements of the Yuma clapper rail include freshwater or brackish stream sides and marshlands associated with heavy riparian and wetland vegetation, especially cattail and bulrush (Grinnell and Miller 1944). Openings within the wetland, especially channels with flowing water, are also important. Habitat edges between marshes and terrestrial vegetation are important, but the main factors determining habitat use are the annual range of water depth and the existence of residual mats of marsh vegetation (Eddleman 1989). The most productive clapper rail areas consist of a mosaic of uneven-aged marsh vegetation interspersed with open water of variable depth (Conway *et al* 1993).

Nesting behavior begins in February with nesting commencing in mid-March and running through early July. Nests are primarily built in mature cattail/bulrush stands, which provide nest building material and cover. It is thought that young rails fledge within 63-70 days and most hatching occurs during the first week of June. The preferred prey of the Yuma clapper rail is the non-native crayfish *Procambarus clarki* (Todd 1986), though rails will also feed on isopods, aquatic and terrestrial beetles, damselfly and dragonfly nymphs, earwigs, grasshoppers, spiders, freshwater shrimp, freshwater clams, leeches, plant seeds, and small fish.

In 2001 a total of 529 Yuma clapper rails were detected in the United States during surveys. Surveys covered portions of the Lower Colorado River (LCR), central Arizona, and the Salton Sea in California. The Cienega de Santa Clara in Mexico, once part of the wetland, riverine, and estuarine complex of the LCR delta, is home to the largest population of Yuma clapper rails, estimated at 6,000 birds (Hinojosa-Huerta *et al.* 2000). However, water supply to the cienega is not guaranteed into the future.

The Yuma clapper rail recovery plan (Service 1983) provides criteria for delisting. Surveys were conducted in 2003 and no Yuma clapper rails were detected in the project area. Rails have consistently been detected along the Gila River just downstream of the project area. Based on information contained in Service files, eight Yuma clapper rails were detected along the Gila River from 107<sup>th</sup> Avenue to El Mirage Road during the 2002 survey season.

## Southwestern willow flycatcher

The southwestern willow flycatcher was listed as endangered, without critical habitat on February 27, 1995 (60 FR 10694). A total of 737 river miles across southern California, Arizona, New Mexico, southern Nevada, and southern Utah were designated as critical habitat on October 19, 2005 (U.S. Fish and Wildlife Service 2005). A final recovery plan was signed on August 30, 2002.

The southwestern willow flycatcher is a small passerine bird. The sub-species is a neotropical migrant that breeds in the southwestern United States and winters in Mexico, Central America, and northern South America (Phillips 1948, Stiles and Skutch 1989, Peterson 1990, Ridgely and Tudor 1994, Howell and Webb 1995). The southwestern willow flycatcher breeds in dense riparian environments. Four basic habitat types have been described for the southwestern willow flycatcher: monotypic willow, monotypic exotic, native broadleaf dominated, and mixed native/exotic (Sogge *et al.* 1997).

The species nests in willow and other plants such as salt cedar. Open water, marshes, or saturated soil are typical of flycatcher habitat. The southwestern willow flycatcher arrives on breeding grounds in late April and May (Sogge and Tibbitts 1992, Sogge and Tibbitts 1994, Muiznieks *et al.* 1994, Maynard 1995, Sferra *et al.* 1995, 1997) and nesting begins in late May and early June. Young fledge from late June through mid-August (Willard 1912, Ligon 1961, Brown B.T. 1988a,b, Whitfield 1990, 1994). Brown-headed cowbird parasitism has been implicated in flycatcher population declines or, at a minimum, has resulted in reduced or complete nesting failure (Muiznieks *et al.* 1994, Whitfield 1994, Maynard 1995, Sferra *et al.* 1995, Sogge 1995a,b,c, Whitfield and Strong 1995, Brown B.T. 1988a,b, Whitfield 1990, Hull and Parker 1995). The flycatcher is an insectivore, foraging primarily on true flies; ants, bees, and wasps (Hymenoptera); and true bugs (Hemiptera) (Drost *et al.* 1998), although other insect prey are also probably taken.

The largest concentrations of willow flycatchers in Arizona in 2000 were near the confluence of the Gila and San Pedro rivers (219 flycatchers, 119 territories); at the inflows of Roosevelt Lake (207 flycatchers, 115 territories); Gila River, Safford area (30 flycatchers, 15 territories); Topock Marsh on the Lower Colorado River (25 flycatchers, 15 territories); Verde River at Camp Verde (9 flycatchers, 5 territories); Alpine/Greer on the San Francisco River/Little Colorado River (7 flycatchers, 5 territories); Alamo Lake on the Bill Williams River (includes lower Santa Maria and Big Sandy river sites) (44 flycatchers, 24 territories); Big Sandy River, Wikieup (23 flycatchers, 16 territories) and Lower Grand Canyon on the Colorado River (14 flycatchers, 8 territories) (Paradzick *et al.* 2001). In 2001, 635 resident flycatchers were detected within 346 territories at 42 sites along 11 drainages statewide (Smith *et al.* 2002). The lowest elevation where territorial pairs were detected was Topock Marsh on the Lower Colorado River (459 feet) and the highest elevation was at the Greer River Reservoir (8203 feet). Just after listing in 1996, 145 territories were known to exist in AZ, compared to 346 territories in 2001. However, the majority of this increase has occurred at Roosevelt Lake and at San Pedro/Gila River confluence. Increased survey effort was a larger factor in detecting more birds at San Pedro/Gila confluence.

The Roosevelt population has grown on the habitat that has flourished on the lakebed due to low water levels resulting from recent years of drought. Flycatchers have colonized newly established vegetation within the reservoir. While numbers have increased, distribution has not changed dramatically. In 2002, 769 resident flycatchers were detected within 430 territories at 47 sites within Arizona. A final EIS and HCP, published by the Service in December 2002, was developed to allow incidental take resulting from future impacts of reservoir management and the Service subsequently issued an Incidental Take Permit.

Flycatchers are not known to occur in the study area, and vegetation communities structurally suitable for nesting are generally lacking. However, we are aware that flycatchers were recently detected (2002 surveys) along the Gila River immediately downstream of the project area during the breeding season.

### **Cactus ferruginous pygmy-owl**

The Arizona population of the cactus ferruginous pygmy-owl (CFPO) was first April 9, 1997. Critical habitat for the CFPO was first designated (64 FR 37419) on August 11, 1999, and included 731,712 acres in Pima, Cochise, Pinal, and Maricopa counties. Critical habitat was subsequently vacated on September 12, 2001, by the District Court of Arizona. The CFPO was removed from endangered status on May 15, 2006. The Service recently issued a 90-day finding that a petition to list the species presents substantial information indicating that listing may be warranted (73 FR 31418, June 2, 2008).

The CFPO is a small bird, averaging 6.75 inches in length. The average weight of a male is 2.2 oz., while females average 2.6 oz. CFPO's are reddish-brown overall, with a cream-colored belly streaked with reddish-brown. Their crown is lightly streaked, and paired black-and-white spots on the nape suggest eyes. They have no ear tufts and their eye color is yellow. Their tail is reddish-brown with darker stripes, and is relatively long for an owl.

The pygmy-owl is crepuscular/diurnal, with a peak activity period for foraging and other activities at dawn and dusk (Collins and Corman 1995). The species is known to use a variety of habitat types. Within Arizona, they are known to occur in riparian woodlands, mesquite bosques, and Sonoran desertscrub communities. While plant species diversity differs between these communities, there are certain unifying characteristics in each of these occupied habitat types, including the presence of vegetation in dense thickets or woodlands, the presence of trees or cacti large enough to support cavity nesting, and elevations below 4,000 ft. Cottonwood trees, large mesquites, and mature saguaros (*Carnegiea gigantea*) can provide cavities for nesting. Dense mid- and lower-story vegetation provides necessary protection from predators and an abundance of prey.

CFPO's begin nesting activities in late winter to early spring. Breninger (1898) noted that nesting along the Salt and Gila rivers began about the 20th of April. Nesting begins in March, egg laying and incubation in April, and hatching in May. Juveniles fledge in June (Abbate *et al.* 1996). Dispersal occurs approximately 63 days after the young first leave the nest. Dispersal distances range from 1.4 miles to 12.9 miles. As with other owls and raptors, high mortality (50 percent or more) of young is typical during the first year of life. Diet includes birds, lizards,

insects, small mammals (Bendire 1888, Sprunt 1955, Earhart and Johnson 1970, Oberholser 1974), and frogs (Proudfoot *et al.* 1994).

The sub-species are known to occur from lowland central Arizona south through western Mexico to the States of Colima and Michoacan, and from southern Texas south through the Mexican States of Tamaulipas and Nuevo Leon. The 1998-99 survey season resulted in 41 adult pygmy-owls documented in Arizona (S. Richardson, AGFD, pers. comm., 1999). Six adult pygmy-owls were documented in southern Pinal County, 11 adults in the northwest Tucson area, 19 adults in riparian and xeroriparian woodlands in semi-desert grasslands and upland Sonoran desertscrub in southern Arizona, and five adults at Organ Pipe Cactus National Monument. Nesting was confirmed at 11 of these sites.

Cactus ferruginous pygmy-owls are not known to occur in the project area and suitable habitat has been generally lacking for many years. The species has not been detected near the project area since 1898 when it commonly occurred in the cottonwood forests near the confluence of the Gila and Salt Rivers (Breninger 1898).

### **Bald eagle**

The bald eagle (*Haliaeetus leucocephalus*) is a large bird of prey that was listed as endangered south of the 40th parallel on March 11, 1967 (32 FR 4001), and reclassified to threatened status on July 12, 1995 (60 FR 35999). No critical habitat was designated, and the bald eagle was proposed for delisting on July 6, 1999 (64 FR 36453). The final rule removing the bald eagle in the lower forty-eight states from the list of threatened and endangered wildlife was published on July 9, 2007, with an effective date of August 8, 2007 (72 FR 37346). On March 5, 2008, US District Court enjoined the final delisting rule to the Sonoran Desert population of bald eagles pending the outcome of a status review and 12-month petition finding. The order requires the temporary reinstatement of the listing of the bald eagle as threatened in the Sonoran Desert area of central Arizona, including Gila, Graham, Pinal, and Maricopa Counties in their entirety; and southern Mohave County, eastern LaPaz County, and northern Yuma County.

The bald eagle continues to be protected by the Bald and Golden Eagle Protection Act (Eagle Act). The Eagle Act prohibits anyone, without a permit issued by the Secretary of the Interior, from taking eagles, including their parts, nests, or eggs. "Take" is defined under the Eagle Act as "to pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb" eagles. "Disturb" means to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment by substantially interfering with normal breeding, feeding, or sheltering behavior (72 FR 31132-31140).

Declines in the number of waterfowl and shorebirds, loss of nesting habitat, and the widespread use of dichloro-diphenyl-trichloroethane (DDT) and other organochlorine compounds in the 1940s resulting in reproductive failure have all contributed to declines in the bald eagle population. Threats persist largely due to the proximity of bald eagle breeding areas to major human population centers and recreation areas and include entanglement in monofilament fish

line; overgrazing of riparian vegetation; malicious and accidental harassment such as shooting, off-road vehicle use, watercraft use, and low-level aircraft overflights; alteration of aquatic and riparian systems for water distribution systems; collisions with transmission lines; poisoning; and electrocution.

The bald eagle historically ranged throughout North America except extreme northern Alaska, Canada, and central and southern Mexico. The species occurs in association with aquatic ecosystems such as estuaries, lakes, reservoirs, major riverine systems, and some seacoast areas.

All breeding areas in Arizona are located in close proximity to aquatic habitats. Southwestern bald eagles establish breeding territories in December or January and lay eggs in January or February. Young eagles remain in the vicinity of the nest until June (Hunt *et al.* 1992). Arizona also provides habitat for wintering bald eagles, which migrate through the state between October and April each year. The most concentrated population of wintering bald eagles is found at Lake Mary and Mormon Lake, Coconino County (Beatty and Driscoll 1996). Their primary food is fish, but also includes waterfowl and carrion.

According to CH2M Hill (*et al.* 1997), immature bald eagles were observed along the Gila River immediately downstream of the project area during surveys in early May of 1996. No nesting bald eagles are known to occur in the project area and suitable habitat is generally lacking.

### **Gila topminnow**

The Gila topminnow was listed as endangered in 1967 without critical habitat (USFWS 1967). The Gila topminnow has gone from being one of the most abundant fishes of the Gila River basin (Hubbs and Miller 1941) to one that exists at not more than nine natural sites (Bagley *et al.* 1991). Of the 300+ reintroductions conducted by the Arizona Game and Fish Department (AGFD) and others, 21 remain extant (Brown and Abarca 1992). Gila topminnows do not occur in the study area and suitable habitat is generally lacking.

### **Desert pupfish**

The Desert pupfish was listed as an endangered species with critical habitat on April 30, 1986 (51 FR 10842). Critical habitat was designated in Arizona at Quitobaquito Springs in Pima County and in California along parts of San Felipe Creek, Carrizo Wash, and Fish Creek Wash. The desert pupfish was once common throughout the mid to lower portions of the Gila River basin, the lower Colorado River and its delta, and the Salton Sea basin of California (Minckley 1985). It was extirpated from the Gila basin by the mid-1900's (Minckley 1973). The reasons for its extirpation were primarily dewatering of major portions of its habitat and the invasion of remaining habitats by predatory and competitive nonnative species (Minckley 1985, Schoenherr 1988). The only remaining natural populations of the desert pupfish are isolated localities in the Salton Sea basin of California and the lower Colorado River delta in Mexico (Hendrickson and Varela-Romero 1989, Lau and Boehm 1991, Minckley 2000). The range-wide status of desert pupfish is poor, but stable. The future of the species depends heavily upon future developments in water management of the Salton Sea as well as Santa Clara Cienega in Mexico. Desert pupfish do not occur in the study area and suitable habitat is generally lacking.

## Brown pelican

The brown pelican was federally listed as endangered in 1970 (35 *FR* 16047). The species has subsequently been proposed for delisting (73 *FR* 9408). It is a large marine bird weighing up to 4 kilograms (8 pounds), recognized by its large bill, prominent throat pouch, and wingspan of up to 7 feet (Sykes 1983). Adults in non-breeding plumage have a white head and neck, while during the breeding season, the hindneck and nape are dark brown. The body and wings are grayish brown, and the primaries and secondaries are dark brown. The bill is gray, and the throat pouch is black. Immature brown pelicans are mostly brown with a dark neck and head and white belly (Sykes 1983).

Adult brown pelicans are primarily fish eaters and require up to 4 pounds of fish per day. Their diet consists mainly of northern anchovy (*Engraulis mordax*), Pacific sardine (*Sardinopus sagax*), and other surface-schooling fish (Anderson et al. 1980, 1982, Anderson and Gress 1984). Brown pelicans are rarely found away from salt water and do not normally venture more than 32 kilometers (20 miles) out to sea. Brown pelicans are social and gregarious. Males and females, juveniles and adults, congregate in large flocks for much of the year and nest in colonies on small coastal islands free of predators. Nesting colonies on the Pacific coast range from the Channel Islands in the Southern California Bight (SCB) south to the islands off Nayarit, Mexico. Prior to 1959, intermittent nesting was observed as far north as Point Lobos in Monterey County, California. Currently in southern California, brown pelican colonies are found only on Anacapa and Santa Barbara islands; they do not nest on any of the other Channel Islands.

Nest sites are generally on steep, rocky slopes and are constructed on the ground or in brush of grass, sticks, feathers, and seaweed. The nesting chronology of brown pelicans varies from year-to-year, although most nesting activity occurs between February and October. Nesting may be synchronous or may consist of sub-colony units breeding asynchronously over a period of several months (Service 1983). A brown pelican pair attends a clutch of two or three eggs, which are incubated alternatively by both parents. Chicks take about 13 weeks to fledge, at which time they weigh about 20 percent more than adults. Brown pelicans reach breeding age in about three to five years.

The essential characteristics of roost sites include: nearness to adequate food supplies; presence of physical barriers to predation and disturbance; sufficient surface space for individuals to interact normally; and adequate protection from adverse environmental factors such as wind and surf (Jaques and Anderson 1987). Offshore rocks and islands; river mouths with sand bars; and breakwaters, pilings, and jetties are important roosting sites.

The biggest threat to brown pelican survival has historically been related to human activities. Brown pelicans experienced widespread reproductive failures in the 1960s and early 1970s. Much of the failure was attributed to eggshell thinning caused by high concentrations of DDE, a metabolite of DDT. Other factors implicated in the decline of this species include human disturbance at nesting colonies and food shortages. Brown pelicans have not nested north of the Channel Islands since the species' decline in the late 1950s and early 1960s. In 1972, the Environmental Protection Agency banned the use of DDT in the U.S. and placed restrictions on the use of other pesticides. Since then, the level of chemical contaminants in pelican eggs has

decreased and brown pelican nesting success has subsequently increased. The brown pelican was the first species to apparently recover from the effects of pesticides.

The maximum breeding population of the California brown pelican throughout its range may number about 55,000 to 60,000 pairs. Breeding populations can be differentiated into geographically separate entities that are isolated from each other by long stretches of uninhabited coastline. About 90 to 95 percent of the California brown pelican population breeds on islands off the coast of mainland Mexico, Baja California, and in the Gulf of California (Anderson 1983, Service 1983). Some genetic exchange occurs among colonies by the recruitment of new breeders. The largest breeding group is located on the Gulf of California, comprising approximately 68 percent of the total breeding population. Although only two breeding colonies exist along the coast of California, the majority of brown pelicans seen foraging along coastal California likely come from Mexico, as those pelicans tend to be more mobile. Brown pelicans do not occur in the project area and suitable habitat is generally lacking.

### **Western yellow-billed cuckoo**

The western yellow-billed cuckoo (*Coccyzus americanus occidentalis*) is a candidate species under the ESA (Service 2002). In response to a petition to list the species submitted in February 1998, the Fish and Wildlife Service issued a 12-month “warranted but precluded” finding (meaning that listing of the species is warranted but is precluded by higher priority listing actions) for the western distinct population segment of yellow-billed cuckoo on July 25, 2001 (Service 2001).

The yellow-billed cuckoo is a slender, medium-sized bird (about 12 inches in length and weighing about 2 ounces) of the Family Cuculidae, whose members are characterized in part by zygodactyl feet (with two toes pointing forward and two backward). The species has a slender, long-tailed profile, with a fairly stout and slightly down-curved bill that is blue-black with yellow on the base of the lower mandible. Plumage is grayish-brown above and white below, with rufous primary flight feathers. The tail feathers are boldly patterned with black and white below. The legs are short and bluish-gray and adults have a narrow, yellow eye ring. Juveniles resemble adults, except the tail patterning is less distinct, and the lower bill may have little or no yellow. Males and females differ slightly, as males tend to have a slightly larger bill.

The western yellow-billed cuckoo has been associated with cottonwood -willow and dominated riparian habitats (Hamilton and Hamilton 1965, Gaines 1974, Gaines and Laymon 1984, Laymon and Halterman 1986, 1987, 1989, Halterman 1991, Halterman and Laymon 1994, 1995). Cottonwood-willow remains the predominant and preferred habitat, but very tall screwbean-honey mesquite stands are also used. In addition, yellow-billed cuckoos have been found to utilize a mixture of tamarisk (*Tamarix* spp.) and cottonwood/willows (Corman and Magill, 2000). Gaines (1974) found that vegetative density, distance to water, and the length and width of the habitat area were important characteristics when surveying for cuckoos. Western yellow billed cuckoos breed in large blocks of riparian habitats (particularly woodlands with cottonwoods and willows). Dense understory foliage appears to be an important factor in nest site selection, while cottonwood trees are an important foraging habitat in areas where the species has been studied in California (Halterman 1991).

The yellow-billed cuckoo arrives on the breeding grounds beginning in mid- to late May (Franzreb and Laymon 1993). Nesting activities usually take place between late June and late July, but may begin as early as late May, and continue to late August, depending on the season. Nest building takes 2-4 days. Nests are typically built in willow or mesquite thickets 4 to 10 feet (but as high as 35 feet) above the ground, are usually well-hidden by foliage, and are almost always near water. Incubation begins as soon as the first egg is laid, and lasts 11 days. Clutch size is usually two or three eggs, and development of the young is very rapid, with a breeding cycle of 17 days from egg-laying to fledging young. The young are fed large food items such as green caterpillars, tree frogs, katydids, and grasshoppers for the 6-7 day nestling period. After fledging the young are dependent on the adults for at least 2 weeks.

Detection of the species is often due to vocalization. Mated males have a distinctive “kowlp” call which is a loud, nonmusical series of notes about 2-3 seconds long which slows down and slurs toward the end. Unmated males use a separate call which is an indeterminate series of soft notes “coo-coo-coo-coo.” Both members of a pair may give the “knocker” call, which is harsh, rattled, series of notes (Hughes 1999).

Historically, the western yellow-billed cuckoo occupied and bred in riparian zones from western Washington (possibly southwestern British Columbia) to northern Mexico, including Oregon, Washington, southwestern Idaho, California, Nevada, Utah, western Colorado, Arizona, New Mexico, and western Texas (American Ornithologists’ Union 1998). Today, the species is absent from Washington, Oregon, and most of California, is likely extirpated in Nevada, is rare in Idaho and Colorado, and occurs in the balance of its range within riparian habitats that are much reduced from their previous extent and are heavily affected by human use (USFWS 2002, 2001).

Principal causes of riparian habitat losses are conversion to agricultural and other uses, dams and river flow management, stream channelization and stabilization, and livestock grazing. Available breeding habitats for yellow-billed cuckoos have also been substantially reduced in area and quality by groundwater pumping and the replacement of native riparian habitats by invasive, non-native plants (particularly tamarisk) (Groschupf 1987; Rosenberg *et al* 1991). Estimates of riparian habitat losses in the west as a result of the factors described above range from 90 to 99 percent in California, 90 percent in New Mexico, and 90 to 95 percent in Arizona (USFWS 2001). In Arizona, the greatest losses of riparian habitat have occurred along the lower Colorado River valley and its major tributaries at elevations below about 3,000 feet (USFWS 2001). Cuckoo numbers appear to have declined substantially in Arizona. In 1976 an estimated 846 yellow-billed cuckoo pairs occupied the lower Colorado River and five of its major tributaries (Service 2001), while in 1999, just 172 cuckoo pairs and 81 unmated adults were located during surveys of 221 miles of riparian habitat (Corman and Magill 2000). Specific declines in cuckoo numbers in Arizona have been documented along the lower Colorado River and the Bill Williams River delta (Rosenberg *et al.* 1991).

Nevertheless, Arizona is thought to contain the largest remaining cuckoo population in the western states (Service 2002). Currently in Arizona, cuckoos occur in a scattered fashion throughout the central, east-central, west central and southeastern parts of the state, with the

majority of known populations occurring along the San Pedro, Verde, and Agua Fria rivers, Cienega Creek in Pima, Pinal, Cochise, and Yavapai counties, and Sonoita Creek in Santa Cruz County (Corman and Magill 2000).

#### **4. RESPONSIBILITIES OF THE PARTIES**

In addition to the following stipulations, the Parties will work cooperatively on other issues as necessary to further the purposes of the Agreement. Moreover, nothing in this Agreement shall limit the ability of Federal and State conservation authorities to perform their lawful duties, and conduct investigations as authorized by statute and by court guidance and direction.

Permittee agrees to:

1. Establish habitat, including the following types: aquatic strand, wetland marsh, cottonwood willow, mesquite bosque, and lower Sonoran, as funding permits. This habitat will be managed as described in Section 6, Management Activities for Covered Species.
2. Provide reports to the Service on species covered in the Agreement regarding mortalities, injuries, or diseases observed on the enrolled lands. These reports will be submitted annually on March 1 for activities occurring during the previous calendar year throughout the term of this agreement.
3. Notify the Service 30 days in advance of any planned land management activity (such as wetlands draining, storm drain outfall maintenance, trail maintenance, controlled burn, fencing, construction, tilling, etc.) that the Permittee reasonably anticipates will result in take of the covered species on the enrolled lands; and provide the Service a reasonable opportunity to capture and/or relocate any potentially affected covered species. The Permittee may proceed with the planned activity unless the Service requests an opportunity to exercise its rights under this paragraph, in writing, within 20 days of receiving the Permittee's notice. Land management activities may take place immediately if the Permittee determines them essential to protect public health and/or safety, in which case the Service will be notified as soon as possible.
4. Notify the Service at least 60 days in advance of any change to the enrolled property's management that the Permittee reasonably anticipates will result in the loss of individuals of a covered species or occupied habitat, including prior notification for returning the enrolled property to baseline conditions; and identify the actions that would result in changed management or return to baseline.
5. Agree to a schedule for monitoring and reporting on compliance with this Agreement based on recommendations and goals relating to covered species in the Monitoring and Adaptive Management Plan being developed specifically for this conservation effort.
6. Allow reasonable access to the enrolled lands by the Service, or another agreed-upon party, for purposes of carrying out monitoring and management activities.

7. Fund the project as outlined in this Agreement at Section 12, Funding.

The Service agrees to:

1. Provide technical assistance, to the maximum extent practicable, when requested by the Permittee; and provide information on Federal funding programs relating to the management of endangered species and their habitat.
2. Upon execution of the Agreement and satisfaction of all other applicable legal requirements, it is anticipated that the Service will issue a permit to the Permittee in accordance with ESA Section 10(a)(1)(A), authorizing incidental take of the covered species as a result of lawful activities within the enrolled property that are described in this Agreement. The term of the permit will be 50 years. The permit shall not impose additional requirements or limitations beyond those expressly provided in this Agreement.
3. Ensure that the Permittee is implementing the terms of the Agreement.
4. Perform or assist with biological monitoring, unless conducted solely by the Permittee. The Service shall provide written notice of the desired access at least 30 days in advance. In the event of an emergency, the Service may enter the premises to care for and protect covered species at any time after contacting the landowner.

Administrative contacts

For the purposes of coordination and administrative matters, the City of Phoenix designates the Rio Salado Habitat Supervisor, 641 West Lower Buckeye Road, Phoenix, AZ 85003, phone (602) 534-7453, fax (602) 534-8223 as the point of contact for this Agreement.

For the purposes of coordination and administrative matters, The Service designates the Field Supervisor, Arizona Ecological Services Field Office, 2321 West Royal Palm Road, Suite 103, Phoenix, AZ 85021, phone (602) 242-0210, fax (602) 242-2513, as the point of contact for this Agreement.

## **5. BASELINE DETERMINATION**

The baseline level of use of enrolled lands by endangered species is described in this section. This baseline determination shall form the basis for all future determinations as to the extent to which the Permittee's activities have affected individual endangered species as well as the covered species as a whole.

Due to upstream river management of dams and reservoirs by Salt River Project, the portion of the Salt River in the project area receives little water from the upper Salt River watershed. Available water in the project area is currently limited to runoff from storm drains and effluent discharge from the City of Tempe's Kyrene Road wastewater treatment facility, also know as the

Tempe drain. This effluent does, however, support some limited wetland and riparian vegetation within the project area. The 1998 final environmental impact statement (EIS) for the Rio Salado Environmental Restoration project provides a description of the current baseline conditions. For ease of discussion, the EIS breaks the project area into two separate reaches: the Phoenix Reach and the Tempe Reach. The Phoenix Reach defined in the EIS includes those lands enrolled in this Agreement.

The majority of the Phoenix Reach is dominated by essentially barren uplands and riverbed, though desert broom (*Baccharis sarothroides*) and rabbitbrush (*Chrysothamnus nauseosus*) occur sparsely and sporadically. Stream side terraces are dominated by scattered desert scrub species such as creosote (*Larrea tridentata*), brittlebush (*Encelia farinosa*), buckwheat (*Eriogonum* sp.), desert sage (*Salvia carnososa*), mesquite, palo verde, salt cedar, fountain grass (*Pennisetum setaceum*), crabgrass (*Digitaria sanguinalis*), and fescue (*Festuca myuros*). Established after construction of the Rio Salado low flow channel in 2001, the most significant vegetation occurs along the existing low flow channel between 7<sup>th</sup> Avenue and Central Avenue where dense stands of cattail (*Typha* sp.) and bulrush (*Scirpus* sp.) are found.

No suitable habitat for southwestern willow flycatcher, cactus ferruginous pygmy-owl, or bald eagle exists within the Rio Salado project area. A total of approximately 12 acres of suitable habitat does exist for the Yuma clapper rail where dense cattail stands occur between 4<sup>th</sup> Street and 15<sup>th</sup> Avenue. Surveys for the Yuma clapper rail during the 2003 season did not detect any rails. Some of the existing ponds and the low flow channel could be used by brown pelican. However, any pelicans that may use the area would be transients not likely to breed. Accordingly, we hereby establish a baseline of zero for the southwestern willow flycatcher, cactus ferruginous pygmy-owl, brown pelican, bald eagle, and the Yuma clapper rail. In the event the pygmy-owl is listed as threatened or endangered in the future, it will be added to this Agreement by addendum.

This Agreement addresses the potential for future reintroduction of Gila topminnow or desert pupfish into the project area. Though the Permittee has no current plans to reintroduce either fish species into the project area, there is the potential for this eventuality. The Service and Arizona Game and Fish Department (AGFD) have developed a State-wide Safe Harbor Agreement for both of these fish species that accommodates use of this fish for vector control within the State of Arizona. If the Permittee decides at a future date to pursue the use of these fish for vector control, that endeavor would be conducted under the auspices of the State agreement through a certificate of inclusion. Due to the absence of the species and habitats, we hereby establish a zero baseline for Gila topminnow and desert pupfish.

Additionally, this Agreement recognizes the potential for future occupation of the project area by the yellow-billed cuckoo, which is currently a candidate for listing. Habitat for the species west of the Continental Divide includes riparian cottonwood-willow galleries (salt cedar is also used by the cuckoo). Dense understory foliage is an important factor in nest site selection, while cottonwood trees are important in foraging areas. In the event this species is listed as threatened or endangered in the future, it will be added to this Agreement by addendum. We hereby establish a baseline of zero for the yellow-billed cuckoo at the Rio Salado project area since suitable habitat is not present.

This Agreement addresses the potential for future occupation of the project area by all species of native fish. A fish survey was conducted on December 10, 2004 and no native fish were detected (Knowles, 2004). Accordingly we hereby establish a baseline of zero for all native fish species.

This agreement addresses the potential for future occupation of the project area of native amphibians. The two potential species within the historic range include the Chiricahua Leopard frog and the Mexican Garter snake. An amphibian survey was conducted by Arizona Game and Fish in 2005 and no native amphibian species were detected. Currently these species are considered to be out of range; therefore a zero baseline was established for these two species.

In the event that species are listed and/or habitat is created, species will be added to this Agreement by addendum as discussed below in section 15.6.

## **6. MANAGEMENT ACTIVITIES FOR COVERED SPECIES**

The Permittee will establish a more natural habitat that will serve to provide a net conservation benefit to the species listed in Section 2, within a portion of the Salt River flood plain. Incidental to this objective is the creation of passive recreational opportunities associated with the restored habitat areas, including the use of maintenance roads as recreational trails for walking, bicycling, horseback riding, and creating areas for observing wildlife and learning about the natural history of the river. Recreational features will include interpretive signage that educates visitors about the sensitive habitat and encourages respect for wildlife and plant communities. The conservation effort will include the establishment of several types of habitat, including mesquite bosque, cottonwood/willow forest, freshwater marsh, and aquatic strand. Each of these habitats is associated with Sonoran Desert riparian corridors and each historically existed in the Salt River flood plain.

The Permittee has developed a monitoring workplan for the covered species based on the guidelines recommended in the Monitoring and Adaptive Management Plan., (see Attachment A). After establishment, monitoring will occur annually. The intent is to manage and maintain this project as a natural habitat area for the net conservation benefit to the species listed in Section 2.

The Permittee will maintain the road system to the extent necessary to ensure adequate access for maintenance purposes.

The Permittee will maintain water delivery system and other infrastructure as required.

The Permittee may alter the constructed habitat either mechanically or allow natural changes to occur, in order to allow the sustainable balance of plant communities to occur.

The Permittee will remove non-native species to promote successful establishment and survival of native plant communities. This may require the use of herbicides. If these products are used at all, they must be applied in full compliance with label guidelines for dilution and application. If the Permittee determines that an herbicide treatment must be used, he/she must avoid

contamination of riparian areas by limiting use of chemicals near them and by disposing of rinse water and empty containers in strict accordance with label directions.

The Permittee will manage the habitat to control vectors and other potential public health hazards. While the habitat features are being designed to minimize potential vector breeding, some use of pesticides may be required. If these products are used at all, they must be applied in full compliance with label guidelines for dilution and application. If the Permittee determines that an insecticide treatment must be used, he/she must avoid contamination of riparian areas by limiting use of chemicals near them and by disposing of rinse water and empty containers in strict accordance with label directions.

The Permittee will remove trash, litter, and debris from the project. Dead or dying vegetation will be removed if it impacts public health or safety, or if replanting will occur.

The Permittee will perform water quality monitoring as required by any state or federal permits. Water treatment may be applied to bring water quality to acceptable levels of the recommended water quality standard. The recommended standard is being evaluated at this time and will either be a health-based or drinking water quality standard.

The Permittee will allow incidental recreation activities to occur within the enrolled lands. Recreational activities will be restricted to established trails and public areas or off trail as appropriate while under supervision. Informational signage will be installed in order to encourage proper use and care for the habitat areas.

The Permittee will undertake or allow maintenance activities to ensure that the flood control capacity of the river channel is acceptable.

The Permittee will maintain vegetation within the Federal Aviation Administration's Critical Zone to minimize the potential establishment of wildlife determined to be hazardous to aviation activities.

The Permittee is also authorized to continue to allow storm water from the separate municipal storm sewer systems to be discharged on and to the enrolled lands.

The Permittee is authorized to implement management activities not described in the Agreement, as long as such actions do not cause a deterioration of habitat below the baseline conditions and do not detract from the beneficial actions set forth in the Agreement. The Permittee will notify the Service 60 days in advance of any activities that the Permittee reasonably anticipates will result in the loss of individuals of a covered species or occupied habitat. The notification will allow the Service an opportunity to capture and relocate the affected individuals, thereby minimizing the impact of the authorized take. Unless absolutely necessary, the Permittee will not undertake potentially disturbing actions during the breeding season of any covered species, to minimize the impact of authorized take by avoiding any possible disruption of reproductive efforts.

Exceptional situations, such as natural disasters (e.g., excessive rainfall, flooding, fire, extreme drought, insect infestations, or epidemic disease), may require initiation of certain emergency management actions, such as salvage or sanitation harvesting. In such cases, the notification requirements described in the preceding paragraph shall be considered waived, and the Permittee may proceed with corrective actions as needed provided, however, that the Permittee reports the circumstances of the action to the Service not more than 72 hours after the situation triggering the action has ended or been controlled and, if at all possible, will make reasonable accommodations to the Service for survey and/or relocation of individuals of covered species prior to the action. The Parties acknowledge that survey and translocation may be precluded by certain urgent situations.

This Agreement will grant to the Service, after reasonable prior notice, the right to enter the enrolled lands for the purpose of ascertaining compliance with the Agreement and for censusing, banding, and in certain circumstances for relocating covered species, as well as, to take other measures that may be necessary. In addition, the Permittee will complete and submit an annual report of activities related to species management to the Service, as well as other reports as required by the Agreement.

Events that could return the enrolled properties to a baseline condition are those associated with termination of the Agreement or those associated with operation and maintenance (e.g., removal of understory vegetation for fire safety, burning cattail stands to promote new growth). However, ongoing conservation activities undertaken by the Permittee on the enrolled lands are not anticipated to result in returning the covered property to baseline conditions.

A return to baseline does not include natural events such as a flood or fire that would destroy the habitat, or disease or insect outbreaks that would destroy habitat or established populations of the covered species on the enrolled lands. These events would constitute changed circumstances.

## **7. DESCRIPTION OF ENROLLED LANDS**

The location of the enrolled lands is depicted in Figure 1. The project consists of approximately 595 acres. The upstream limit of the project is 24<sup>th</sup> Street and the 19<sup>th</sup> Avenue Bridge is the downstream limit. The total distance is approximately five miles. Currently, the enrolled lands consist largely of a barren river channel with closed sand and gravel mining operations and former landfills along the banks of the river. Prior to the project, except during periods of flooding, the only water in this reach of the river consisted of outfalls from storm drains. The enrolled lands include the active river channel and generally land within 50 feet of the north and south river banks.

The purpose of the voluntary conservation effort is to recreate a more natural habitat for the benefit of threatened and endangered species within this portion of the Salt River. Incidental to this objective is the creation of passive recreational opportunities associated with the restored habitat areas, including the use of maintenance roads as recreational trails for walking and bicycling and creating areas for observing wildlife and learning about the natural history of the river.

## 8. NET CONSERVATION BENEFIT

The Permittee agrees to voluntarily manage the enrolled lands in a manner designed to produce a cumulative net conservation benefit to the covered species, by implementing the conservation measures described in this Agreement to increase species populations and enhance, restore, and maintain suitable habitat. It is anticipated that the net conservation benefit will be sufficient to contribute, directly or indirectly, to recovery of the covered species, after taking into account the length of the Agreement and any off-setting adverse effects of authorized take. Although the activities stipulated in this Agreement may not permanently conserve or recover covered species populations or their habitats, it does provide important benefits to the covered species including, but not limited to the following: maintenance, restoration, and enhancement of habitat; maintenance and increase of population numbers or distributions; increase in habitat connectivity; reduction of habitat fragmentation; establishment of buffers for other protected areas; creation of areas for testing and implementing new conservation strategies, and public education concerning threatened and endangered species and ways to preserve them.

The Parties anticipate that this Agreement will result in an increased number and/or distribution of the covered species, and/or an increase in the total area of occupied suitable habitat, within the enrolled lands. Without this cooperative government effort, these lands would not otherwise be utilized by the covered species in the foreseeable future. The Agreement will also provide an example of a mutually beneficial relationship between government agencies for the benefit of endangered and threatened species, and may provide evidence that such species can coexist with current land-use practices.

The habitat restoration efforts of this project involve 595 acres of desert river habitat and include many different types of native plant species. The following associations have been made based upon the identified species within this Agreement and the habitat that will exist within the project area. The Yuma clapper rail requires habitat along stream sides or marshlands associated with heavy riparian and wetland vegetation, especially cattail and bulrush. Within the project limits approximately 37 acres of wetland marsh and 43 acres of aquatic strand will exist. The southwestern willow flycatcher prefers dense riparian environments, open water, and marshes. Four basic habitat types have been identified, monotypic willow, monotypic exotic, native broadleaf dominated and mixed native/exotic. Suitable habitat may be located within the approximately 90 acres of cottonwood/willow association, 37 acres of wetland marsh, and the 43 acres of aquatic strand that will exist. The cactus ferruginous pygmy-owl typically prefers riparian woodlands, mesquite bosques, and Sonoran desert scrub communities. Cottonwood trees and large mesquites may provide cavities for nesting. Dense mid and lower story vegetation provides necessary protection from predators and an abundance of prey. Approximately 200 acres of mesquite bosque habitat, 90 acres of cottonwood/willow habitat, 32 acres of lower Sonoran habitat (palo verde and mesquite association), and 123 acres of open edge (saltbush, burro bush, and brittlebush association) will exist. The bald eagle and Brown Pelican in Arizona are located in close proximity to aquatic habitats. Approximately 37 acres of wetland marsh and 43 acres of aquatic strand will exist within the project. For the Gila topminnow and desert pupfish, possible suitable habitat may include the 37 acres of wetland strand and 43 acres of aquatic strand.

Therefore, it is anticipated that the cumulative impact of this Agreement and the activities it covers, which are facilitated by the authorized take, will provide a net conservation benefit to the covered species. Nevertheless, the failure of the anticipated benefits to accrue as expected shall not be deemed a breach of this Agreement.

## **9. AGREEMENT DURATION/TRACKING NUMBER**

The Agreement, (assigned tracking number TE-XXXXXX-0) including any commitments related to funding under Service programs, will be in effect for the duration of 50 years from the date of the last signature on this Agreement. This Agreement may be signed in counterparts. Given the probable response time by covered species to the planned conservation measures, the Service estimates it may take 5 years of implementing the Agreement to fully reach a net conservation benefit for the species, although some level of benefits will likely occur within a shorter time period (2-3 years). Based on Service experience, the 50-year duration of this Agreement is considered sufficient to establish an incipient population of the species; increase the numbers or distribution of the covered species; increase acres of suitable habitat; and/or gain new information on the species that will facilitate its management on the Permittee's enrolled property.

Implementation of this Agreement is expected to result in the preservation, reintroduction, or expansion of the covered species' populations within the 595-acre enrolled lands covered by the Agreement. The 50-year permit term will be advantageous to the Permittee because of the longer time period available to plan future land-use activities. The 50-year permit term also would benefit species conservation because impacts associated with take of individuals or habitat above the baseline may not occur in the short term. The permit and Agreement may be extended beyond the specified duration through amendment, upon written agreement of the Parties.

## **10. TAKE**

Management and development activities on the enrolled lands will include, but not be limited to the activities described in Section 6, Management Activities for Covered Species. The Permittee plans to continue the following activities that may result in an unintentional take of the species:

The Permittee intends to undertake management activities that may include vegetation removal, temporary or permanent elimination of freshwater marshes, and the introduction of roads or paths necessary for overall project maintenance, if deemed necessary by the Permittee or another government agency in order to protect the health, safety, or welfare of the public.

Whenever possible, the Permittee will give the Service 60 days notice prior to commencing any activities that could modify the habitat or impact a covered species. As long as agreed-upon management activities that are expected to provide a net conservation benefit are being implemented, under this Agreement, the Permittee is authorized to make use of the enrolled lands in any manner that does not result in reducing the population and/or occupied habitat of the covered species below original baseline conditions. The permit will authorize take of covered species and their progeny, or alteration of occupied habitat, resulting from lawful activities within the enrolled lands, during the term of this Agreement. The Permittee may continue

current land-use practices, undertake new ones, or make any other lawful use of the enrolled lands, and may allow public recreational use of the enrolled lands, even if such use results in the loss of individuals of covered species or their habitat covered under this Agreement.

The maximum number of individuals or occupied habitat that can be incidentally taken pursuant to this Agreement will be no more than the number of additional individuals or acres of occupied habitat above the baseline created through this Agreement. Thus the net impact of take authorized under this program is, at most, a return to baseline, and therefore is not expected to appreciably reduce the likelihood of survival and recovery of the species in the wild. To return the enrolled property to baseline conditions, the Permittee must demonstrate that the agreed-upon baseline conditions were maintained and the activities identified in the Agreement as necessary to achieve a net conservation benefit were carried out for the duration of the Agreement.

No habitat will be impacted until the Permittee has given the Service a 60-day notice prior to any activities that the Permittee reasonably anticipates will result in the take of the covered species, or removal of habitat as provided for in this Agreement, to relocate any remaining individuals of covered species from the area to be impacted, unless the action is deemed necessary to protect public health, safety, or welfare.

## **11. REPORTING AND MONITORING**

After the five-year establishment period, the Permittee will perform monitoring for the covered species on an annual basis. Monitoring reports will identify performance milestones.

Compliance Monitoring. The Permittee will be responsible for annual monitoring and reporting related to implementation of the Agreement and fulfillment of its provisions, including verification of baseline maintenance, implementation of agreed-upon conservation measures, and any take authorized by the permit. The Agreement will grant the Service, after reasonable prior notice to the Permittee, the right to enter the enrolled lands to ascertain compliance with the Agreement.

Biological Monitoring. To the extent practicable and feasible, and based on available resources and funding, the Service and the Permittee will strive to conduct surveys for covered threatened and endangered species within suitable habitat areas on an annual basis. At a minimum, the Permittee will conduct annual field trips to qualitatively evaluate the development of habitats for covered species. The Service will participate when possible. Monitoring for this Agreement may also be conducted in accordance with the Permittee's Monitoring and Adaptive Management Plan.

Reporting. Annual reports will be due March 1 of each year and copies will be made available to all Parties. Annual reports will include a detailed description of the existing habitat conditions within the enrolled lands, an estimate of the population size or acreage of occupied habitat for each covered species, a description of each covered species' distribution and productivity on the enrolled lands, and any conservation measures implemented during the first year.

## **12. FUNDING**

The voluntary conservation efforts being conducted on the enrolled lands are being funded through a partnership with the Permittee and the Corps. The Corps is funding 65% of the project construction, and the Permittee is funding 35%.

The completion of the project is dependent upon annual appropriations in the federal budget. The Permittees's share is funded through voter-approved bonds, and has been supplemented with grant funding and a contribution from the Flood Control District of Maricopa County. The construction budget is \$100 million, with scheduled construction to be complete by the end of 2008.

The Corps is responsible for cost sharing a five-year adaptive management period after the project is completed. During the adaptive management period, the success of the habitat restoration efforts will be monitored. The monitoring activities will be determined based on recommendations from the Monitoring and Adaptive Management Plan being prepared by the Service specifically for this project.

Adaptive Management activities will be recommended based upon monitoring results and may result in the alteration of the original conservation measures. The overall goal, however, will remain to create a more natural habitat upon the enrolled lands. The monitoring and adaptive management activities will continue throughout the life of the project.

After the five-year adaptive management period, operation and maintenance of the conservation efforts will be the full responsibility of the Permittee. These activities will be funded through the City of Phoenix's General Funds.

### **13. LANDOWNER ASSURANCES**

Through this Agreement, the Service provides the Permittee assurances that if additional conservation and mitigation measures are deemed necessary, the Service may require additional measures of the Permittee, but only if such measures are limited to modifications within the covered areas for the affected species and maintains the original terms of the Agreement to the maximum extent practicable. Additional conservation and mitigation measures will not involve the commitment of additional land, water, or financial compensation, or additional restrictions on the use of land, water, or other natural resources otherwise available for use under the original terms of the Agreement without the consent of the Permittee.

These assurances allow the Permittee to alter or modify the enrolled property, even if such alteration or modification results in the incidental take of covered species to such an extent that the take returns the enrolled lands to the original baseline conditions. Such assurances may apply to the entire enrolled property or to portions of the enrolled property as designated or otherwise specified in this Agreement. These assurances depend on the Permittee compliance with the obligations in this Agreement and in the associated Section (10)(a)(1)(A) permit. Further, the assurances apply only to this Agreement, only if the Agreement is being properly implemented, and only with respect to the species covered by the Agreement and its associated permit.

## 14. MODIFICATIONS

After approval of the Safe Harbor Agreement, the Service may not impose any new requirements or conditions on, or modify any existing requirements or conditions applicable to, a landowner or successor in interest to the landowner, to mitigate or compensate for changes in the conditions or circumstances of any species or ecosystem, natural community, or habitat covered by the Agreement except as stipulated in 50 CFR 17.22(c)(5) and 17.32(c)(5).

- 14.1 Modification of the Agreement. Either party may propose modifications or amendments to this Agreement, as provided in 50 CFR 13.23, by providing written notice to, and obtaining the written concurrence of, the other Party. Such notice shall include a statement of the proposed modification, the reason for it, and its expected results. The Parties will use their best efforts to respond to proposed modifications within 60 days of receipt of such notice. Proposed modifications will become effective upon the other Party's written concurrence.
- 14.2 Amendment. The permit may be amended to accommodate changed circumstances in accordance with all applicable legal requirements, including but not limited to the ESA, the National Environmental Policy Act, and Service permit regulations at 50 CFR 13 and 50 CFR 17. The party proposing the amendment shall provide a statement describing the proposed amendment and the reasons for it.
- 14.3 Termination of the Agreement. As provided for in Part 12 of the Service's Safe Harbor Policy (FR 64:32717), the Permittee may terminate implementation of the Agreement's voluntary management actions prior to the Agreement's expiration date, for good cause. In such circumstances, the Permittee may return the enrolled lands to baseline conditions even if the expected net conservation benefits have not been realized. If the Permittee does not continue implementation of the plans and stipulations of the Agreement, the Permittee would relinquish the Section 10 permit to the Service. Species management on the enrolled lands would return to its status prior to the signing of the Agreement (i.e., original baseline). Such termination will not affect the Permittee's authorization under the permit to take any individual of the covered species or occupied habitat that is not part of the Permittee's baseline at the time of termination. The Permittee may terminate this Agreement due to uncontrollable circumstances upon 30 days prior written notice to the Service, provided that the baseline conditions have been maintained and the Service is provided an opportunity to relocate affected species within 30 days of that notice. The Permittee also may terminate the Agreement at any time for any other reason, but termination for reasons other than uncontrollable circumstances such as those associated with a *force majeure* event shall extinguish the Permittee's authority to take species or occupied habitat under the permit.
- 14.4 Permit Suspension or Revocation. The Service may suspend or revoke this Agreement for cause in accordance with the laws and regulations in force at the time of such suspension or revocation. The Service also, as a last resort, may revoke the permit if continuation of permitted activities would likely result in jeopardy to any covered

species (50 CFR 13.28(a)). Prior to revocation, the Service would exercise all possible measures to remedy the situation.

- 14.5 Baseline Adjustment. Unforeseen circumstances could involve habitat impacts resulting from catastrophic (*force majeure*) events beyond the reasonable control of the Permittee such as rainstorms, floods, severe drought, lethal forest fires, or insect/disease epidemics that locally destroy the species population or render the habitat unsuitable, thereby reducing population numbers or occupied acreage below the original baseline conditions. For such circumstances, the Parties may agree to revise the Agreement's baseline conditions to reflect the new circumstances, rather than terminate the Agreement. The discharge of storm water through the municipal separate storm sewer system to the enrolled lands in high volumes may be a force majeure event.
- 14.6 Dispute Resolution. The Parties agree to work together in good faith to resolve any disputes, using dispute resolution procedures agreed upon by all Parties.

## 15. ADDITIONAL MEASURES

- 15.1 Neighboring Lands. The City of Phoenix Aviation Department maintains the stretch of the Salt River between SR 143 and just east of the I-10 Bridge. If the Permittee's voluntary conservation actions result in covered species occupying adjacent properties, the Service will use the maximum authority allowed under the ESA to address neighboring properties. Implications to neighboring landowners with non-enrolled lands will be determined on a case-by-case basis. In general, the Service will make every effort to include the neighboring landowner as a signatory party to this or a separate agreement and permit. Nothing in this Agreement requires the Permittee to take any action with respect to endangered species or habitat on property that is not within the enrolled lands.
- 15.2 Succession and Transfer. This Agreement shall be binding on and for the benefit of the Permittee and its respective successors and transferees, in accordance with applicable regulations (50 CFR 13.24 and 13.25). The rights and obligations under this Agreement shall run with the ownership of the enrolled lands and are transferable to subsequent non-Federal property owners pursuant to 50 CFR 13.25. The enhancement of survival permit issued to the Permittee also may be extended to the new owner(s), provided the new owner agrees in writing to become party to the original Agreement and permit in accordance with 50 CFR 13.25. As a successor to the original agreement and permit, the new owner(s) should have the same rights and obligations with respect to the enrolled property as the original owner. The new owner(s) also will have the option of receiving Safe Harbor assurances by signing a new Agreement and receiving a new permit. The Permittee shall notify the Service of any transfer of ownership of any of the enrolled lands.
- 15.3 Availability of Funds. Implementation of this Agreement by the Service is subject to the requirements of the Anti-Deficiency Act and the availability of appropriated funds. Nothing in this Agreement will be construed by the Parties to require the obligation,

appropriation, or expenditure of any funds from the U.S. Treasury other than as expressly provided herein. The Parties acknowledge that the Service will not be required under this Agreement to expend any Federal agency's appropriated funds unless and until an authorized official of that agency affirmatively acts to commit to such expenditures as evidenced in writing.

- 15.4 Relationship to Other Agreements. There is an established agreement between City of Phoenix and U.S. Army Corps Engineers to construct the Rio Salado Environmental Restoration Project under the Water Resources Development Act.
- 15.5 No Third-Party Beneficiaries. This Agreement does not create any new right or interest in any member of the public as a third-party beneficiary, nor shall it authorize anyone not a party to this Agreement to maintain a suit for personal injuries or damages pursuant to the provisions of this Agreement. The duties, obligations, and responsibilities of the Parties to this Agreement with respect to third parties shall remain as imposed under existing law.
- 15.6 Other Listed Species, Candidate Species, and Species of Concern. The possibility exists that other listed, proposed, or candidate species, or species of concern may occur in the future on enrolled lands as a direct result of the Permittee's voluntary conservation actions. If biological surveys determine this Agreement will provide a net conservation benefit to any such listed species or their potential habitat, the Parties may agree to amend the Agreement and permit to cover additional species, at the Permittee's request.

If federally designated candidate species or other unlisted species of concern should occur on the property, the Service will recommend measures for including them in a joint Safe Harbor Agreement/Candidate Conservation Agreement with Assurances to contribute toward the conservation of those species. If appropriate measures are included in such an agreement, the Service, consistent with its "No Surprises" policy, will not impose additional requirements on the Permittee as a result of any such species later being listed as threatened or endangered.

- 15.7 Notices and Reports. Any notices and reports, including monitoring and annual reports, required by this Agreement shall be delivered to the persons listed below, as appropriate:

For the purposes of coordination and administrative matters, the City of Phoenix designates the Rio Salado Habitat Supervisor, 641 West Lower Buckeye Road, Phoenix, AZ 85003, phone (602) 534-7453, fax (602) 534-3787 as the point of contact for this Agreement.

For the purposes of coordination and administrative matters, the Service designates the Field Supervisor, Arizona Ecological Services Field Office, 2321 West Royal Palm Road, Suite 103, Phoenix, AZ 85021, phone (602) 242-0210, fax (602) 242-2513, as the point of contact for this Agreement.

## **16. NATIONAL ENVIRONMENTAL POLICY ACT**

The National Environmental Policy Act of 1969, as amended, and the regulations of the Council on Environmental Quality (CEQ) require all federal agencies to examine the environmental impact of their actions, to analyze a full range of alternatives, and to use public participation in the planning and implementation of their actions. The purpose of the NEPA process is to help federal agencies make better decisions and to ensure that those decisions are based on an understanding of environmental consequences. The Service will review each Safe Harbor Agreement and the associated permit action for any significant environmental, economic, social, historical, or cultural impact, or for significant controversy. If a Safe Harbor Agreement and its associated permit are not expected to individually or cumulatively have a significant impact on the quality of the human environment or other natural resources, the Agreement/permit may be categorically excluded.

## **17. AUTHORITIES**

Sections 2, 7, and 10 of the Endangered Species Act of 1973, as amended, and the Fish and Wildlife Service Coordination Act, allow the Service to enter into this Agreement. The terms of this Agreement shall be governed by and construed in accordance with applicable federal law. Nothing in this Agreement is intended to limit the authority of the Service to fulfill its responsibilities under federal laws. All activities undertaken pursuant to this Agreement or its accompanying permit must be in compliance with all applicable state and federal laws and regulations.

## **18. OTHER REQUIREMENTS OF SECTION 10**

Section 10(d) of the ESA provides that the Service may grant permits authorizing the taking of endangered species under Section 10(a)(1)(A) only if it finds that “(1) [they] were applied for in good faith, (2) if granted and exercised will not operate to the disadvantage of such threatened and endangered species, and (3) will be consistent with the purposes and policy set forth in Section 2 of the ESA.” This Agreement helps satisfy those requirements. The Service has worked closely with the Permittee to develop the conservation measures that the Permittee intends to implement. The Service must find that the Permittee has pursued conservation activities in good faith, has made substantial progress toward accomplishing those activities, and has applied for a Section 10 permit in good faith. If granted and exercised, the Service must find that this Agreement and the Section 10 permit will not operate to the disadvantage of any threatened or endangered species. If the permit is granted it will operate to enhance habitat and, as a result, maintain or increase species now present. Likewise, the Service must find that this Agreement and the permit will enhance and restore habitat and thereby encourage the presence of species that are not currently present and, thus, lead to net conservation benefits for the covered species.

IN WITNESS WHEREOF, THE PARTIES HERETO have executed this Safe Harbor Agreement to be in effect as of the date that the Service issues the permit.

Permittee

CITY OF PHOENIX, ARIZONA  
Frank Fairbanks, City Manager

By  
Dale Larsen, Director  
Parks and Recreation Department

ATTEST:

City Clerk

APPROVED AS TO FORM:

City Attorney

---

Benjamin Tuggle  
Regional Director  
U.S. Fish and Wildlife Service  
P.O. Box 1306, Room 4102  
Albuquerque, NM 87103

Date

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## **Attachment A Workplan**

1. Monitor health of renovated habitat as per the Adaptive Management and monitoring plan currently being developed by the Service and AGFD.
2. Remove nonnative species to ensure successful establishment and survival of native plant communities.
3. Control vectors and other potential public health hazards.
4. Trash litter and debris will be removed from the project. Dead or dying vegetation will only be removed if it impacts public health or safety or if replanting will occur.
5. Water quality monitoring will be performed as required in the AZPDES permit. Water treatment may be applied to bring water quality to acceptable levels of the recommended water quality standard. The recommended standard is being evaluated at this time and will either be a (health-based or drinking water quality standard) standard, either of which is acceptable for consumption by wildlife.

**Figure 1**  
**Enrolled Lands**

LEGAL DESCRIPTION-SEPARATE DOCUMENT



**NOTES**

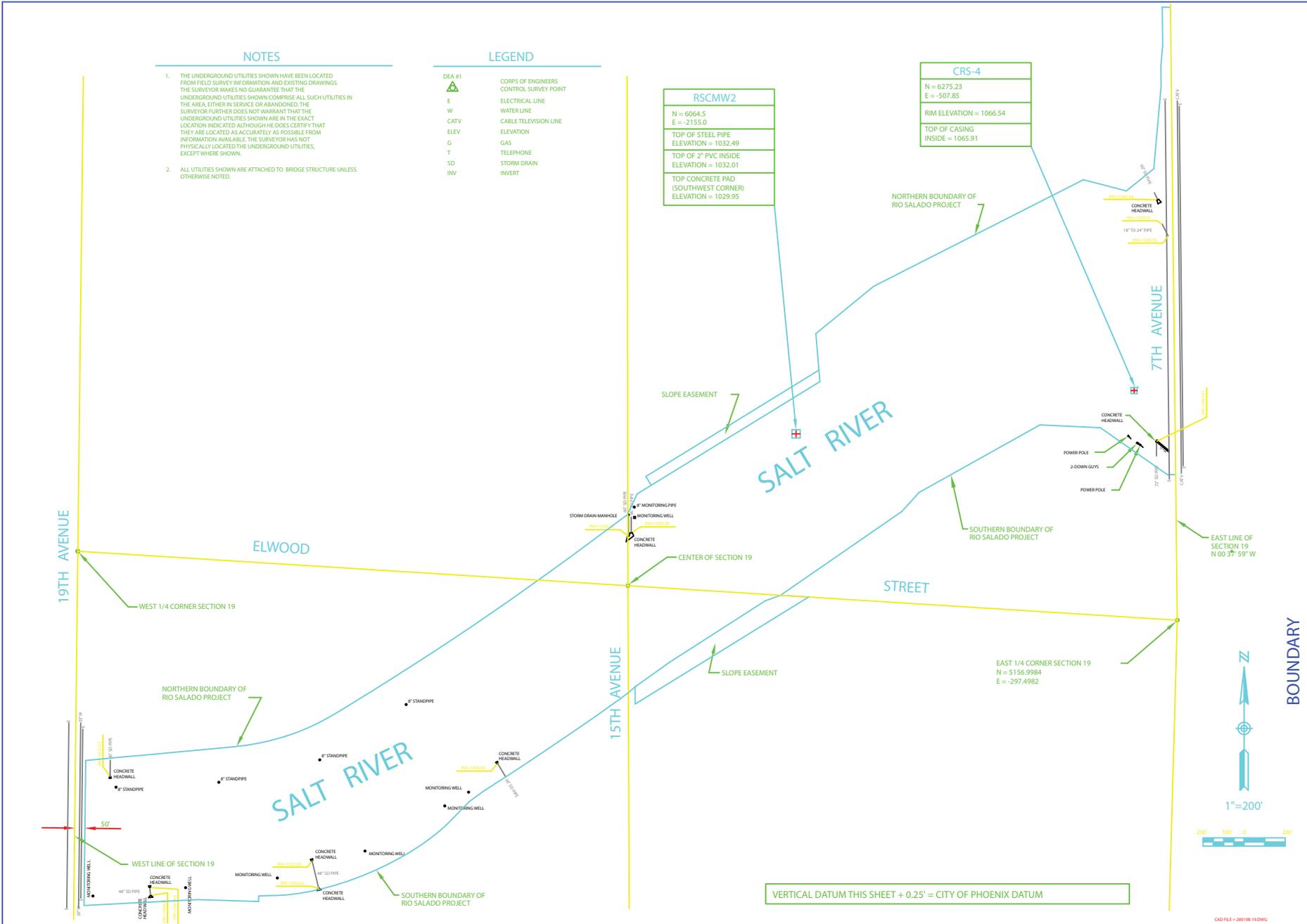
1. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES, EXCEPT WHERE SHOWN.
2. ALL UTILITIES SHOWN ARE ATTACHED TO BRIDGE STRUCTURE UNLESS OTHERWISE NOTED.

**LEGEND**

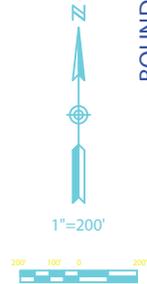
DEA #1	CORPS OF ENGINEERS CONTROL SURVEY POINT
E	ELECTRICAL LINE
W	WATER LINE
CATV	CABLE TELEVISION LINE
ELEV	ELEVATION
G	GAS
T	TELEPHONE
SD	STORM DRAIN
INV	INVERT

<b>RSCMW2</b>
N = 6064.5 E = -2155.0
TOP OF STEEL PIPE ELEVATION = 1032.49
TOP OF 2" PVC INSIDE ELEVATION = 1032.01
TOP CONCRETE PAD (SOUTHWEST CORNER) ELEVATION = 1029.95

<b>CRS-4</b>
N = 6275.23 E = -507.85
RIM ELEVATION = 1066.54
TOP OF CASING INSIDE = 1065.91



VERTICAL DATUM THIS SHEET + 0.25' = CITY OF PHOENIX DATUM



CAD FILE = 201108-192WG

**MARTIN ENGINEERING & SURVEYING, INC.**  
28 W. DUNLAP AVE., PHOENIX, AZ. 85021 (602) 944-5829

DESIGNED: D.H.M.  
DRAFTED: B.J.G.  
CHECKED: D.H.M.

1976  
REGISTERED  
SURVEYOR  
MARTIN

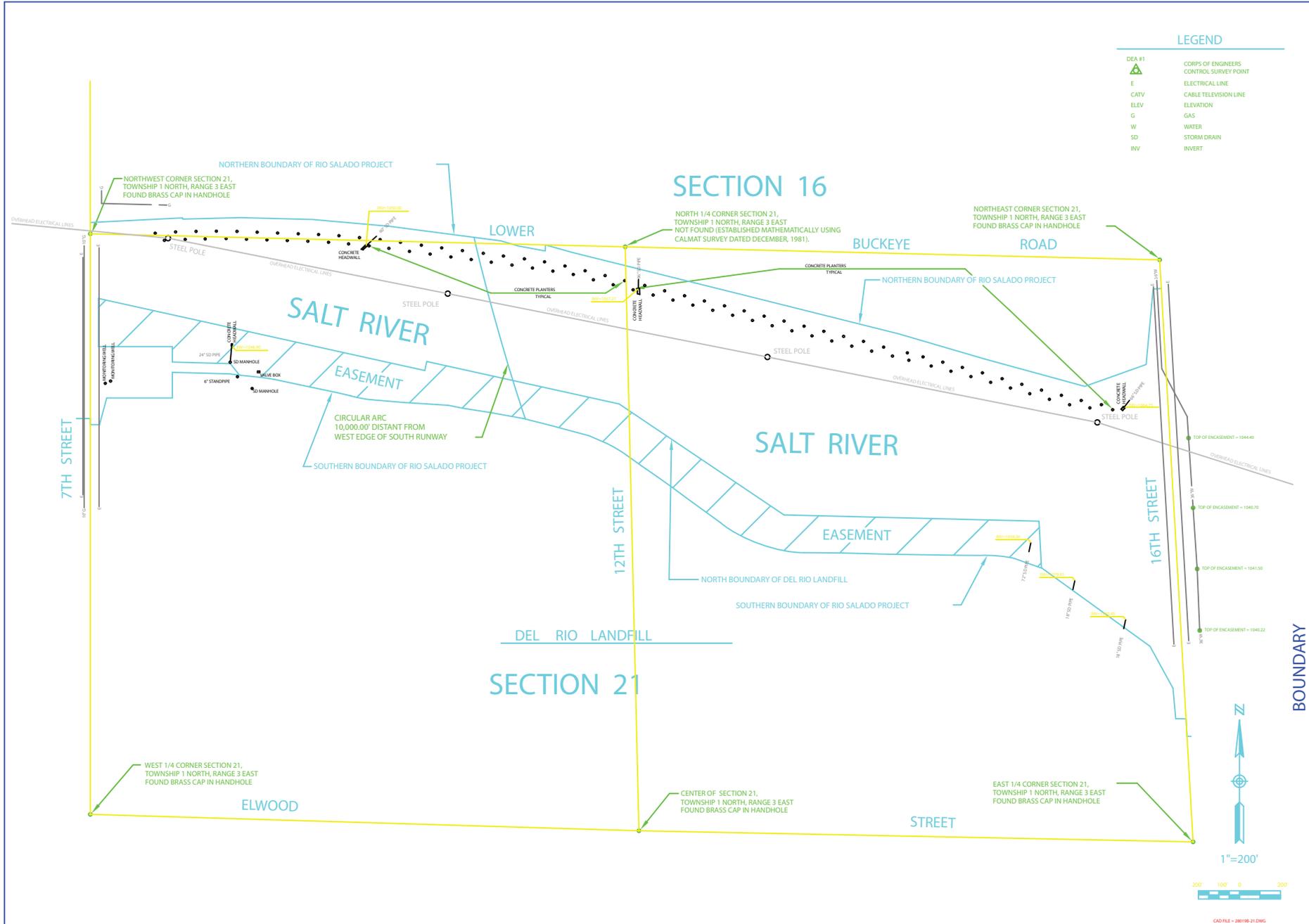
**BOUNDARY**

RIO SALADO PROJECT  
SECTION 19  
TOWNSHIP 1 NORTH, RANGE 3 EAST

JOB NO. 201108  
DATE 4/2007  
REVISED

263-1100

sht. 1 of 5



**MARTIN ENGINEERING & SURVEYING, INC.**  
 28 W. DUNLAP AVE., PHOENIX, AZ. 85021 (602) 944-5829

**BOUNDARY**

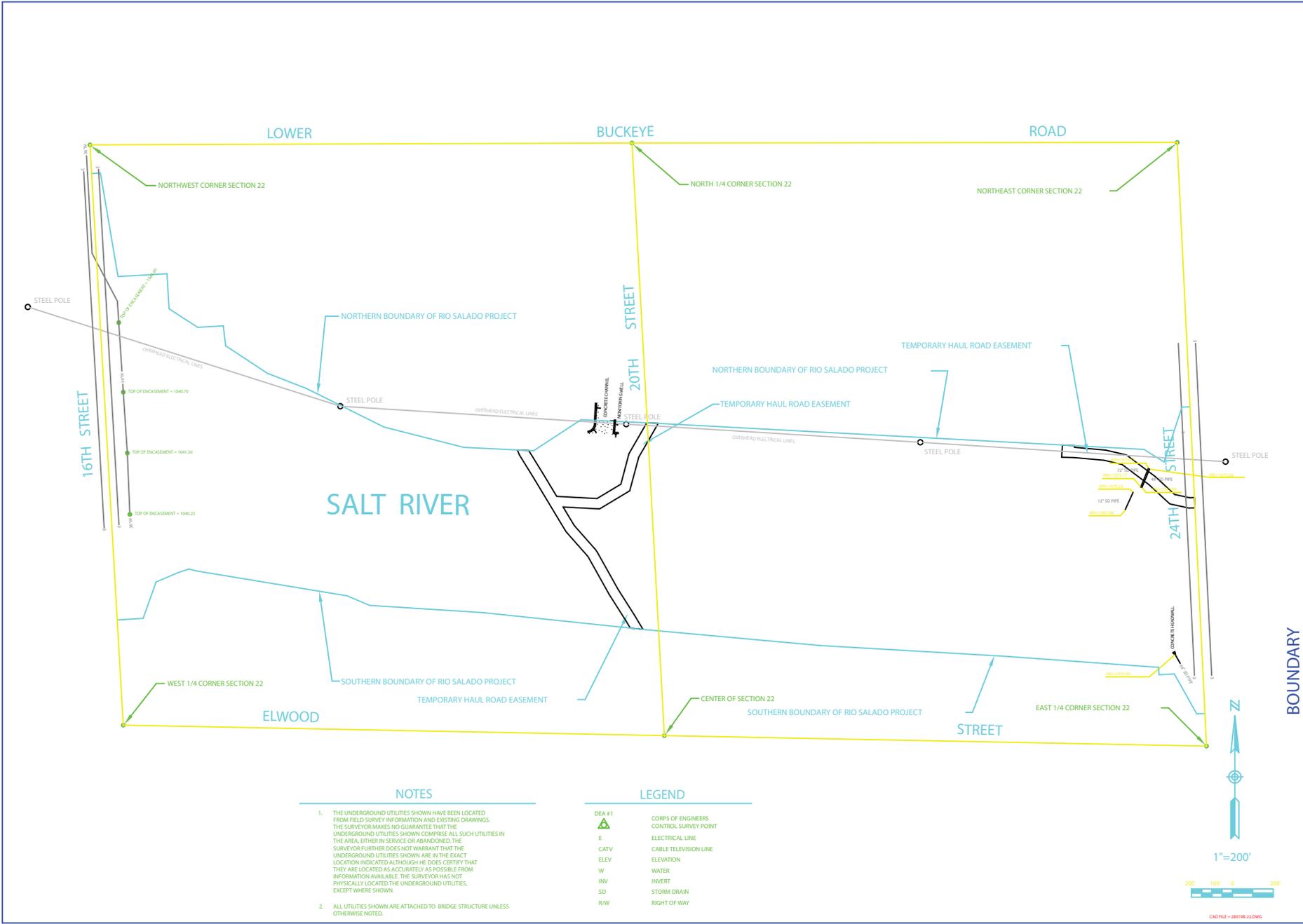
**RIO SALADO PROJECT**  
 SECTIONS 21 AND 16  
 TOWNSHIP 1 NORTH, RANGE 3 EAST

**DESIGNED:** D.H.M.  
**DRAWN:** B.J.G.  
**CHECKED:** D.H.M.

**JOB NO.:** 2019R  
**DATE:** 4/20/20  
**REVISED:**

**263-1100**

**sh. 3 of 5**



- NOTES**
1. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES, EXCEPT WHERE SHOWN.
  2. ALL UTILITIES SHOWN ARE ATTACHED TO BRIDGE STRUCTURE UNLESS OTHERWISE NOTED.

- LEGEND**
- |        |   |
|--------|---|
| DEA #1 | CORPS OF ENGINEERS CONTROL SURVEY POINT |
| E      | ELECTRICAL LINE                         |
| CATV   | CABLE TELEVISION LINE                   |
| ELEV   | ELEVATION                               |
| W      | WATER                                   |
| INV    | INVERT                                  |
| SD     | STORM DRAIN                             |
| R/W    | RIGHT OF WAY                            |

**BOUNDARY**

**RIO SALADO PROJECT**  
SECTION 22  
TOWNSHIP 1 NORTH, RANGE 3 EAST

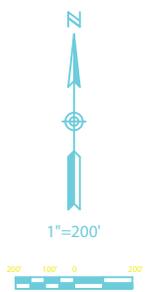
DESIGNED D.H.M.	DRAFTED B.J.G.	CHECKED D.H.M.	
JOB NO. 2631100	DATE 4/2007	REVISED	

263-1100  
Sheet 4 of 5

CAD FILE = 26018B-22.DWG

**MARTIN ENGINEERING & SURVEYING, INC.**  
28 W. DUNLAP AVE., PHOENIX, AZ 85021 (602) 944-5829



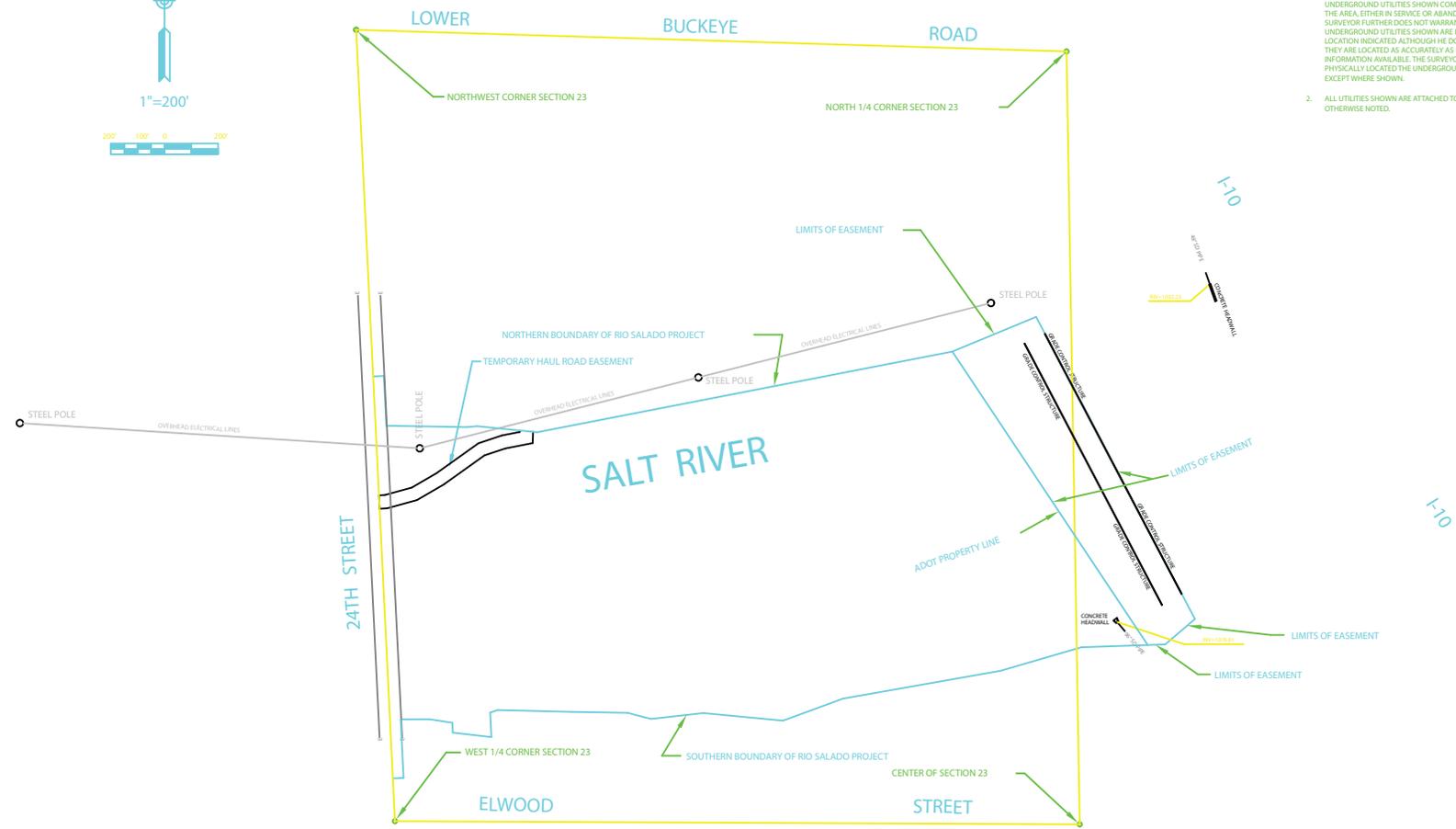


### LEGEND

DEA #1	CORPS OF ENGINEERS CONTROL SURVEY POINT
E	ELECTRICAL LINE
CATV	CABLE TELEVISION LINE
ELEV	ELEVATION
SD	STORM DRAIN
INV	INVERT

### NOTES

1. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES, EXCEPT WHERE SHOWN.
2. ALL UTILITIES SHOWN ARE ATTACHED TO BRIDGE STRUCTURE UNLESS OTHERWISE NOTED.



BOUNDARY

RIO SALADO PROJECT  
SECTION 23  
TOWNSHIP 1 NORTH, RANGE 3 EAST

job no. 201708	DATE 4/20/17	REVISED
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263-1100

sht. 5 of 5

designed D.H.M.	drafted B.J.G.	checked D.H.M.
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