

Meeting Agenda

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CENTENNIAL WASH

LEVEE

(333)

Centennial Reach
of
Westside Canal

Meeting Agenda

Centennial Wash Levee

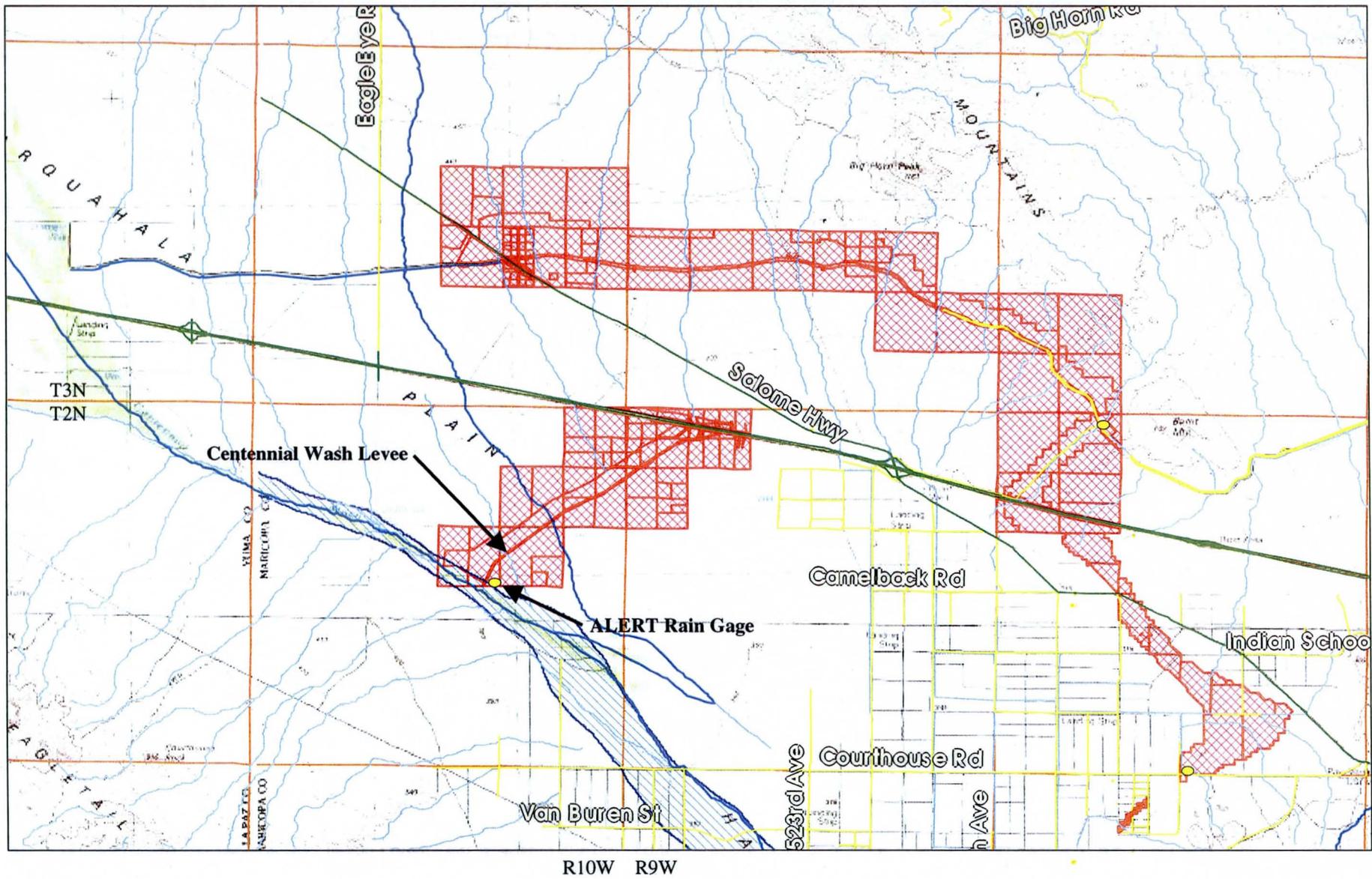
April 14, 2003
(2:00pm – 3:30pm)

Meeting Location: Spook Hill/Guadalupe Conference Room

The intent of this meeting is to pass the project lead to Engineering Division, but also have someone from the Structures Assessment Branch participate on the project team in a technical advisory/review role. At a minimum, an EAP should be developed and implemented. Investigation/repair/rehab will need to be conducted once resources become available.

Agenda Items - Suggested topics for the meeting are:

1. Project background and current status (**MDG**)
2. Discussion of levee deficiencies (**MDG, LKL**)
3. Required actions - short term and long term (**Group Discussion**)
4. Authority and funding for investigations and rehab (**Group Discussion**)
5. Project lead responsibility (**RUM, EAR, TRR**)
6. Need for Interim EAP, ALERT monitoring, hazard zoning? etc. (**SDW**)
7. Coordination with outside agencies (**Group Discussion**)
8. Other issues (**Group Discussion**)



Inspection Reports

ANNUAL INSPECTION REPORT

Centennial Levee

1. **Inspection Team:**

The annual inspection of the Centennial Levee was conducted on February 5, 2002. The inspection team consisted of:

Steven Rubin	Inspector / Coordinator, FCDMC
Ernie Hamer	Public Works Inspector, FCDMC

2. **Project Conditions:**

The weather was clear and mild with a high temperature reported at Phoenix Sky Harbor International Airport of 73°.

3. **Flow Observation:**

No significant flows have occurred since the date of the last inspection.

4. **Inspection Observations:**

A. **Levees:**

The crest of the levee is in good condition and free of unwanted vegetation. The slopes are free of unwanted vegetation and erosion. Some scattered animal holes need to be repaired at the far south end of the levee. The embankment toes appear to be stable. Possible transverse cracks were noted at approximately the following locations:

Sta. # 15+50 upstream slope mid area
Sta. # 162+50 crest
Sta. # 162+83 crest
Sta. # 177+00 crest
Sta. # 184+90 crest
Sta. # 185+40 crest
Sta. # 223+00 crest

FCD crews will be performing routine maintenance through out the project during February and March.

B. Channel Invert:

The channel invert is stable and in good condition. Stands of trees, mostly mesquite, need to be thinned out in the very near future. Mowable areas are in need of mowing.

C. Outlet Structure:

The grade control structure at the outlet is in good condition and is free and clear of debris. The soil cement plating is in good condition with no signs of severe cracking or deterioration.

D. High Flow:

No problems were noted in the high flow areas.

5. Conclusion:

The levee and appurtenance are in good condition and should function as designed.

6. Required Action:

Continue with scheduled maintenance program and observations. Repair noted animal holes. Mow mowable areas of low flow channel. Remove mesquite trees in low flow channel in the very near future.



Charles Klenner
Acting Operations and Maintenance Division Manager

cc: Noller Herbert, Natural Resource Conservation Service
Larry Lambert, FCD,PPM
Mike Meng
Kevin Dubose



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December 27, 2002

MEMO TO: Tom Renckly, P.E.,
Manager, Structures Management Branch

INFO: Larry Lambert, P.E.
Dam Safety Project Manager

FROM: Michael Greenslade, P.E.

SUBJECT: Centennial Levee (333) – December 18, 2002 Trip Report

As requested, I arrived at Centennial Levee with Carlos Rivera of the O&M Division to inspect two trenches that had been excavated at suspected transverse crack locations. An O&M Division crew had been in the process of repairing the cracks by excavation and replacement with similar materials. When the trench excavations revealed that the cracks were wide and extensive, the field crew contacted the Structures Management Branch for technical assistance.

Centennial Levee is referenced in District files as the Centennial Reach of the Westside Canal. According to the O&M Division "Structure Data Book" the project was completed in 1985 under the Watershed Protection and Flood Prevention Act (Public Law 566) under the sponsorship of the U.S. Department of Labor, Soil Conservation Service (currently known as National Resource Conservation Service). The design drawings and specifications indicate design oversight by the Bureau of Reclamation.

The project consists of a dike and floodway located just upstream of the Centennial Reach of the Westside Canal extending from I-10 south for a distance of about 5.1 miles. Centennial Wash is located west of the dike and floodway. The design drawings indicate that the dike varied in height from about 8 to 10½-feet as measured from the upstream toe, has a crest width of 12-feet, and a 12-foot wide cutoff trench. It appears that the cutoff trench was excavated to a depth of 3 to 5-feet after pre-wetting. See Figure 1, attached, for a typical detail of the canal, dike and floodway configuration. The dike and floodway provide 100-year protection to agricultural properties and the Westside Canal to the east. According to the project specifications, the Centennial Reach of the Westside Canal is a feature of the Central Arizona Project and is a portion of the system, which conveys water from the Granite Reef Aqueduct to the Harquahala Valley Irrigation District. At the time of construction, the project appears to have been constructed in accordance with current state of the practice standards.

Upon arrival I inspected and photo documented two shallow trenches that had been excavated on the crest of the levee. The photos and my observations are attached. According to the stationing on the crest of the

levee, the test pits were excavated at Sta. 157+21 and 162+67. Transverse cracks were observed through the entire length of the bottom of the test pits indicating that the transverse cracks extend through the levee. The two cracks observed were generally open with some loose filling and varied in width from ½ to 1-inch. A cursory inspection of the crest indicates the possible presence at least 9 more such transverse cracks between the two test pits or a crack spacing of less than 1 crack every 50-feet.

A review of the test pit and auger logs in the design plans, see the attached Figure 2, indicates a foundation consisting of a "younger alluvium" underlain by an "older alluvium" with the interface at about 8 to 10-feet. Based on the cutoff trench depths shown on the drawings, it appears that younger alluvium materials exist below the dike cutoff. The materials identified as younger alluvium materials would appear to be consistent with the Holocene materials identified in recent studies as being highly erosive.

During the inspection I also observed two crack like linear features parallel to the dike. One was located on the upstream toe of the dike and the other was observed on the downstream toe of the dike at the locations identified in the attached photos. Approximately 200-feet upstream of the dike I also observed numerous depressions and small holes creating random linear features which are similar to features that have been associated with fissuring in other studies.

After completing my investigation, I instructed O&M Division personnel to backfill the trenches with locally obtained ASTM C33 sand to within about 6-inches of the surface and then complete backfilling with a soil cover for protection. I was informed via e-mail by Earl Percy that backfilling of the two trenches was accomplished in this manner.

It should be noted that there appears to be a discrepancy in the stationing on the dike. While the project drawings indicate separate stationing for the floodway and canal, neither appeared to be consistent with the stationing observed at the north end of the dike.

Conclusions and Recommendations

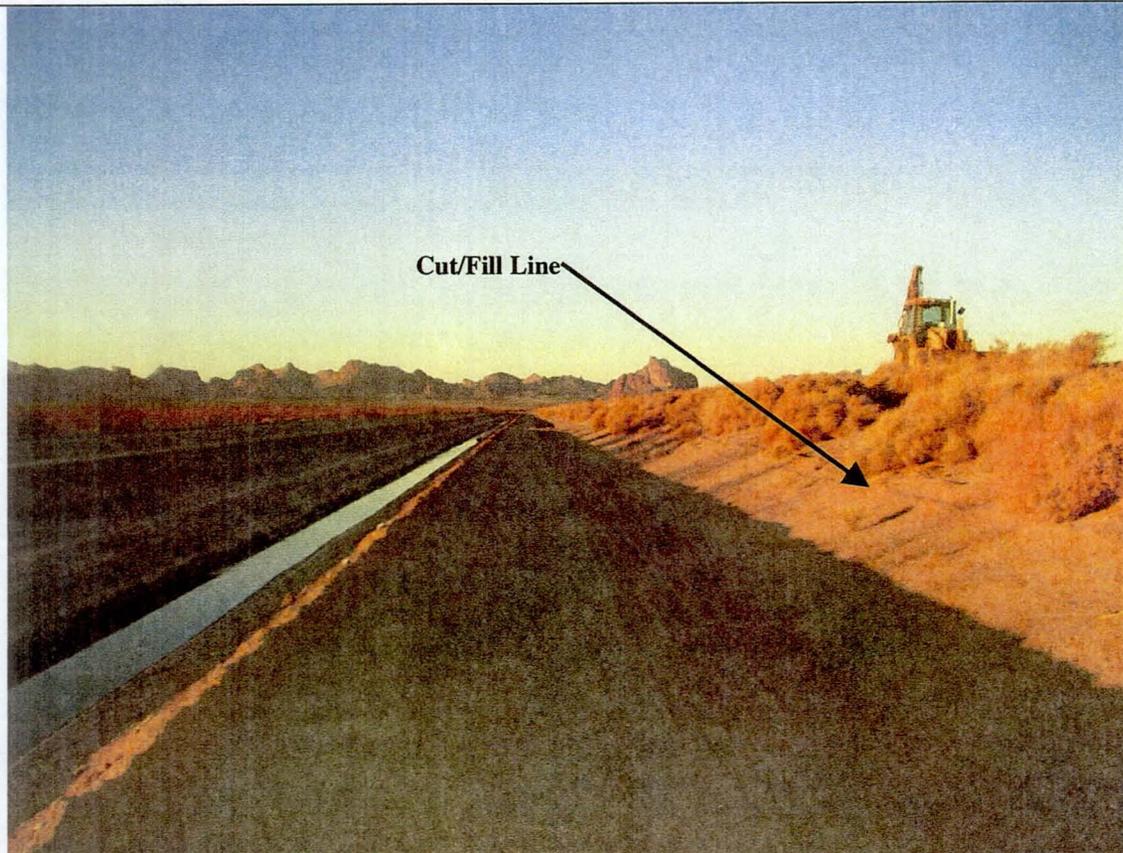
It is recommended that a geotechnical consultant be retained to conduct a detailed investigation and document cracking at the structure. The consultant should evaluate concerns regarding the extensive cracking, the presence of Holocene soils beneath the foundation, and the possibility that fissures may exist below the structure. The consultant should also recommend necessary remedial measures. Considering that the project was constructed under the PL 566 program there may be opportunities for cost sharing with the sponsor.

Based on my limited observations, there does not appear to be an immediate danger to population or downstream inhabitants. However, there does appear to be a threat to the Westside Canal and Central Arizona Project's ability to convey water from the Granite Reef Aqueduct to the Harquahala Valley Irrigation District. It is recommended that both the Harquahala Valley Irrigation District and Bureau of Reclamation be notified of these observations.



Looking south at trench excavated at approximate Sta. 162+67. The trench was excavated perpendicular to the axis of the levee and was approximately 2-feet deep and 2-feet wide.

Photo #1
December 18, 2002



Looking south along the alignment of the Westside Canal downstream of the levee and trench at Sta. 162+67. Note the cut/fill line.

Photo #2
December 18, 2002



View looking southwest and upstream of the trench excavated at Sta. 162+67.

Photo #3
December 18, 2002



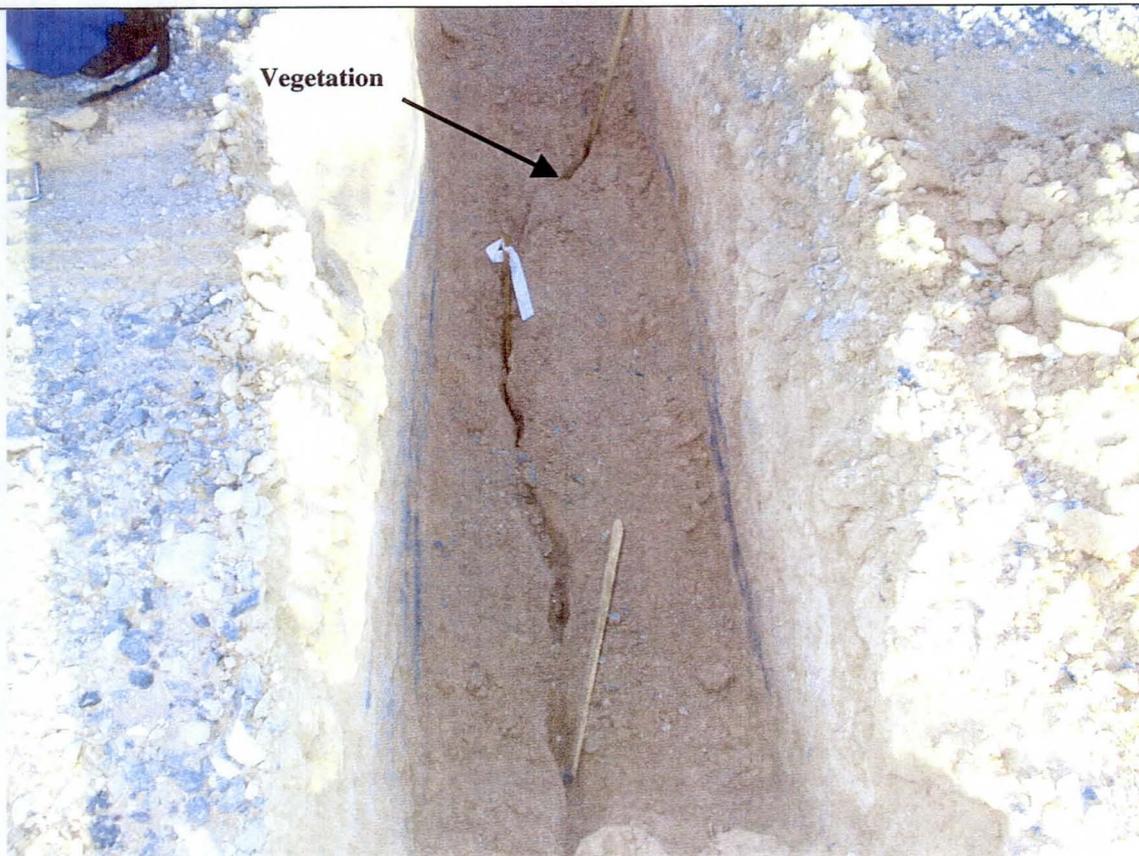
Looking west (upstream) at the transverse crack exposed in the bottom of the trench at Sta. 162+67. The crack appears to extend the full width of the levee, has a maximum width of about 1-inch and average width of $\frac{1}{2}$ -inch. The crack was probed to a depth of 2 $\frac{1}{2}$ -feet below the bottom of the trench with a $\frac{3}{8}$ -inch diameter rod.

Photo #4
December 18, 2002



Looking north at the trench excavated at approximate Sta. 157+21. The trench was excavated perpendicular to the axis of the levee and was approximately 3-feet deep and 2-foot wide.

Photo #5
December 18, 2002



Looking west (upstream) at the transverse crack exposed in the bottom of the trench at Sta. 157+21. The crack appears to extend the full width of the levee, has a maximum width of about $\frac{3}{4}$ -inch and average width of $\frac{1}{2}$ -inch. The crack was probed to a depth of 2-feet below the bottom of the trench with a $\frac{3}{8}$ -inch diameter rod. Note the vegetation growing out of the crack.

Photo #6
December 18, 2002



Looking east (upstream) at the transverse crack exposed in the downstream sidewall of the trench at Sta. 157+21. The crack appeared to be open with some loose filling (possible that infilling occurred during excavation).

Photo #7
December 18, 2002



Typical view of the upstream face of the levee. Note the hard and dry condition of the embankment soils.

Photo #8
December 18, 2002



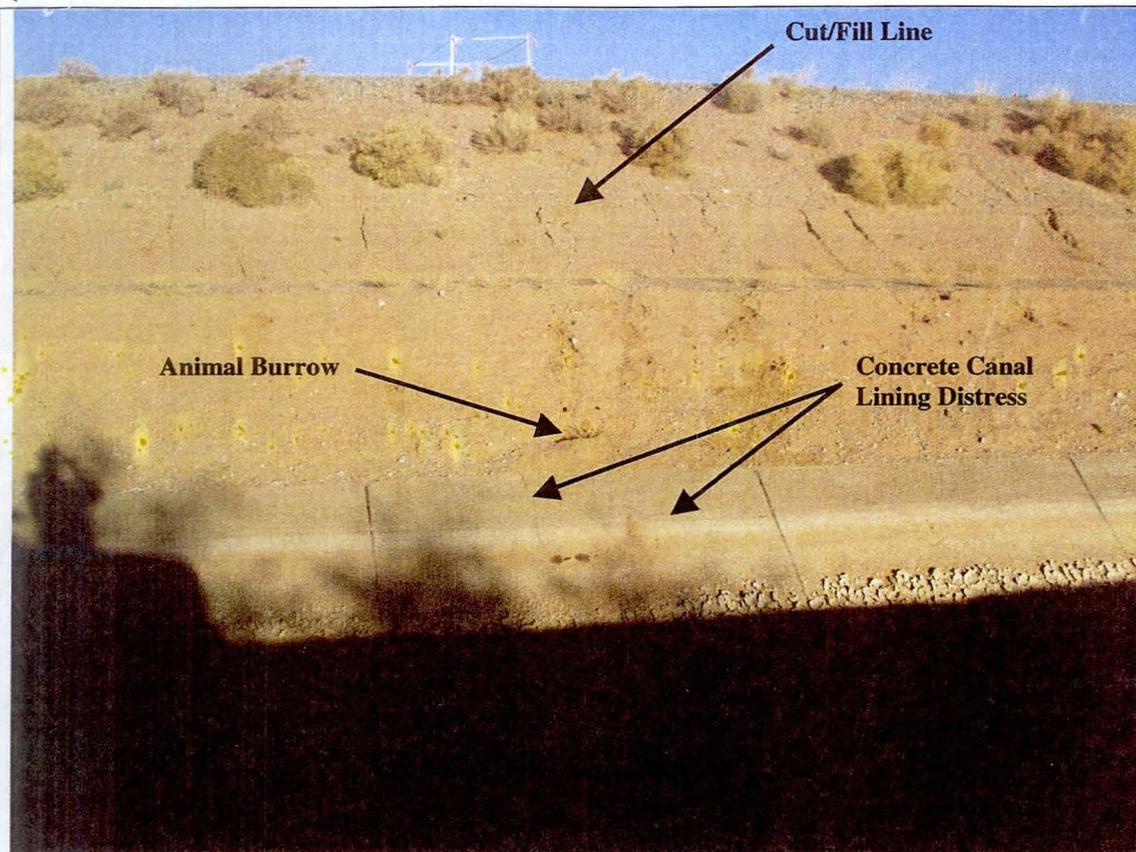
View of a transverse crack exposed on the upstream slope at Sta. 156+84. The crack was exposed on the crest and appeared to extend completely through the levee. I was informed that this exposure is typical of the cracks investigated at Sta. 162+67 and Sta. 157+21.

Photo #9
December 18, 2002



View of a series of holes, possible indication of a longitudinal crack, in the maintenance road between the levee and canal at Sta. 156+84.

Photo #10
December 18, 2002



Looking west at the downstream slope of the levee in the area of the test pit at Sta. 157+21. Note the cut/fill line, large animal burrow, and distress to canal lining.

Photo #11
December 18, 2002



Series of holes, possible longitudinal crack, in the upstream toe area at approximate Sta. 3+50. As-built drawings indicate that this is an old borrow area and the grade has been elevated since construction.

Photo #12
December 18, 2002

LOG OF TEST PIT OR AUGER HOLE
FOR BORROW AND FILL INVESTIGATIONS

Name: Centennial Levee Reach 1, Station: 147+62.6, Harquahala Valley Watershed, Canal Centerline, Station Number: 1262.3, Date: 8/17/83, Inspector: Alex D. Elin

DEPTH (FEET)	DEPTH (METERS)	DESCRIPTION	PERCENTAGE OF SANDS AND SOILS**
SH 0.0	0.0	0.0 to 3.5 Fine SAND, much silt, soft, light brown, dry (younger alluvium and eolian).	Not Applicable
SH 3.5	1.06.1	3.5 to 4.5 Fine to coarse SAND, some gravel, some silt, slightly cemented, light brown, dry (younger alluvium).	
SC 4.5	1.37.1	4.5 to 9.0 Fine to medium SAND, some coarse SAND, some gravel, some clay and silt, moderately cemented with calcium carbonate, light brown, dry (older alluvium).	
SH 9.0	1006.2	9.0 to 11.0 Fine to coarse SAND, some gravel, some silt, not cemented, light brown, dry (older alluvium).	
SH 11.0	9.5-10.0	11.0 to 16.0 Fine to medium SAND, some coarse sand, some silt, moderately cemented with calcium carbonate, light brown, dry (older alluvium).	
SH 16.0		16.0 to 18.5 Fine to medium SAND, some coarse sand, some silt, reddish brown, slightly cemented, dry (older alluvium).	
SH 18.5			

Notes: 1006.1: 4.4% field moisture, 92.5 lb/ft³ field dry density. 1006.2: 3.4% field moisture, 103.3 lb/ft³ field dry density.

LOG OF TEST PIT OR AUGER HOLE
FOR BORROW AND FILL INVESTIGATIONS

Name: Centennial Levee Reach 1, Station: 153+00.0, Harquahala Valley Watershed, Canal Centerline, Station Number: 1262.1, Date: 8/18/83, Inspector: Alex D. Elin

DEPTH (FEET)	DEPTH (METERS)	DESCRIPTION	PERCENTAGE OF SANDS AND SOILS**
SH 0.0	0.0	0.0 to 3.5 Fine SAND, much silt, light brown, dry, (younger alluvium and eolian).	Not Applicable
SH 3.5	1007.1	3.5 to 5.5 Fine to coarse SAND, some silt, light brown, dry, (younger alluvium).	
SC 5.5	9.5-6.0	5.5 to 11.0 Fine to medium SAND, some coarse sand, with clay and silt, moderately cemented with calcium carbonate, light brown, dry, (older alluvium).	
SH 11.0	1007.2	11.0 to 18.0 Fine to medium SAND, some coarse sand, with silt, slightly cemented, light brown, dry, (older alluvium).	
SH 18.0			

Notes: 1007.1: 4.8% field moisture, 92.2 lb/ft³ field dry density. 1007.2: 6.4% field moisture, 89.5 lb/ft³ field dry density.

LOG OF TEST PIT OR AUGER HOLE
FOR BORROW AND FILL INVESTIGATIONS

Name: Centennial Levee Reach 1, Station: 159+00.0, Harquahala Valley Watershed, Canal Centerline, Station Number: 1262.6, Date: 8/18/83, Inspector: Alex D. Elin

DEPTH (FEET)	DEPTH (METERS)	DESCRIPTION	PERCENTAGE OF SANDS AND SOILS**
SH 0.0	0.0	0.0 to 3.0 Fine SAND, much silt, soft, light brown, dry, (younger alluvium and eolian).	Not Applicable
SH 3.0		3.0 to 4.0 Fine to coarse SAND, some gravel, some silt, light brown, dry, (younger alluvium).	
SC 4.0	1008.1	4.0 to 7.0 Fine to medium SAND, some coarse sand, some clay and silt, light brown, dry, moderately cemented with calcium carbonate (older alluvium).	
SH 7.0	5.5-6.0	7.0 to 9.5 Fine to coarse SAND, some gravel, some silt, slightly cemented, light brown, dry (older alluvium).	
SC 9.5	1006.2	9.5 to 11.0 Silt, some fine sand and clay, slightly cemented, light brown, dry (older alluvium).	
SH 11.0	9.5-10.0	11.0 to 13.0 Fine to medium SAND, some clay and silt, moderately cemented, light brown, dry (older alluvium).	
SH 13.0		13.0 to 15.0 Fine to medium SAND, some coarse sand, some silt, moderately cemented, light brown, dry (older alluvium).	
SH 15.0			

Notes: 1008.1: 5.0% field moisture, 89.3 lb/ft³ field dry density. 1006.2: 3.5% field moisture, 92.9 lb/ft³ field dry density.

LOG OF TEST PIT OR AUGER HOLE
FOR BORROW AND FILL INVESTIGATIONS

Name: Centennial Levee Reach 1, Station: 165+00.0, Harquahala Valley Watershed, Canal Centerline, Station Number: 1263.2, Date: 8/18/83, Inspector: Alex D. Elin

DEPTH (FEET)	DEPTH (METERS)	DESCRIPTION	PERCENTAGE OF SANDS AND SOILS**
SH 0.0	1009.1	0.0 to 7.0 Fine SAND, much silt, soft, light brown, dry (younger alluvium and eolian).	Not Applicable
SH 7.0		7.0 to 9.0 Fine SAND, much silt, slightly cemented, light brown, dry (younger alluvium).	
SH 9.0		9.0 to 10.0 Fine to medium SAND, with silt, moderately cemented with calcium carbonate, light reddish brown, dry (older alluvium).	
SC 10.0		10.0 to 12.0 Fine to medium SAND, some clay and silt, moderately cemented, light brown, dry (older alluvium).	
SH 12.0		12.0 to 13.0 Fine to medium SAND, some silt, moderately cemented with calcium carbonate, light brown, dry (older alluvium).	
SH 13.0			
SH 14.5			

Notes: 1009.1: 3.6% field moisture, 90.6 lb/ft³ field dry density.

Date: APR 1984
 Designed: RPM
 Drawn: SLJ
 Checked: RPM
 Revised:




Franzyo, Corey & Associates
 Consulting Engineers
 1030 E. Guadalupe Road
 Tempe, Arizona 85283
 602-838-8626

05012 / X-3

ALWAYS THINK SAFETY

UNITED STATES
 DEPARTMENT OF THE INTERIOR
 BUREAU OF RECLAMATION
 CENTRAL ARIZONA PROJECT
 GRANITE REEF DIVISION - ARIZONA

HARQUAHALA VALLEY DISTRIBUTION SYSTEM
 WESTSIDE CANAL / CENTENNIAL REACH
 LOG OF TEST PIT OR AUGER HOLES
 TP-1006 TO TP-1009

DESIGNED: RPM
 DRAWN: SLJ
 CHECKED: RPM

RECOMMENDED: [Signature]
 APPROVED: [Signature]

344-330-4490

Figure 2

Operation and Maintenance Agreement

OPERATION AND MAINTENANCE AGREEMENT

THIS AGREEMENT made on 28th of August 1984 is between the Soil Conservation Service, United States Department of Agriculture, hereinafter referred to as the Service, and the following organization(s), hereinafter referred to as the Sponsor(s):

Flood Control District of Maricopa County, State of Arizona.

The Sponsor(s) and the Service agree to carry out the terms of this agreement for the operation and maintenance of the project measures in the State of Arizona. The project measures covered by this agreement are identified as follows:

Centennial Levee Reach I.

I. OPERATIONS

A. The Sponsor(s) will be responsible for operating the measure without cost to the Service as follows:

1. In compliance with applicable Federal, State and local laws.
2. In compliance with the conditions set out in the instruments by which rights were acquired to install, operate and maintain the measure(s);
3. In a manner that will protect the environment and permit the measure(s) to serve the purpose for which installed as set forth in the program agreement;
4. In keeping with the requirements to provide inspection, operation and maintenance reports within the time frame provided in the attached plan:

B. The Service will, upon request of the Sponsor(s) and to the extent that its resources permit, provide consultative assistance in the operation of the structural measures.

II. MAINTENANCE

A. The Sponsor(s) will:

1. Be responsible for and promptly perform or have performed without cost to the Service all maintenance of the measures determined by either the Sponsor(s) or the Service to be needed.
2. Obtain prior Service approval of all plans, designs and specifications for maintenance work.

B. The service will upon request of the Sponsor(s) and to the extent that its resources will permit, provide consultative assistance in the maintenance of the measure(s).

III. REPLACEMENT

- A. The Sponsor(s) will be responsible for the replacement of parts or portions of the measure(s) which has a physical life of less duration than the evaluated life of measure(s).
- B. The Service will, upon request of the Sponsor(s), provide consultive assistance in the replacement of measure parts or portions.

IV. PLAN OF OPERATION AND MAINTENANCE

The Service and the Sponsor(s) will prepare a detailed plan of operation and maintenance for each measure covered by this agreement. More than one measure may be included in a single plan provided that the measures are sufficiently similar to warrant such action. Each such plan shall be attached to and become a part of this agreement.

V. INSPECTIONS AND REPORTS

- A. The Sponsor(s) will inspect the measures at least annually and after each major storm or occurrence of any unusual condition that might adversely affect the measure(s).
- B. The Service or Federal and administering agency may inspect the measures at any reasonable time during the period covered by this agreement. At the discretion of the State Conservationist, Service personnel may assist the Sponsor(s) in their inspections.
- C. A written report will be made of each inspection. A copy of each report will be provided by the inspecting party to the other party within ten days of the date on which the inspection was made. The report will describe the conditions found and list any corrective action needed with a time frame to complete each action.

VI. TIME OF RESPONSIBILITY

The Sponsor(s)' responsibility for operation and maintenance begins when a part of or all of the work of installing a measure is completed and accepted or is determined complete by the Service. This responsibility shall continue until the expiration of the evaluated life of all the installed project measures. This does not relieve the Sponsor(s)' liability which continues throughout the life of the measure or until the measure is modified to remove potential loss of life or property.

VII. RECORDS

The Sponsor will maintain in a centralized location a record of all inspections and significant actions taken, cost of performance and completion date with respect to operation, maintenance and replacement. The Service may inspect these records at any reasonable time during the term of the agreement.

VIII. GENERAL

- A. The Sponsor(s) will:
 - 1. Prohibit the installation of any structure or facilities that will interfere with the operation or maintenance of the project measures.

2. Obtain prior Service approval of the plans and specifications for any alteration or improvement to the structural measures.
 3. Obtain prior Service approval of any agreement to be entered into with other parties for the operation or maintenance of all or any part of the project measures, and provide the Service with a copy of the agreement after it has been signed by the Sponsor(s) and the other party.
- B. Service personnel will be provided the right of free access to the project measures at any reasonable time for the purpose of carrying out the terms of this agreement.
- C. The responsibilities of the Sponsor(s) under this agreement are effective simultaneously with the acceptance of the project measures in whole or in part.
- D. Comply with the attached PROPERTY MANAGEMENT STANDARDS.

FLOOD CONTROL DISTRICT OF MARICOPA
COUNTY

By: *Fred Kory Jr.*
 Title: _____
 Date: AUG 28 1984

This action was authorized
 at an official meeting
 of the Sponsor named on
 day of _____
 at _____

Attest: _____
 Title: _____

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

By: *B. Stegman* Acting For
 Title: STATE CONSERVATIONIST
 Date: 8/28/84

OPERATION AND MAINTENANCE PLAN

FOR

HARQUAHALA VALLEY WATERSHED

CENTENNIAL WASH LEVEE -- REACH 1

This guide applies to the works of improvement to the Centennial Wash Levee -- Reach 1, Harquahala Valley Watershed, Maricopa County, Arizona.

GENERAL

The Centennial Wash Levee -- Reach 1 was designed to intercept and channelize flows from upstream drainage areas and discharge them into the Centennial Wash. This Reach of the Levee will serve as flood protection against the 100 year flood frequency for downstream lands and a portion of the Harquahala Valley Irrigation District's "Westside Canal".

Because of intermittent, possibly high discharge overland flows with considerable amounts of sediment, some damage to the floodway channel and upstream sideslope of the intercepting dike is expected to occur.

Therefore, a program of regular inspection and maintenance will be required to assure that excessive erosion and/or sedimentation does not destroy the integrity of the structure or appurtenances.

The following items are to be used as a guide to properly operate and maintain the levee system.

Operation

There are no special requirements for proper operation of the floodway and dike.

Maintenance

(1) Floodway and Low Flow Channel

Inspect the floodway and channel annually and after significant flows for sediment accumulation and excessive erosion caused by rilling and gulleying. Prompt damage repair is advised.

(2) Outlet Channel

Inspect the rock sill and soil cement protection at the outlet to "Centennial Wash" annually and after major flows for excessive sediment accumulation, scour at the transition between the soil cement protection and the rock sill, and cracking for the remaining soil cement protection. Repair scour and cracking damage by replacing soil cement to its full thickness and compacting the material to designed grade.

(3) Dike Embankment

Inspect annually for accumulative minor erosion or burrowing animal damage. Inspect after major flow for serious erosion damage. Repair embankment by replacing and compacting material to design grade.

The following items shall be added to the Standard O&M Agreement.

Critical Items

All items listed under "Maintenance" are considered important and critical to the proper operation of the system. All of these items will be considered in all special and recurring on-site inspections.

O&M Inspection and Followup

The annual inspection should be performed in October. Any supplemental inspections then determined necessary will be scheduled and agreed to at that time.

State O&M Handbook

The book entitled "State of Arizona Watersheds Operation and Maintenance Handbook" for projects installed with assistance from the Soil Conservation Service, U.S. Department of Agriculture, Soil Conservation Service dated May 1971 is herein made a part of this O&M Guide.

Funds of O&M

Funding of O&M shall be provided by the Flood Control District of Maricopa County (the Sponsors).

PROPERTY MANAGEMENT STANDARDS
(Attachment to Operation and Maintenance Agreement)

The standards prescribed herein govern the utilization and disposition of property furnished by SCS or acquired in whole or in part with SCS-furnished funds by the sponsors. Sponsors are responsible for observing the standards set forth herein. Sponsors are authorized to use their own property management standards and procedures as long as the provisions set forth herein are included.

1. Definitions

- (a) Real property. Real property means land, land improvements, structures and appurtenances thereto, excluding movable machinery and equipment.
- (b) Personal property. Personal property means property of any kind except real property. It may be tangible -- having physical existence, or intangible -- having no physical existence, such as patents, inventions, and copyrights.
- (c) Nonexpendable personal property. Nonexpendable personal property means tangible personal property having a useful life of more than one year and an acquisition cost of \$300 or more per unit. A sponsor may use its own definition of nonexpendable personal property provided that such definition would at least include all tangible personal property as defined above.
- (d) Expendable personal property. Expendable personal property refers to all tangible personal property other than nonexpendable property.
- (e) Excess property. Excess property means property under the control of any federal agency which, as determined by the head thereof, is no longer required for its needs.

2. Use of Real Property

Sponsors shall use any real property acquired partly or wholly with SCS financial assistance, as long as needed for the purpose for which it was acquired and in accordance with the O&M agreement. When the real property is no longer needed for the purpose of the SCS financial assistance, the sponsor shall obtain SCS approval of its plans for future use or disposition.

3. Use of Nonexpendable Personal Property

- (a) Nonexpendable personal property acquired with federal funds. When non-expendable personal property is acquired by a sponsor wholly or in part with federal funds, title will not be taken by the federal government, but shall be vested in the sponsor subject to the following restrictions on use and disposition of the property:

- (1) The sponsor shall retain the property acquired with federal funds in the federally financially assisted program as long as there is a need for the property to accomplish the purpose of the program whether or not the program continues to be supported by federal funds. When there is no longer a need for the property to accomplish the purpose of the federally financially assisted program, the sponsor shall use the property in connection with other federal grants it has received in the following order of priority:
 - (i) Other grants of the SCS needing the property.
 - (ii) Grants of other federal agencies needing the property.
- (2) When the sponsor no longer has need for the property in any of its federal grant programs, the property may be used for its own official activities in accordance with the following standards:
 - (i) Nonexpendable property with an acquisition cost of less than \$500 and used four years or more. The sponsor may use the property for its own official activities without reimbursement to SCS or sell the property and retain the proceeds.
 - (ii) All other nonexpendable property. The sponsor may retain the property for its own use provided that a fair compensation is made to the SCS for the SCS share of the cost of the property. The amount of compensation shall be computed by applying the percentage of SCS participation in the SCS financially assisted undertaking to the current fair market value of the property.
- (3) If the sponsor has no need for the property, disposition of the property shall be made as follows:
 - (i) Nonexpendable property with an acquisition cost of \$1,000 or less. Except for that property which meets the criteria of (2)(i) above, the sponsor shall sell the property and reimburse the SCS an amount which is computed in accordance with the last paragraph in (ii) below.
 - (ii) Nonexpendable property with an acquisition cost of over \$1,000. The sponsor shall request disposition instructions from SCS. The SCS shall determine whether the property can be used to meet a SCS requirement. If no requirement exists within SCS, the availability of the property shall be reported to the General Services Administration (GSA) by the SCS to determine whether a requirement for the property exists in other federal agencies. The SCS shall issue instructions to the sponsor within 120 days and the following procedures shall govern:

If the sponsor is instructed to ship the property elsewhere, the sponsor shall be reimbursed by the benefiting federal agency with an amount which is computed by applying the percentage of the sponsor participation in the SCS financially assisted undertaking to the current fair market value of the property, plus any shipping or interim storage costs incurred.

If the sponsor is instructed to otherwise dispose of the property, he shall be reimbursed by the SCS for such costs incurred in its disposition.

If disposition instructions are not issued within 120 days after reporting, the sponsor shall sell the property and reimburse the SCS an amount which is computed by applying the percentage of SCS participation in the undertaking to the sales proceeds. Further, the sponsor shall be permitted to retain \$100 or 10 percent of the proceeds, whichever is greater for the sponsor's selling and handling expenses.

4. Other Requirements for Nonexpendable Personal Property

The sponsor's property management standards for nonexpendable personal property shall also include the following procedural requirements:

- (a) Property records shall be maintained accurately and provide for: a description of the property; manufacturer's serial number or other identification number; acquisition date and cost; source of the property; percentage of federal funds used in the purchase of property; location, use, and condition of the property; and ultimate disposition data including sales price or the method used to determine current fair market value if the sponsor reimburses SCS for its share.
- (b) A physical inventory of property shall be taken and the results reconciled with the property records at least once every two years to verify the existence, current utilization, and continued need for the property.
- (c) A control system shall be in effect to insure adequate safeguards to prevent loss, damage, or theft to the property. Any loss, damage, or theft of nonexpendable property shall be investigated and fully documented.
- (d) Adequate maintenance procedures shall be implemented to keep the property in good condition.
- (e) Proper sales procedures shall be established for unneeded property which would provide for competition to the extent practicable and result in the highest possible return.

5. Expendable Personal Property

When the total inventory value of any unused expendable personal property exceeds \$500 at the expiration of need for any federal grant purposes, the sponsor may retain the property or sell the property as long as it compensates SCS for its share in the cost. The amount of compensation shall be computed in accordance with 3(a)(2)(ii) above.

6. Intangible Personal Property

- (a) If any program produces patents, patent rights, processes, or inventions, in the course of work aided by a SCS financial assistance, such fact shall be promptly and fully reported to SCS. The SCS shall determine whether protection on such invention or discovery shall be sought and how the rights in the invention or discovery--including rights under any patent issued thereon--shall be disposed of and administered in order to protect the public interest consistent with "Government Patent Policy" (President's Memorandum for Heads of Executive Departments and Agencies, August 23, 1971, and Statement of Government Patent Policy as printed in 36 F.R. 16889).
- (b) Where the SCS financial assistance results in a book or other copyrightable material, the sponsor is free to copyright the work, but SCS reserves a royalty-free, nonexclusive and irrevocable license to reproduce, publish, or otherwise use, and to authorize others to use the work for government purposes.

Right-of-Way Easement
and
Ownership Information

Right-of-Way Easement

2-27-03

TO: MIKE GREENSLADE
FROM: DIANNA CUNNINGHAM
Re; Centennial Wash Easement

Mike:

The document that I gave you does cover both areas of E-014 and E-018. Both these areas were given per easement to us for water flow. I don't find any record of us giving someone else an easement in this area representing E-018. However, historical projects records may indicate the purchase of the land simultaneously (E018 by Bureau of Rec. and E016 by FCD).

The reason that townships and ranges may not be where you think they should be is because this document covered the Harquahala Watershed. It does, however, also list the Centennial levee.

If you need anything else, please send us a written request of what you need and why you need it. This helps us prioritize the work. Also can you please give us a PCN to charge our time to.

Thanks!!!!



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

ARIZONA STATE OFFICE
2400 VALLEY BANK CENTER
PHOENIX, ARIZONA 85073
(602) 261-4774

E-14
2/4/80
DKT 14202/398-414

IN REPLY REFER TO

A-11866 PAS
(943)

*Sent to Mar. Co. Rec. Office
Feb-4-1980 to
be recorded. (via Edith)*

January 31, 1980

Easement for Right-of-Way for Flood Control Structures and Associated Uses

Pursuant to Section 501 of the Act of October 21, 1976, 43 U.S.C. 1761, and the authority vested in the undersigned officer by Bureau Order No. 701 of July 23, 1964 (20 F.R. 10526), as amended, there is hereby granted by the United States of America, as Grantor, to the Flood Control District of Maricopa County, hereinafter referred to as Grantee, an easement for construction of five (5) flood control structures and two (2) associated uses over, across and upon the public lands and reservations of the United States within the State of Arizona subject to valid existing rights, described as follows:

1. The Saddleback Diversion structure, being approximately 4.25 miles in length and located south of Interstate Highway 10.
2. The Saddleback flood-retarding structure, being approximately 4.25 miles in length and located south of Interstate Highway 10.
3. The Harquahala floodway, being approximately 3 miles in length, and passing under Interstate Highway 10.
4. The Harquahala flood-retarding structure, being 10.25 miles in length, and located north of Interstate Highway 10.
5. The Centennial levee, being approximately 8.5 miles in length, and located along Centennial Wash south of Interstate Highway 10.
6. Two cattle crossings to be constructed over the Central Arizona Project right-of-way and the flood control structures. These crossings will be located in the SW $\frac{1}{4}$ sec. 19 and the NE $\frac{1}{4}$ sec. 21, T. 3 N., R. 9 W.
7. A culvert to be installed that will allow water gathered by flood-retarding structure to flow into a dirt tank called "New Tank", at the cattle crossing located in SW $\frac{1}{4}$ sec. 19, T. 3 N., R. 9 W.

The legal description of the Federal lands affected by this right-of-way are set forth in Attachment "A" and made a part hereof. The areas covered

by the flood structures and associated uses are delineated on maps entitled "Harquahala Valley Watershed Project", being part of Grantee's application for easement, which were filed with the Bureau of Land Management on January 22, 1980 in file A-11866.

The easement for this right-of-way covers approximately 4,244.00 acres.

Use of this easement for any purposes not associated with the construction of the flood control project is prohibited.

This grant is limited to a term of thirty (30) years, and may be renewed subject to regulations existing at the time of renewal and such other terms and conditions deemed necessary to protect the public interest.

This grant reserves to the Secretary of the Interior, or his lawful delegate, the right to grant additional rights-of-way, easements, or permits, for compatible uses over, under or adjacent to the lands involved in this Grant.

By acceptance of this grant, Grantee agrees and consents to be bound by the regulations contained in 43 CFR 2800 and regulations to be promulgated by the Secretary of the Interior pursuant to Public Law 94-579.

The easement herein granted shall be subject to the express covenant that it will be modified, adapted, or discontinued if found by the Secretary to be necessary, without liability or expense to the United States, so as not to conflict with the use and occupancy of the land for any authorized works which may be hereafter constructed thereon under the authority of the United States.

This easement will serve a public purpose and, therefore, it is not subject to rental charges.

This grant is made subject to:

1. Stipulations required by the Bureau of Reclamation Form 300-8(a), Attachment "B".
2. Civil Rights Stipulations, Form 1814-2, Attachment "C".
3. Submission of final construction plans for all improvements listed above.

Within 90 days after completion of construction, Grantee shall file proof of construction with the Authorized Officer.

This grant is made upon the express condition that each of the terms and conditions hereof and appended hereto shall be fully complied with by Grantee, and by accepting this grant, Grantee agrees and covenants to fully comply

with each said term and condition. Failure of Grantee to comply with said terms and conditions shall be cause for cancellation of this grant.

UNITED STATES OF AMERICA

BY Mario L. Lopez

County of Maricopa)
State of Arizona)

Before me, Mike C. Gomez, a Notary Public in and for the County of Maricopa, State of Arizona, on this 31st day of January, 1980, personally appeared Mario L. Lopez, Jr., Chief, Branch of Lands and Minerals Operations, Bureau of Land Management, Phoenix, Arizona, to me known to be the identical person who executed the foregoing instrument and acknowledged to me that he executed the same as a free and voluntary act and deed for the uses and purposes set forth therein.

Mike C. Gomez
Notary Public

My commission expires: December 7, 1980

Accepted for Flood Control District of Maricopa County

W. D. Mathews
Authorized Officer

CHIEF ENGINEER AND GENERAL MANAGER
Title

County of Maricopa)
State of Arizona)

Before me, John R. Wylse, a Notary Public in and for the county of Maricopa, State of Arizona, on this 1st day of FEBRUARY, 1980, personally appeared W. D. MATHIEWS, to me known to be the identical person who executed this instrument, and acknowledged to me that he accepted this easement for the uses and purposes set forth therein.

John R. Wylse
Notary Public

My commission expires: My Commission Expires Feb. 10, 1984

Right-of-way Construction and Maintenance - Terms and Conditions

A. Definitions:

As used hereinafter, the following terms have the following meanings:

"Authorized Officer" means the Arizona State Director of the Bureau of Land Management or his delegate, the Compliance Officer. The term is synonymous with "Superintendent in Charge" referred to in 43 CFR, Part 2800.

"Right-of-way" means all flood control structures or associated uses and lands included in the subject grant.

"Grantee" means the Flood Control District of Maricopa County and any other State or governmental entity which, at any time, operates the flood control right-of-way.

B. Communications between permittee and BLM:

1. Grantee will notify the BLM Phoenix District Manager 30 days before the start of construction activities.
2. Before construction may commence, Grantee will designate a representative for field operations who shall be the sole field representative of Grantee and the Grantee's contractors in dealing with the Authorized Officer.
3. At least 10 days prior to construction, Grantee will contact the Authorized Officer and arrange a preconstruction conference. Grantee should make every effort to have their contractor's representatives present.

C. Clearing and Grading:

1. Clearing outside of the right-of-way is prohibited unless prior approval has been given by the Authorized Officer.
2. Clearing for roads in desert scrub will be limited to crushing rather than uprooting brush. Plants may be clipped off at ground level, leaving roots intact so resprouting can occur. This will be done by hand or brush blades.

D. Construction facilities:

1. Grantee, or his contractor, must obtain a Temporary-Use Permit for campsites, storage and housing facilities to be located outside the permit area.

2. Such sites will be kept as small as possible and will be restored to the satisfaction of the Authorized Officer.
3. All borrow material will either come from material generated by CAP excavation or from within the designated right-of-way. No borrow material will be taken from outside the right-of-way without prior approval of the Authorized Officer. All borrow areas will be reshaped to the fullest extent possible and to the satisfaction of the Authorized Officer.
4. All portions of the work areas will be maintained in a neat, clean and sanitary condition. Toilets will be furnished to the construction workers as needed.

E. Access Roads and Vehicle Movement

1. Travel will be confined to the right-of-way and existing roads. No off-road travel will be allowed, including the movement of equipment between sites. When feasible, these roads will be marked.
2. No new roads outside the grant boundaries will be constructed prior to written authorization of the Authorized Officer. An appropriate application must show proposed centerline and be filed in the Phoenix District Office.
3. Road width will be determined on a "need" basis.
4. The exterior boundaries of the right-of-way will be clearly marked. All construction activities, except as otherwise authorized, will be limited to these boundaries. Grantee is responsible for compliance by all contractors, subcontractors and workmen on the project.

F. Public Access

1. Public access to the flood-control structures will be controlled by the Flood Control District of Maricopa County.
2. The fencing along the right-of-way to prevent disturbance to the structures will be according to BLM specifications. (See BLM fence standard, Attachment "D"). The fences will be a standard 4-strand barbed wire fence not to exceed 42" in height. A 12" space between the top two wires is required. The bottom wire shall be barbless and at least 16" above the ground.
3. The Flood Control District of Maricopa County is required to provide a substitute road for public access to the public lands lying north of the Harquahala flood-retarding structure, in lieu of the existing road that will be blocked by this project.

G. Protection of Property and Public Safety

1. Operations shall be done in a manner that will not obstruct or close any road or block access to other property until the proper permits have been obtained.
2. Disturbance of improvements (fences, tanks, etc.) will be kept to a minimum. Grantee is required to restore any damaged improvements to at least their former state.
3. Where the right-of-way includes public lands on which are located cadastral survey markers or monuments, Grantee will avoid disturbing or removing such markers or monuments. When the monuments or markers cannot be avoided, then the permittee will follow the instructions in 43 CFR 2802.1-5 which state: Whenever it is found that a public land survey monument or reservation boundary monument will be destroyed or rendered inaccessible by reason of the proposed development, at least two permanent marked witness monuments should be established at suitable points, preferably on the surveyed lines. A brief description of the witness monuments and the connecting courses and distances to the original corners should be shown."

H. Dust Control

1. All excavations, embankments, stockpiles, haul roads, permanent access roads, plant sites, waste areas, borrow areas and all other work areas within or without the project area shall be maintained free from dust that would cause the standards for air pollution to be exceeded or that would cause an extended hazard or nuisance to others.
2. Approved methods of stabilization consisting of sprinkling, chemical treatment, light bituminous treatment or similar methods will be used to control dust.
3. Dust control shall be performed as the work proceeds and whenever a dust nuisance or hazard occurs.

I. Erosion:

1. The area and duration of exposure of erodible soils will be reduced to the greatest extent practicable.
2. Runoff from the construction site will be mechanically controlled as needed to prevent downstream problems.
3. During or after heavy storms, it may be necessary to cease operations if vehicle movement is resulting in ruts or other major damage to soil surface.

J. Fire Control and Prevention:

1. A fire plan shall be proposed that will set forth in detail the plan for prevention, control and extinguishing of fires on and in the vicinity of the project area.
2. Full compliance with fire laws and regulations shall be considered a necessity.
3. Blasting caps and powder shall be stored only in approved areas.

K. Noise Control:

1. Large earthmoving equipment produces a high level of noise. All machinery and equipment is inspected prior to operation at the site. Improper muffling is cause for rejection.

L. Vegetation Disturbance:

All vegetation that does not interfere with the performance of work will be preserved. Before construction activities begin, the Flood Control District and the BLM will jointly inventory those plants identified in the Arizona Native Plant Law that will be destroyed during construction. The two agencies will then contact other Government agencies and private concerns in an attempt to salvage as many of the endangered or protected plants as is possible. These plants may be made available free to public agencies for landscaping purposes. Disposal to private concerns will be by sale by the Authorized Officer.

M. Waste Disposal:

1. General cleanup will be expected along working areas throughout the duration of the project to prevent littering.
2. Disposal of any materials, wastes, effluents, trash, garbage, oil, grease, chemicals, etc., shall be subject to the approval of property owners hauled to authorized landfills.
3. All used oil or other petroleum products shall be hauled away. There shall be no release of crankcase oil, etc., into surface waters, washes, or the soil anywhere.
4. Sanitary wastes shall not be discharged into any surface waters or washes. Portable toilets will be provided.
5. Water used in embankment material processing, aggregate processing, concrete curing, foundation and concrete lift cleanup and other waste waters shall not be discharged into surface waters.

6. All noncombustible wastes such as concrete waste or metal scraps, shall be hauled away or buried. Permission will be obtained from property owners before burial.
7. Combustible wastes such as packaging material shall be hauled away and disposed of upon leaving any work area.
8. In instances where disposal by burning seems preferable, it shall be done with small fires.
9. All burning of materials including materials removed during clearing and grubbing operations will be carried out in accordance with Maricopa County Health Department regulations.

N. Post-construction Cleanup (to be completed within 30 days after construction ceases):

1. All signs of temporary construction facilities such as haul roads, work areas, structures, foundations of temporary structures, stock-piles of excess or waste materials, or any other vestiges of construction shall be removed to the satisfaction of the Authorized Officer.
2. Filling and plowing of roadways will be required where appropriate to restore the area to near natural conditions which will permit the growth of vegetation thereon and discourage future traffic.
3. Any landscape feature scarred or damaged by equipment or operations shall be restored as nearly as possible to its original condition. Large damaged vegetation shall be treated and healed or removed and disposed of under requirements for clearing and grubbing.
4. Restoration of disturbed areas will be accomplished by seeding, transplants and/or special treatment to accelerate natural regrowth as directed by the Authorized Officer.

O. Poisonous Substances:

The Grantee shall comply with the applicable Federal and State laws and regulations concerning the use of pesticides and other toxic substances (i.e., insecticides, herbicides, fungicides, rodenticides, and other similar substances) in all activities/operations under this grant. The Grantee shall obtain from the Authorized Officer approval of a written plan prior to the use of such substances. The plan must provide the type and quantity of material to be used; the pest, insect, fungus, etc. to be controlled; the method of application; the location for storage and disposal of containers; and other information that the Authorized Officer may require. The plan should be submitted no

later than December 1 of any calendar year that covers the proposed activities for the next fiscal year (i.e., December 1, 1980, deadline for a fiscal year 1981 action). Emergency use of pesticides may occur. The use of substances on or near the right-of-way shall be in accordance with the approved plan. A pesticide shall be used only in accordance with its registered uses and within other limitations if the Secretary has imposed limitations. Pesticides shall not be permanently stored on public lands authorized for use under this Grant.

P. Maintenance Stipulations:

1. Keep all gate outlets in operating condition.
2. Remove trash and debris from principal spillway inlets and from inlets to the conduits installed to maintain downstream water flow.
3. Keep emergency spillways clear of obstructions and repair damage caused to the spillways.
4. Exercise control and removal of debris and vegetation other than short grasses from the low flow channel of Saddleback Diversion.
5. Remove sediment deposits from channels if needed to maintain capacity, giving particular attention to areas where defined tributaries intersect the channels. Sediment will be disposed of in accordance with local environmental policies.
6. Refill and compact scoured areas along all embankments.
7. Stabilize excessively scoured areas in the channel areas of Saddleback Diversion and Harquahala Floodway.
8. Special attention must be given to bridges, road crossings, telephone cable and other utility crossings for excessive scour so that immediate remedies can be effected.
9. Trash and debris will be removed, and repairs made as necessary, to continue vehicular traffic on all roads that transverse flood pools of the structural measures.

Q. Compliance Stipulations:

1. When all development and rehabilitation have been completed, a joint compliance check of the right-of-way will be made by Grantee and the Authorized Officer, or his designated representative, to determine compliance with the terms and conditions of this grant. Grantee will perform at his own expense any required modifications

or additional reclamation work needed to comply with the terms of this grant.

2. Grantee shall construct and maintain right-of-way facilities and structures in strict conformity with the descriptive and technical data which it has heretofore furnished the Bureau of Land Management in connection with its application for the line. Construction or maintenance activities which are not in accord with such data may not be initiated without the prior written approval of the Authorized Officer. Approval of variances will not be given unless the need therefor is fully justified by Grantee.
3. If at any time hereafter Grantee wishes to reconstruct, remodel or relocate any portion of the right-of-way hereby granted, or any of the improvements thereon, the prior written approval of the Authorized Officer must be obtained. No such approval will be given unless the request is fully justified by Grantee and is authorized by law. Where necessary, Grantee shall make application under appropriate regulations.
4. With regard to location, construction and maintenance of the right-of-way, (1) Grantee shall ensure full compliance with the terms and conditions of this grant by its agents, employees and contractors (including subcontractors of any tier), and the employees of each of them; (2) unless clearly inapplicable, the requirements and prohibitions imposed upon Grantee by these terms and conditions are also imposed upon Grantee's agents, employees, contractors and subcontractors, and the employees of each of them; (3) failure or refusal of Grantee's agents, employees, contractors, subcontractors, or their employees to comply with these terms and conditions shall be deemed to be the failure or refusal of Grantee; (4) Grantee shall require its agents, contractors and subcontractors to include these terms and conditions in all contracts and subcontracts which are entered into by any of them, together with a provision that the other contracting party, together with its agents, employees, contractors and subcontractors, and the employees of each of them, shall likewise be bound to comply with these terms and conditions.

R. Appeals

Decisions of the Authorized Officer shall be effective upon receipt thereof by the Grantee unless specifically otherwise provided in any decision. The regulations of the Department of the Interior relating to hearings and appeals, 43 CFR Part 4, are applicable to all appeals.

If an appeal is taken, notice of the appeal must be filed in the office of the Authorized Officer who made the decision (not the Board of Land Appeals). The notice of appeal must give the serial number or other

identification of the case and must be transmitted in time to be filed in the office where it is required to be filed within thirty (30) days after the Grantee is served with the decision from which he is appealing. To avoid summary dismissal of the appeal, the Grantee must comply with all applicable terms of the regulations in 43 CFR Part 4.

S. Archeological Stipulations

1. The Grantee shall have prepared by a qualified professional, a mitigation plan for those sites located during the intensive inventory of the project area. This plan will be subject to approval by the Bureau of Land Management and may include data collection, monitoring recommendations and salvage excavation. Construction activities may not begin and entry onto the land may not occur until the plan has been approved by the Authorized Officer.
2. Upon receipt of the mitigation plan and prior to initiation of field work determination of compliance with Section 106 of the National Historic Preservation Act of 1966 shall be made.
3. The Grantee shall engage a qualified professional archeologist, approved by the Bureau of Land Management to conduct the work prescribed in the archeological mitigation plan. All mitigative measures must be completed prior to construction. The responsibility for and cost of such mitigation shall be that of the Grantee.
4. Should evidence of previously unrecorded archeological, historical, or paleontological materials be exposed by ground disturbance during construction, the Grantee shall suspend construction activities in the area immediately, leave the materials intact and notify the Bureau of Land Management Authorized Officer immediately. The Authorized Officer shall engage a qualified professional to inspect and evaluate the discovery within three working days. Avoidance measures, monitoring by a qualified professional or salvage operations, if judged necessary by the Authorized Officer, shall be implemented by the Grantee and shall be completed and approved by the Authorized Officer prior to resuming construction in the area. The responsibility for and the cost of, such monitoring or salvage operations shall be that of the Grantee.
5. The Grantee, contractors and sub-contractors will inform all employees of the archeological stipulations in all permits and will enforce strict sanctions against any willful actions by employees that could in any way be injurious to archeological, historical or paleontological sites and materials.

6. Collection or disturbance of artifacts and other archeological, historical and paleontological materials on or off the right-of-way by the Grantee, his representatives or employees, will not be allowed. Offenders will be subject to prosecution under the appropriate State and Federal laws.
7. The above stipulations pertain to all cultural resources located within the area of a project's/undertaking's potential environmental impact and will be afforded like identification, evaluation, protection, and/or mitigation measures, including resources on non-Federal lands.

Lands Affected by Right-of-Way A-11866

Gila and Salt River Meridian, Arizona

- T. 1 N., R. 8 W.,
 sec. 3, NW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$;
 sec. 4, Lot 1, SE $\frac{1}{4}$ of Lot 2, NW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$, NW $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$;
 sec. 17, W $\frac{1}{2}$ E $\frac{1}{2}$;
 sec. 20, W $\frac{1}{2}$ W $\frac{1}{2}$ E $\frac{1}{2}$, W $\frac{1}{2}$ E $\frac{1}{2}$ W $\frac{1}{2}$ SE $\frac{1}{4}$, E $\frac{1}{2}$ E $\frac{1}{2}$ W $\frac{1}{2}$.
- T. 2 N., R. 8 W.,
 sec. 5, Lots 1, 2, S $\frac{1}{2}$ of Lot 3, S $\frac{1}{2}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$,
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 sec. 7, E $\frac{1}{2}$ of Lot 2, E $\frac{1}{2}$ of Lot 3, W $\frac{1}{2}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$, W $\frac{1}{2}$ E $\frac{1}{2}$, E $\frac{1}{2}$ E $\frac{1}{2}$ W $\frac{1}{2}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$,
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- T. 3 N., R. 8 W.,
 sec. 29, SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$;
 sec. 30, SW $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$, S $\frac{1}{2}$ SE $\frac{1}{4}$, S $\frac{1}{2}$ N $\frac{1}{2}$ SE $\frac{1}{4}$, NW $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$ except all
 that part lying south of the north right-of-way line of the
 Granite Reef Aqueduct, Central Arizona Project, Reach 5B.
 sec. 31, E $\frac{1}{2}$ NE $\frac{1}{4}$ except all that part lying south and west of the north
 right-of-way line of the Granite Reef Aqueduct, Central
 Arizona Project, Reach 5B.
 sec. 32, NW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$, S $\frac{1}{2}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$ NW $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$, S $\frac{1}{2}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$, S $\frac{1}{2}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$,
 SW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$, NW $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$, S $\frac{1}{2}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ except all that part
 lying south and west of the north right-of-way line of the
 Granite Reef Aqueduct, Central Arizona Project, Reach 5B.
- T. 3 N., R. 9 W.,
 sec. 19, S $\frac{1}{2}$ of Lot 1, Lots 2, 3, S $\frac{1}{2}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$, S $\frac{1}{2}$ N $\frac{1}{2}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ NE $\frac{1}{4}$,
 NE $\frac{1}{4}$ SW $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$ except all that part lying south of the north line
 of the Granite Reef Aqueduct, Central Arizona Project, Reach 5B.
 sec. 20, NE $\frac{1}{4}$, NE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$, S $\frac{1}{2}$ N $\frac{1}{2}$ NW $\frac{1}{4}$, S $\frac{1}{2}$ NW $\frac{1}{4}$, S $\frac{1}{2}$ except all that part south
 of the north line of the Granite Reef Aqueduct, Central Arizona
 Project, Reach 5B.
 sec. 21, NW $\frac{1}{4}$, NW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ N $\frac{1}{2}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ except all that part lying
 south of the north right-of-way line of the Granite Reef Aqueduct,
 Central Arizona Project, Reach 5B.
 sec. 22, N $\frac{1}{2}$ N $\frac{1}{2}$ SW $\frac{1}{4}$ except all that part lying south of the north right-of-way
 line of the Granite Reef Aqueduct, Central Arizona Project,
 Reach 5B;

T. 3 N., R. 9 W., cont'd

- sec. 23, $SW\frac{1}{4}SW\frac{1}{4}NE\frac{1}{4}$, $SW\frac{1}{4}NW\frac{1}{4}NW\frac{1}{4}$, $S\frac{1}{2}SE\frac{1}{4}NW\frac{1}{4}$, $SW\frac{1}{4}$, $NW\frac{1}{4}NW\frac{1}{4}SE\frac{1}{4}$, $S\frac{1}{2}NW\frac{1}{4}SE\frac{1}{4}$, $SW\frac{1}{4}SE\frac{1}{4}$, $S\frac{1}{2}SE\frac{1}{4}SE\frac{1}{4}$ except all that part lying south and west of the north right-of-way line of the Granite Reef Aqueduct, Central Arizona Project, Reach 5B;
- sec. 25, $NW\frac{1}{4}NW\frac{1}{4}$, $W\frac{1}{2}NE\frac{1}{4}NW\frac{1}{4}$, $SE\frac{1}{4}NE\frac{1}{4}NW\frac{1}{4}$, $S\frac{1}{2}NW\frac{1}{4}$, $S\frac{1}{2}NW\frac{1}{4}NE\frac{1}{4}$, $S\frac{1}{2}NE\frac{1}{4}$, $N\frac{1}{2}N\frac{1}{2}SE\frac{1}{4}$ except all that part lying south of the north right-of-way line of the Granite Reef Aqueduct, Central Arizona Project, Reach 5B;
- sec. 26, $N\frac{1}{2}NE\frac{1}{4}$ except all that part lying south and west of the north right-of-way line of the Granite Reef Aqueduct, Central Arizona Project, Reach 5B.

T. 3 N., R. 10 W.,

- sec. 13, $S\frac{1}{2}SW\frac{1}{4}SW\frac{1}{4}$, $SW\frac{1}{4}SE\frac{1}{4}SW\frac{1}{4}$;
- sec. 14, $S\frac{1}{2}SW\frac{1}{4}$, $SW\frac{1}{4}SE\frac{1}{4}$, $S\frac{1}{2}SE\frac{1}{4}SE\frac{1}{4}$;
- sec. 24, $NE\frac{1}{4}$, $N\frac{1}{2}N\frac{1}{2}SE\frac{1}{4}$ except all that part lying south of the north right-of-way line of the Granite Reef Aqueduct, Central Arizona Project, Reach 5B.

Form 300-8(a)

In connection with Right-of-way Application A 11866, Flood Control District of Maricopa County agrees the following will apply only to those federal lands where the Flood Control District's Right-of-way A 11866 overlaps the Granite Reef Aqueduct, Central Arizona Project:

STIPULATION

There is reserved to the United States, its successors and assigns, the prior right to use any of the land herein described to construct, reconstruct, operate and maintain dams, dikes, levees, reservoirs, canals, wasteways, laterals, ditches, drainage works, flood channels, telephone and telegraph lines, electric transmission lines, roadways and appurtenant irrigation structures, without any payment made by the United States, or its successors and assigns, for such right, with the agreement on the part of the applicant that if the construction or reconstruction of any or all of such dams, dikes, levees, reservoirs, canals, wasteways, laterals, ditches, telephone and telegraph lines, electric transmission lines, roadways or appurtenant irrigation structures across, over or upon said lands should be made more expensive by reason of the existence of improvements or workings of the applicant thereon, such additional expense is to be estimated by the Secretary of the Interior, whose estimate is to be final and binding upon the parties hereto, and that within thirty days after demand is made upon the applicant for payment of such sums, the applicant will make payment thereof to the United States, or its successors and assigns, constructing or reconstructing such dams, dikes, levees, reservoirs, canals, wasteways, laterals, ditches, telephone and telegraph lines, electric transmission lines, roadways, or appurtenant irrigation structures across, over or upon said lands. There is also reserved to the United States the right of its officers, agents, employees, licensees and permittees, at all proper times and places freely to have ingress to, passage over, and egress from all of said lands for the purpose of exercising, enforcing and protecting the rights reserved herein.

Applicant further agrees that the United States, its officers, agents, employees and assigns, shall not be liable for any damage to the improvements or works of the applicant resulting from the construction, reconstruction, operation or maintenance of any of the works hereinabove enumerated.

Flood Control District of Maricopa County

BY

W. D. Mathews
 Authorized Officer
 William D. Mathews, P.E.
 Chief Engineer and General Manager

Title

1/29/80
 (Date)

County Assessor
Ownership Information

Centennial Wash Levee

MARICOPA COUNTY FLOOD CONTROL

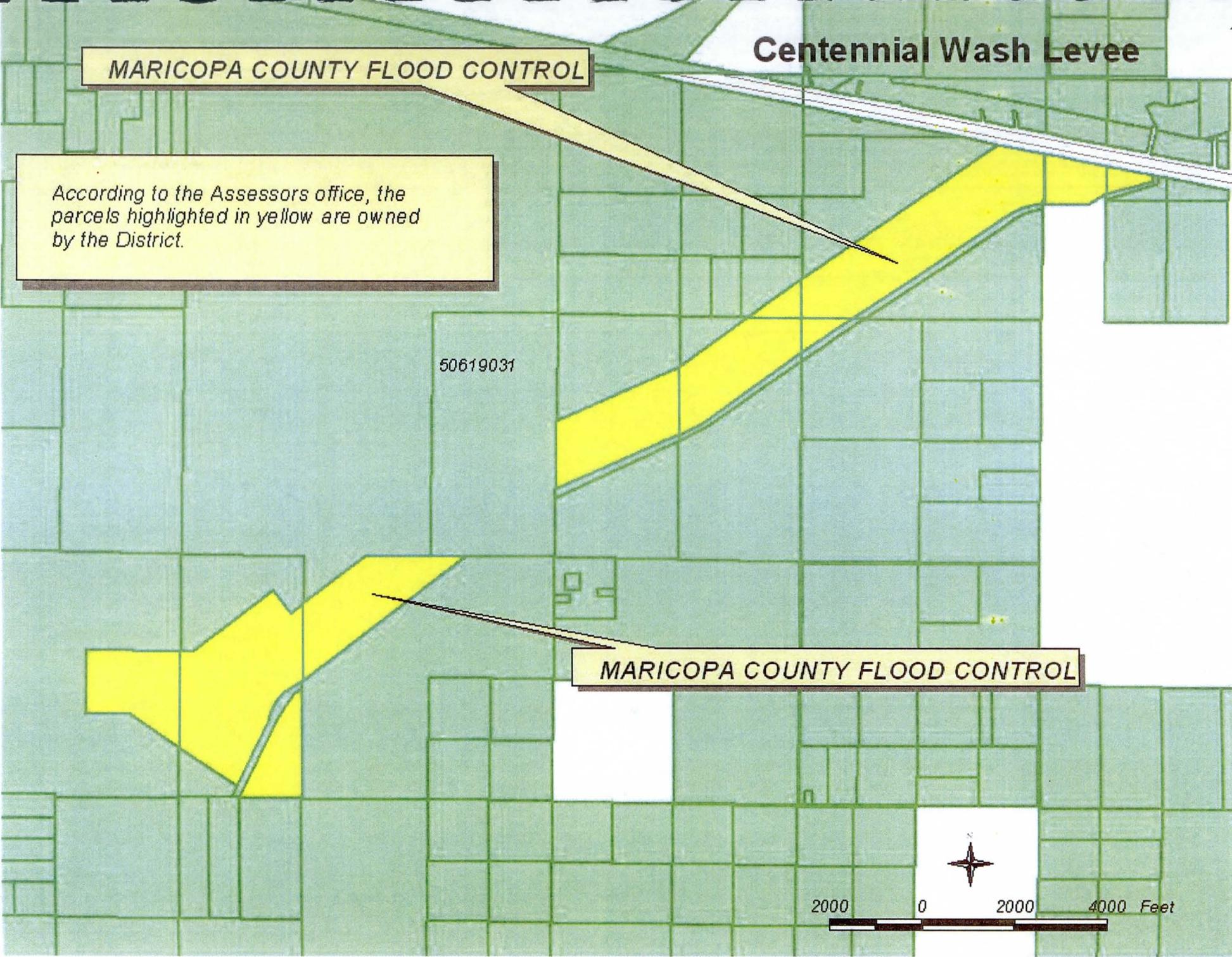
According to the Assessors office, the parcels highlighted in yellow are owned by the District.

50619031

MARICOPA COUNTY FLOOD CONTROL



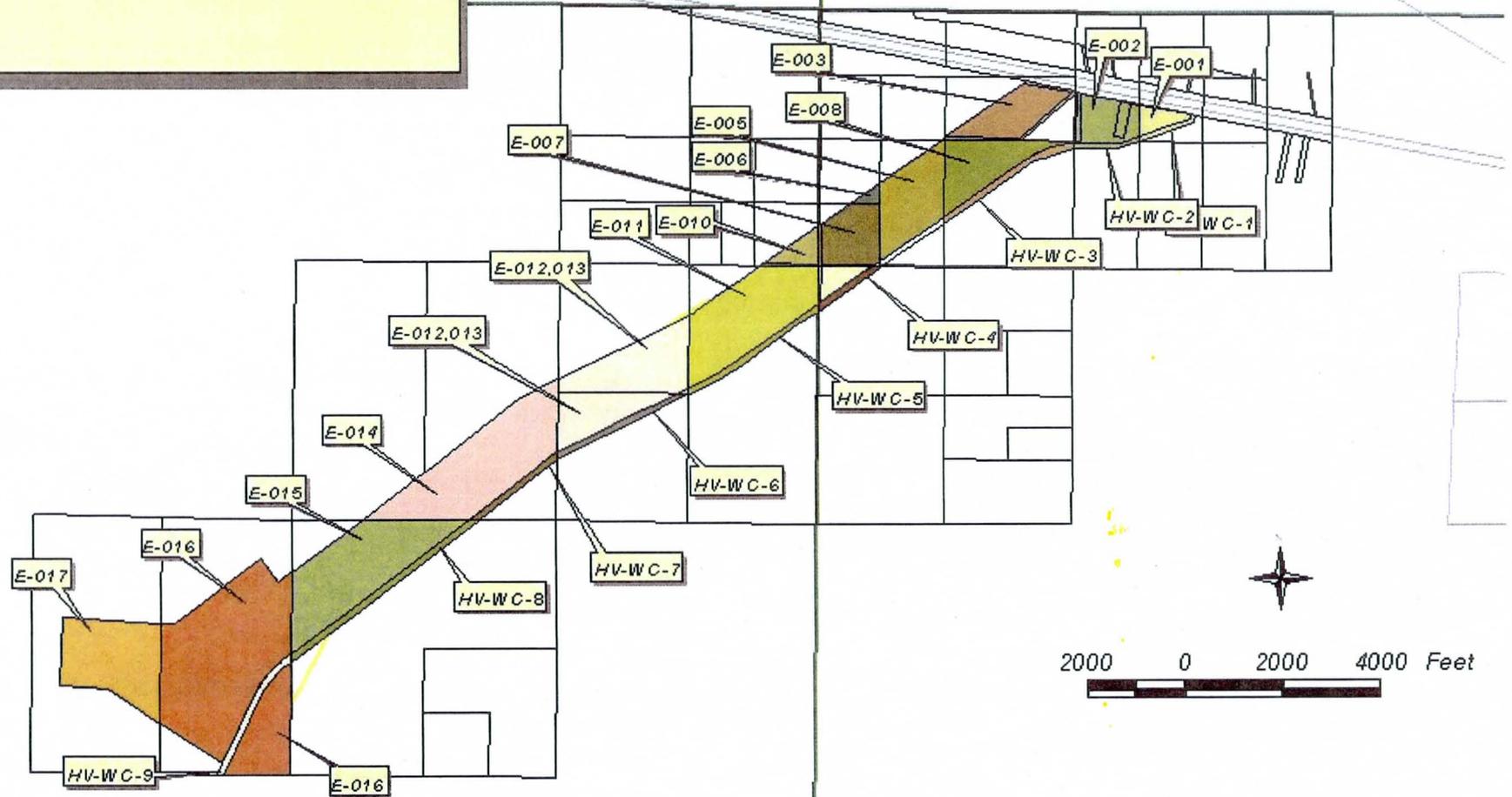
2000 0 2000 4000 Feet



Centennial Wash Levee

The color parcels show parcels for which we have a parcel number from Lands.
The ownership for all of them has been coded as "Blank / Unknown / Uncertain".

This map reflects the most current information we have.





We are experiencing technical difficulties loading our 2004 data. We appreciate your patience. ***

[New Search](#)

Property Information

[View GIS Maps](#)

Parcel #: 506 - 20 - 021-J

Property Address: , AZ

Subdivision Name:

Lot #:

MCR #:

Property Description: PT E2 DAF BEG AT SE COR SD SEC TH W 1328.96F TO TPOB TH W 131.33F N 24D 40M E 1900.77F TH NELY

Section Township Range: 15 2N 10W

Associated Parcel:

Owner Information

[View Tax Statement](#)

Owner: UNITED STATES OF AMERICA
Mailing Address: P O BOX 13468
Address: PHOENIX, AZ 85002

Deed #: 840439836

Sales Price: n/a *

Deed Date: 10/9/1984

Sales Date: n/a *

* Only sales for the last three years are maintained.

Valuation Information

Tax Year:	2004	2003	2002
Full Cash Value:	\$8,000	\$16,500	\$16,500
Limited Property Value:	\$8,000	\$10,580	\$8,606
Legal Class:	<u>2</u>	<u>2</u>	<u>2</u>
Assessment Ratio:	16%	16%	16%
Assessed FCV	\$1,280	\$2,640	\$2,640
Assessed LPV	\$1,280	\$1,693	\$1,377
Property Use Code:	9400	9400	9400
Tax Area Code:	470001	470001	470001

Additional Component Information (for this parcel)

[Valuation](#) [Characteristics](#)

[New Search](#)

Helpful Information:

[recorder](#) [glossary](#) [forms](#)

Disclaimer

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*6.016
2/2*



We are experiencing technical difficulties loading our 2004 data. We appreciate your patience. ***

New Search

Property Information

[View GIS Maps](#)

Parcel #: 506 - 20 - 021-H

Property Address , AZ

Subdivision Name:
Lot #:

MCR #:

Property Description: PT E2 DAF BEG SE COR SEC 15 TH W 1328.96F TH N 24D 40M E
1847.40F N 38D 20M E 653.54F N 52D 00M

Section Township Range: 15 2N 10W Associated Parcel:

Owner Information

[View Tax Statement](#)

Owner: MARICOPA COUNTY FLOOD CONTROL DIST
Mailing Address: 2801 W DURANGO ST
PHOENIX, AZ 85009-6399

Deed #: 840304852
Deed Date: 7/13/1984

Sales Price: \$0
Sales Date: n/a *

Valuation Information

Tax Year:	2004	2003	2002
Full Cash Value:	\$17,500	\$32,000	\$32,000
Limited Property Value:	\$17,500	\$23,788	\$21,051
Legal Class:	2	2	2
Assessment Ratio:	16%	16%	16%
Assessed FCV	\$2,800	\$5,120	\$5,120
Assessed LPV	\$2,800	\$3,806	\$3,368
Property Use Code:	9600	9600	9600
Tax Area Code:	470001	470001	470001

Additional Component Information (for this parcel)

[Valuation](#) [Characteristics](#)

New Search

Helpful Information:

[recorder](#) [glossary](#) [forms](#)

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* We are experiencing technical difficulties loading our 2004 data. We appreciate your patience. ***

New Search

Property Information

[View GIS Maps](#)

Parcel #: 506 - 20 - 021-G

Property Address , AZ

Subdivision Name:
Lot #:

MCR #:

Property Description: PT E2 SEC 15 DAF BEG S4 COR SEC 15 TH N 1036.46F TO TPOB TH N 2049.40F TH S 87D 44M E 271.13F N

Section Township Range: 15 2N 10W

Associated Parcel:

Owner Information

[View Tax Statement](#)

Owner: MARICOPA COUNTY FLOOD CONTROL DIST

Mailing Address 2801 W DURANGO ST
PHOENIX, AZ 85009-6399

Deed #: 840304852
Deed Date: 7/13/1984

Sales Price: \$0
Sales Date: n/a *

Valuation Information

Tax Year:	2004	2003	2002
Full Cash Value:	\$33,000	\$58,000	\$58,000
Limited Property Value:	\$33,000	\$58,000	\$58,000
Legal Class:	2	2	2
Assessment Ratio:	16%	16%	16%
Assessed FCV	\$5,280	\$9,280	\$9,280
Assessed LPV	\$5,280	\$9,280	\$9,280
Property Use Code:	9600	9600	9600
Tax Area Code:	470001	470001	470001

Additional Component Information (for this parcel)

[Valuation](#) [Characteristics](#)

New Search

Helpful Information:

[recorder](#) [glossary](#) [forms](#)

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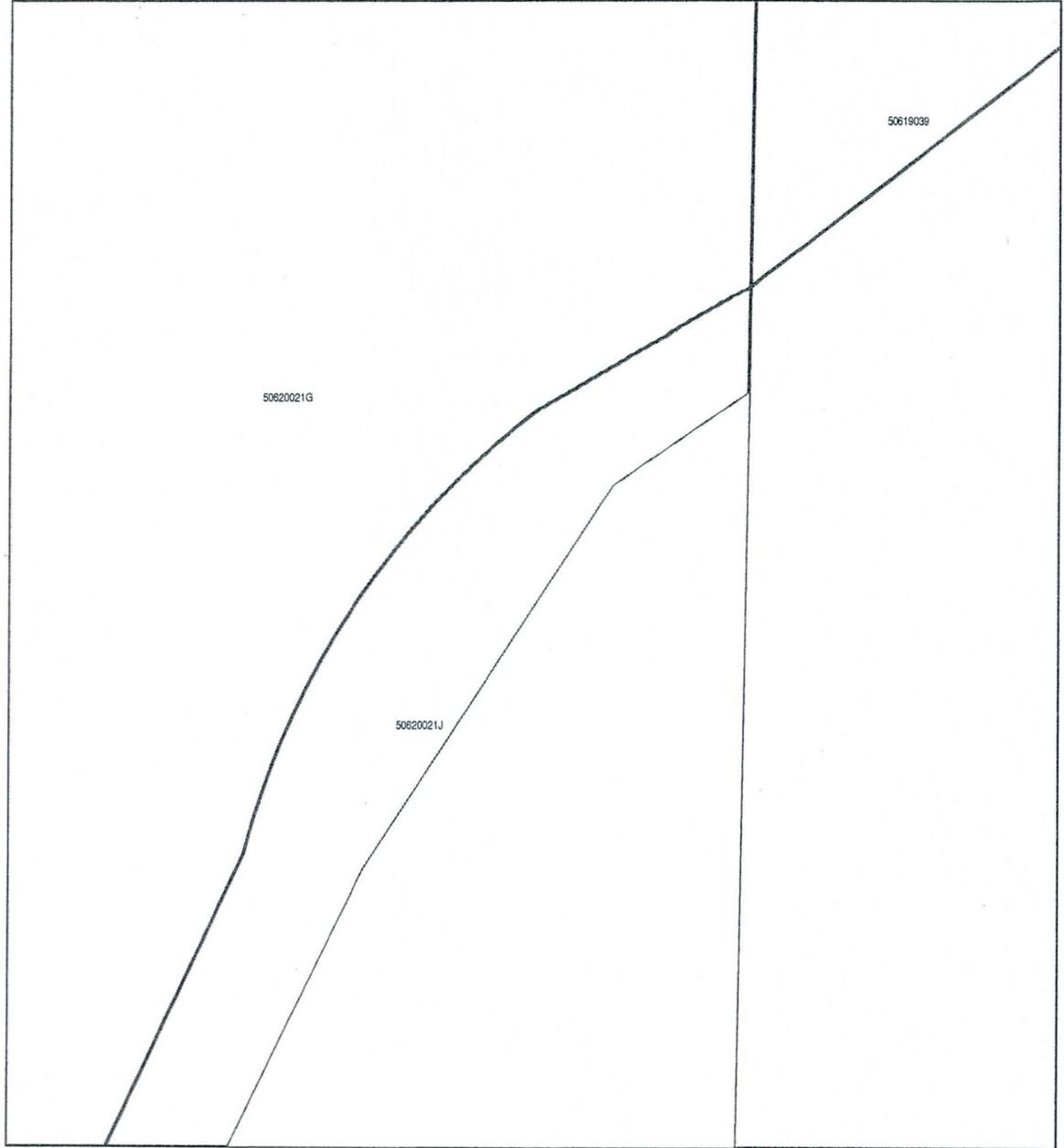
County Parcels

PARCELS
□ Parcels

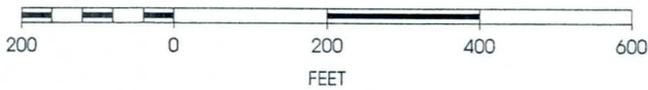
SUBDIVISIONS
— Sub. Boundaries
□ Sub Poly

TRANSPORTATION
— Streets (MCDOT)
— Streets (ASSR)

SCHOOLS
Public Schools



SCALE 1 : 2,985



County Parcels

PARCELS

 Parcels

SUBDIVISIONS

 Sub. Boundaries

 Sub Poly

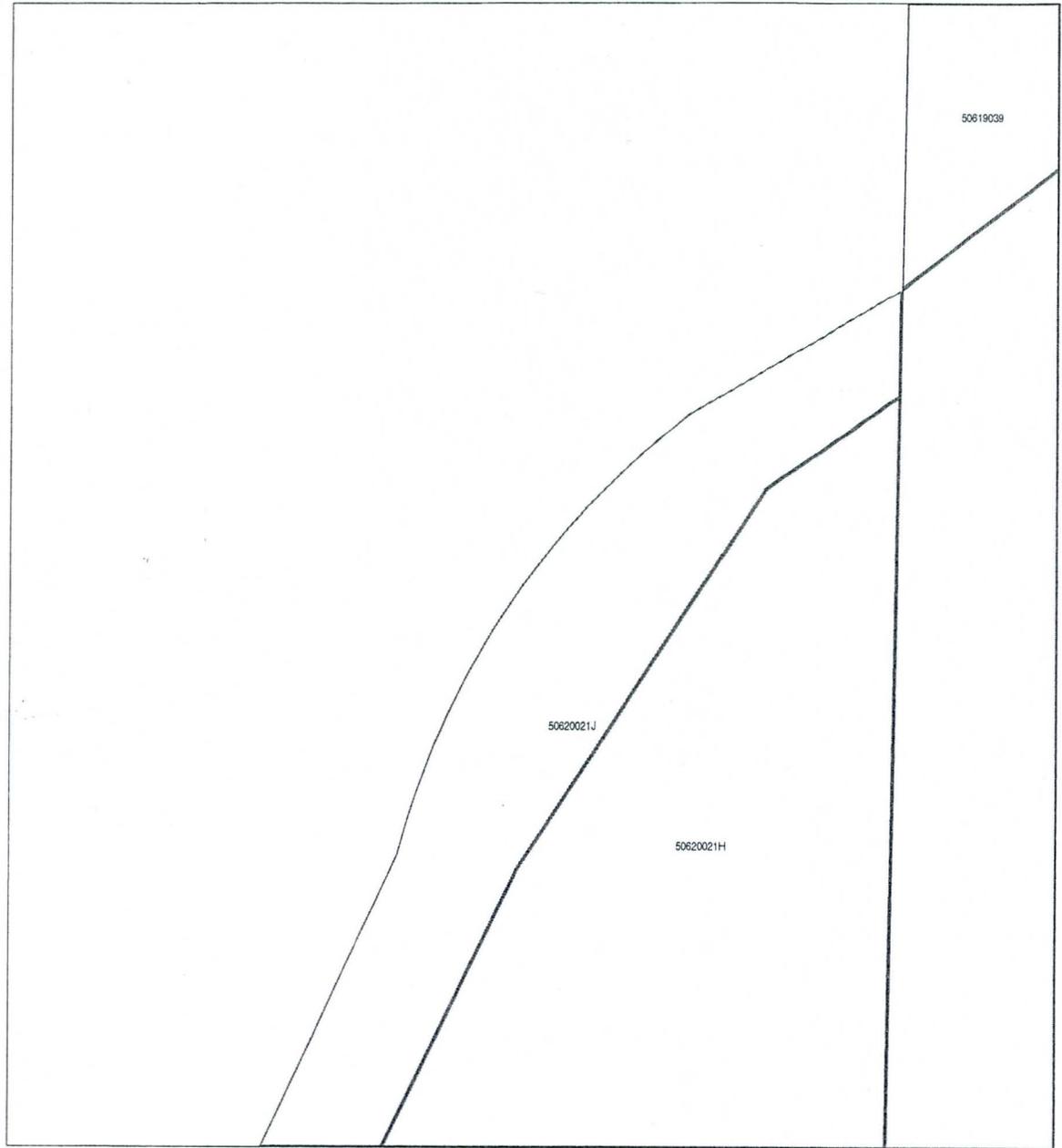
TRANSPORTATION

 Streets (MCDOT)

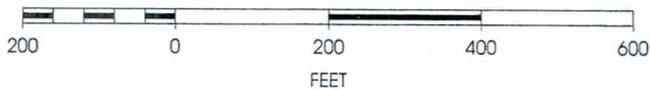
 Streets (ASSR)

SCHOOLS

 Public Schools



SCALE 1 : 2,985





New Search

Property Information

[View GIS Maps](#)

Parcel #: 506 - 19 - 031

Property Address: , AZ

Subdivision Name:
Lot #:

MCR #:

Property Description: E2 320 AC
Section Township Range: 11 2N 10W

*SEE 806
8288A*

Associated Parcel:

Owner Information

[View Tax Statement](#)

Owner: UNITED STATES OF AMERICA
Mailing Address: PO BOX 81169
PHOENIX, AZ 85068-9980

Deed #: NOD-56889
Deed Date: 12/25/1993

Sales Price: n/a *
Sales Date: n/a *

* Only sales for the last three years are maintained.

Valuation Information

Tax Year:	2003	2002	2001
Full Cash Value:	\$1,249,000	\$818,500	\$96,000
Limited Property Value:	\$519,719	\$276,625	\$96,000
Legal Class:	<u>2</u>	<u>2</u>	<u>2</u>
Assessment Ratio:	16%	16%	16%
Assessed FCV	\$199,840	\$130,960	\$15,360
Assessed LPV	\$83,155	\$44,260	\$15,360
Property Use Code:	9920	9920	9920
Tax Area Code:	470001	470001	470001

Additional Component Information (for this parcel)

[Valuation](#) [Characteristics](#)

[New Search](#)

Helpful Information:

[recorder](#) [glossary](#) [forms](#)

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County Parcels

PARCELS

- Parcels (2nd Floor)
- Parcels

SUBDIVISIONS

- Sub. Boundaries
- Sub Poly

TRANSPORTATION

- Streets (MCDOT)
- Streets (ASSR)

SCHOOLS

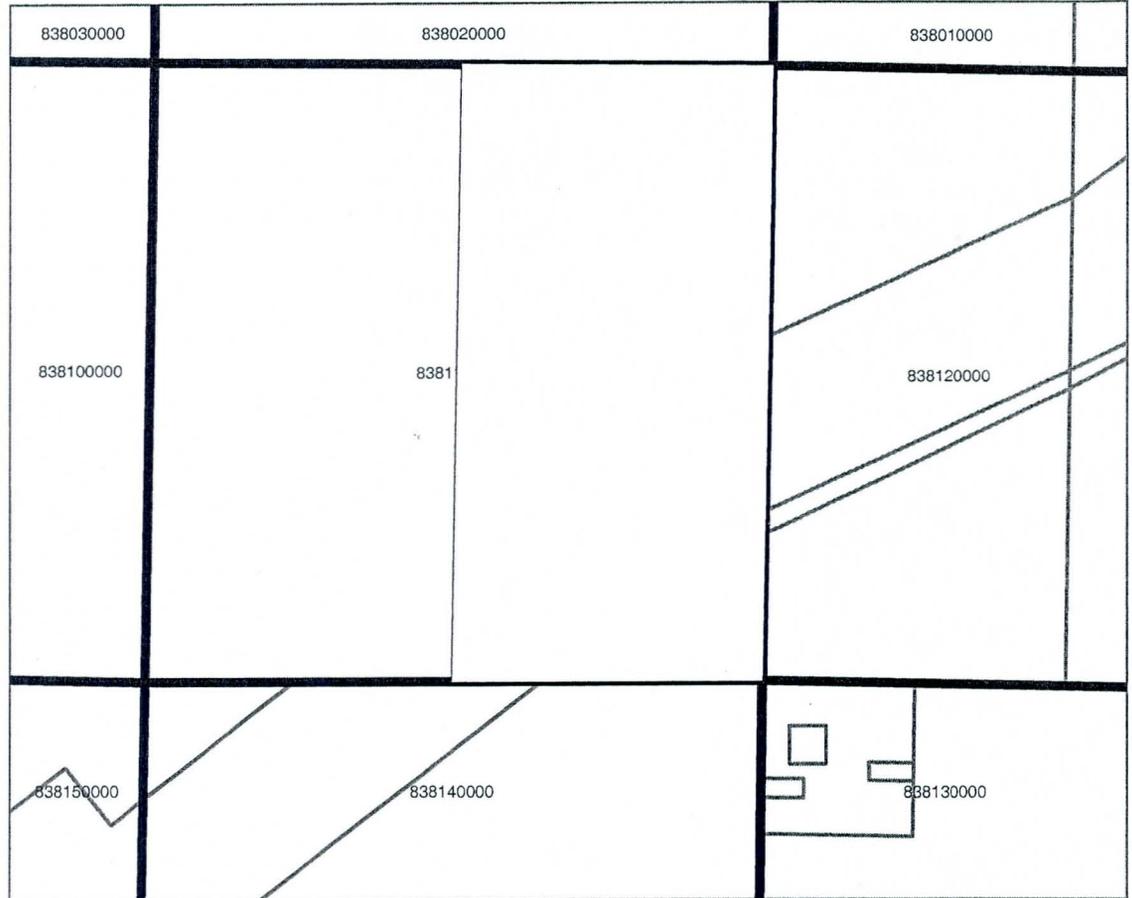
- Public Schools

ASSESSOR FEATURES

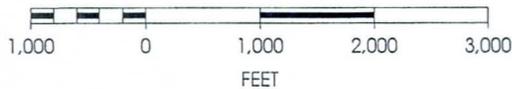
- Map ID #s
- Abc Book Numbers

COORDINATE FEATURES

- Sections
- Township/Range

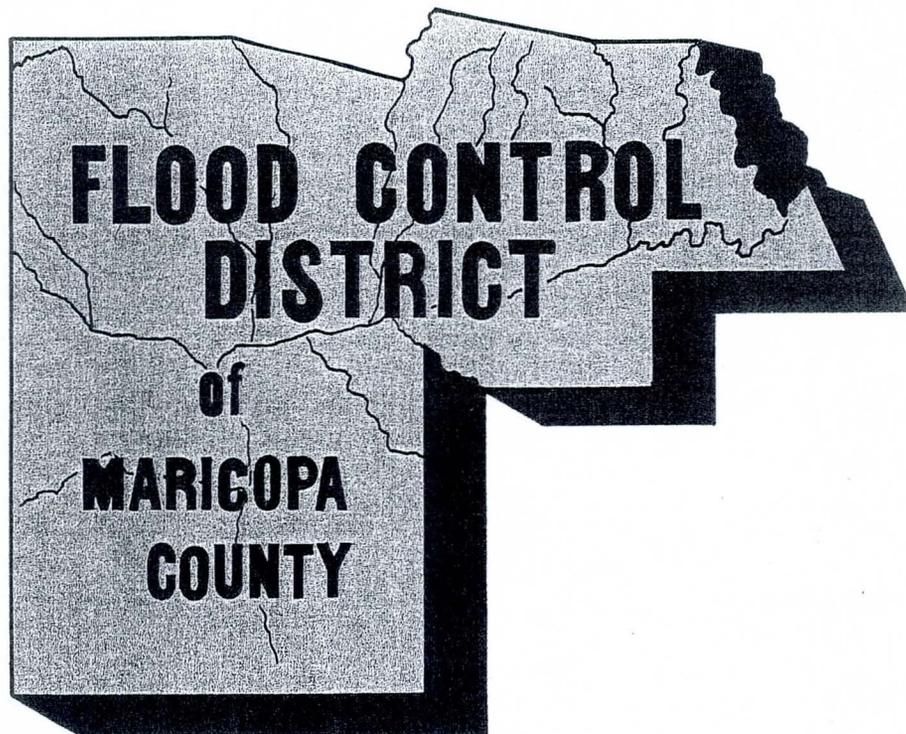


SCALE 1 : 19,959



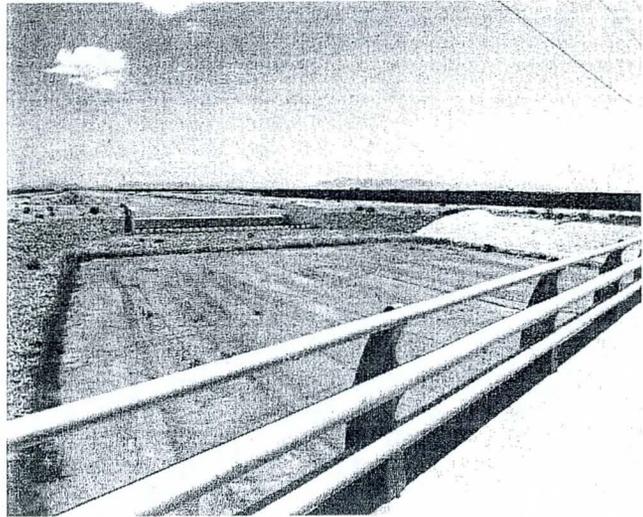
Annual Reports

ANNUAL REPORT



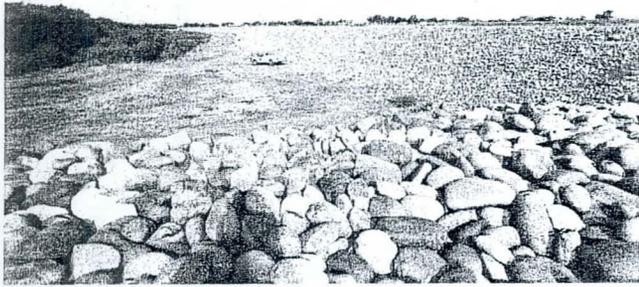
JULY 1, 1985 to JUNE 30, 1986

CENTENNIAL LEVEE — Reach 1 of the Centennial Levee in the Harquahala Valley in Western Maricopa County was completed in February 1986 by the Soil Conservation Service. This Levee protects the Valley from flows from the west and helps keep floodwater in Centennial Wash from breaking out across the Valley and damaging agricultural lands, roads and homes. The structure was built in coordination with the Harquahala Irrigation District's distribution system for Central Arizona Project water. The combined Federal and local costs for Reach 1 of the Centennial Levee were approximately \$1.8 million. The Soil Conservation Service has completed the compiling of survey data necessary to start the design of Reach 2.



RWCD Floodway—Reach 3 from Chandler Heights Bridge.

RWCD FLOODWAY, REACH 3 — The third reach of the RWCD Floodway was completed in August 1985. Reach 3 extends from the Gila River Indian Reservation (Hunt Highway) to Queen Creek Road, a distance of 4.43 miles. It is an earthen channel approximately 200 feet wide and ten feet deep. Queen Creek, which often caused flooding in the area and on the Indian Reservation, enters the Floodway in Reach 3, and controlling these floodwaters is one of the main benefits of the Floodway. Because of the tremendous amount of excess soil generated by excavation of the Floodway, the District acquired several spoil disposal sites. The spoil sites can now be sold by the District to recover acquisition costs and to return the land to the tax rolls. A bridge at Queen Creek Road and one at Chandler Heights Road were constructed to cross the Floodway. The combined federal and local costs of Reach 3 were approximately \$6.3 million.



Holly Acres Levee and Bank Stabilization.

HOLLY ACRES LEVEE AND BANK STABILIZATION — The homes in Holly Acres and the surrounding area suffered heavy damages from flooding on the Salt/Gila River from 1978 through 1980. The District has completed a project to protect the Holly Acres Subdivision by constructing a levee four to six feet high and stabilizing the north bank of the Gila River. The levee is designed to provide protection for Holly Acres from a flow of 115,000 cfs in the Salt River which is 100 year protection after the construction of the Plan 6 Flood Control features. Flows in the River delayed completion of the project for many months, but it was finally finished in October 1985. The project cost approximately \$1.2 million and half of this was paid by the State of Arizona.



Chuck Smith, Carlos Rivera, at RWCD Floodway.

ACTIVITY	OPERATIONS EXPENDITURES		CAPITAL IMPROVEMENTS PROGRAM		
	Administrative	Maintenance	Engineering	Lands	Relocation & Construction
White Tanks Dam #3		8,000			
White Tanks Dam #4		17,000			
McMicken Dam		29,000	35,000	1,000	40,000
Dreamy Draw Dam		8,000			
McMicken Dam Outlet Channel		26,000			
Guadalupe Dam		8,000			
Buckeye #1		30,000			
Buckeye #2		6,000			
Buckeye #3		7,000			
Spook Hill FRS & Outlet	11,000	55,000			
Signal Butte Floodway	8,000	10,000			
Pass Mountain FRS & Outlet	3,000	4,000			
Apache Jct. FRS, Floodway, Outlet and Bulldog	2,000		14,000	3,274,000	25,000
Signal Butte FRS	1,000	2,000			
Powerline Dam		5,000			
Powerline Floodway		13,000			
Vineyard Road FRS		35,000			
Rittenhouse FRS		16,000			
Harquahala FRS & Floodway		30,000			65,000
Saddleback FRS	4,000	8,000			58,000
Saddleback Diversion Channel		1,000			
Centennial Levee	1,000		1,000	106,000	1,000
Harquahala Floodway		6,000	1,000		
Sunset FRS		2,000			
Sunnycove FRS		1,000			
Sunset/Sunnycove Pipeline		2,000			
Cave Buttes Dam	1,000	26,000			
Adobe Dam	1,000	14,000	1,000	7,000	
Skunk Creek Channel at I-17		5,000			
New River Dam	3,000	26,000	20,000	110,000	14,000
Skunk Creek and New River Flowage Easements	9,000		32,000	5,096,000	3,000
Agua Fria River Flowage Easements	2,000	1,000	1,660,000	1,270,000	17,816,000
Guadalupe and Spookhill Flowage Easements			21,000		
Spookhill Watershed ADMS	7,000		33,000		
Glendale/Peoria Drainage	72,000				
East Maricopa ADMS	12,000		124,000		75,000
Glendale-Peoria ADMS	5,000		35,000		
East Fork Cave Creek ADMS	5,000		3,000		
White Tanks-Agua Fria ADMS	1,000		1,000		
Queen Creek ADMS	1,000				
Gilbert-Chandler ADMS	1,000				
Total	<u>\$2,265,000</u>	<u>\$2,186,000</u>	<u>\$2,781,000</u>	<u>\$11,264,000</u>	<u>\$37,325,000</u>

* Expenditures by Activities and Function will not always agree with Expenditures by Task on page 2 except in total.

FLOOD CONTROL DISTRICT

of MARICOPA COUNTY



ANNUAL REPORT

JULY 1, 1986 to JUNE 30, 1987

003.106

ACTIVITY	OPERATIONS EXPENDITURES		CAPITAL IMPROVEMENTS PROGRAM			
	Administrative	Maintenance	Engineering	Lands	Relocation & Construction	
White Tanks Dam #3	3,000	2,000		890,000		
White Tanks Dam #4	2,000	9,000		2,229,000		
McMicken Dam	1,000	33,000		8,185,000		
Dreamy Draw Dam		5,000				
McMicken Dam Outlet Channel		3,000				
Guadalupe Dam	5,000	7,000				
Buckeye #2		5,000				
Buckeye #3		6,000				
Spook Hill FRS & Outlet	1,000	54,000				1,000
Signal Butte Floodway		6,000				
Pass Mountain FRS & Outlet		1,000				
Apache Jct. FRS, Floodway, Outlet and Bulldog Floodway	9,000	3,000	22,000	279,000		149,000
Signal Butte FRS		11,000	3,000			
Powerline Dam		7,000				
Powerline Floodway		26,000				
Vineyard Road FRS		11,000				
Rittenhouse FRS		13,000				
Harquahala FRS & Floodway		30,000				
Saddleback FRS		36,000				
Saddleback Diversion Channel		6,000		2,000		
Centennial Levee		11,000		28,000		1,000
Harquahala Floodway		6,000				
Sunset FRS		2,000				
Sunnycove FRS		5,000				
Sunset/Sunnycove Pipeline		1,000				
Wittmann ADMS	11,000		262,000			
Cave Buttes Dam		47,000				
Adobe Dam	6,000	33,000	1,000	38,000		
Skunk Creek Channel at I-17		6,000				
New River Dam		22,000				
New River Area Drainage Master Study		2,000				
Skunk Creek and New River Flowage Easements	1,000	14,000	20,000	2,595,000		39,000
Agua Fria River Flow- age Easements	6,000		428,000	263,000		1,593,000
Spook Hill Watershed ADMS	11,000					
East Maricopa ADMS	12,000		20,000			75,000
Glendale-Peoria ADMS	17,000		56,000			
East Fork Cave Creek ADMS	55,000		71,000			
Queen Creek ADMS	2,000		148,000			
Bell Road Expansion	160,000		6,000			
Total	<u>\$3,229,000</u>	<u>\$2,447,000</u>	<u>\$1,785,000</u>	<u>\$19,639,000</u>		<u>\$17,092,000</u>

* Expenditures by Activities and Function will not always agree with Expenditures by Task on page 2 except in total.

THE FLOOD CONTROL DISTRICT
OF MARICOPA COUNTY
INVITES YOU TO ATTEND

the

Ground Breaking Ceremonies

for the

Harquahala Valley

Watershed

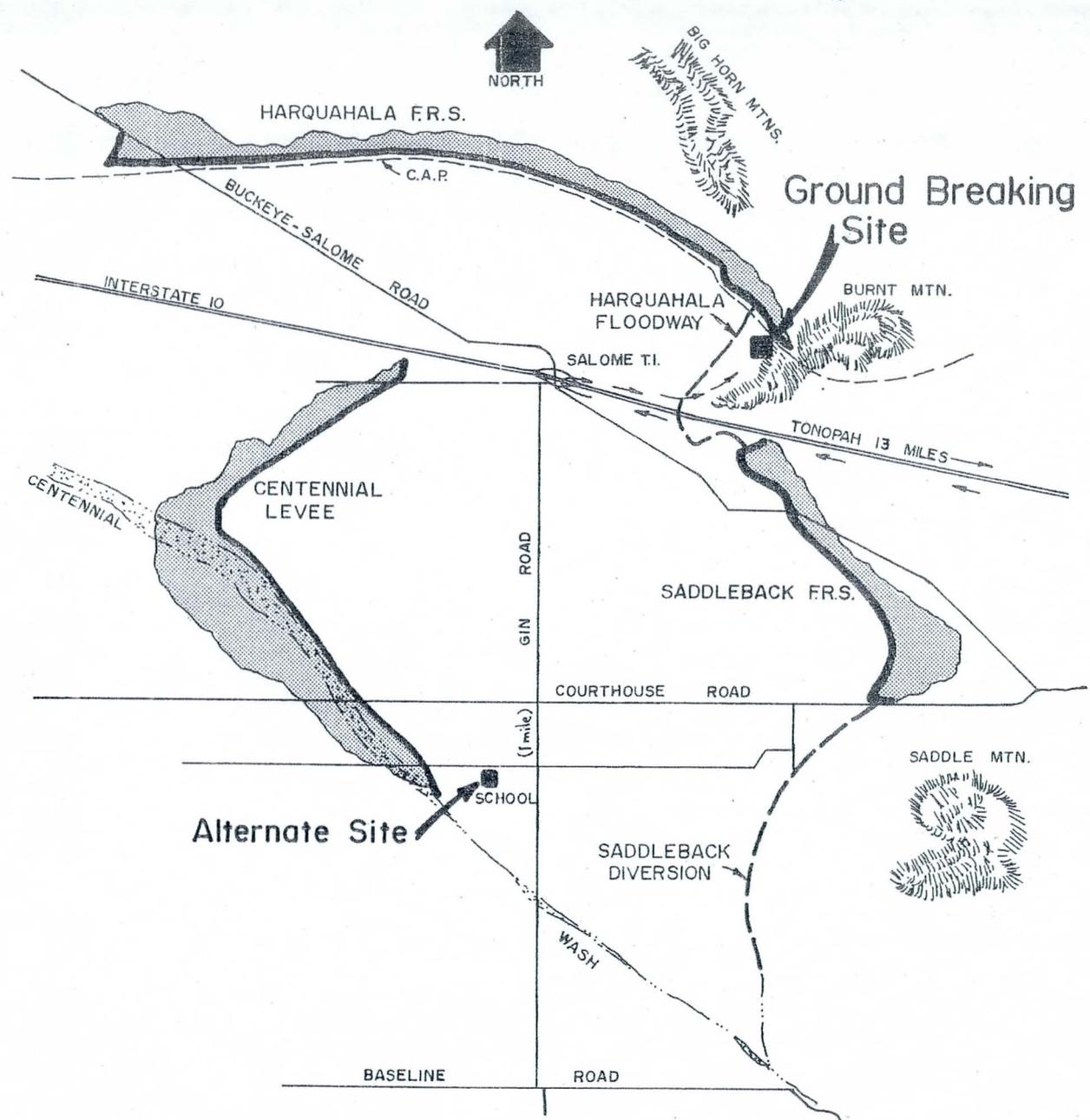
Flood Control

Project



Wednesday, April 9, 1980

10:30 A.M.



GROUND BREAKING CEREMONIES



BAND	Buckeye Union High School Concert Band
MASTER OF CEREMONIES	Hawley Atkinson, Board of Directors
INVOCATION	Maurice Ledford, Harquahala Valley
PLEDGE OF ALLEGIANCE AND INTRODUCTION OF GUESTS	Hawley Atkinson
REMARKS	Thomas G. Rockenbaugh, State Conservationist Soil Conservation Service
	Edward H. Hallenbeck, Projects Manager Water and Power Resources Service
	John Fornes, Chairman, Buckeye-Roosevelt NRCD
	Frank Rogers, President, Harquahala Irrigation District
	Senator S. H. "Hal" Runyon
	Representative James B. Ratliff
	Representative Bob Denny
BENEDICTION	Maurice Ledford, Harquahala Valley

HARQUAHALA VALLEY WATERSHED PROJECT

The objectives of the Harquahala Valley Watershed project are a watershed and conservation land treatment program to prevent and reduce floodwater, sediment, and erosion damages to productive agricultural lands, existing irrigation facilities, Interstate Highway 10, county and farm roads, commercial establishments, residences and public facilities. It is also desired that project measures provide maximum protection and benefit for the proposed Granite Reef Aqueduct of the Central Arizona Project and the proposed system of canals, laterals, and other improvements that will be installed in Harquahala Valley to distribute Central Arizona Project waters.

The Harquahala Valley Watershed project is actually composed of three individual projects—the Saddleback Floodwater Retarding Structure (FRS) and Diversion, the Harquahala Floodwater Retarding Structure and Floodway, and the Centennial Levee. (See map)

Construction will begin this year on the most downstream portion of the whole project, the Saddleback Diversion and then the Saddleback FRS. The Harquahala structures are scheduled for construction in 1981 and will be built jointly by the Soil Conservation Service and the Water and Power Resources Service. Construction of Centennial Levee will follow in 1982.

The water collected behind the Saddleback FRS and Diversion will outlet into Centennial Wash, going around most of the agricultural area. When the Harquahala structures are finished, the waters collected from them will be channeled into an existing wash and through existing box culverts under I-10 and then enter the pool area behind the Saddleback structures, eventually going into Centennial Wash also.

As required under Public Law 566, the Flood Control District has been acquiring rights-of-way for all three projects and relocating utility facilities in the area. During project construction, the Flood Control District will construct a bridge on Court House Road, a road ramp over the Saddleback FRS on Buckeye-Salome Road and relocate roads where necessary.

The structures are being designed by and will be constructed by the Soil Conservation Service. The local sponsors are the Flood Control District of Maricopa County, the Buckeye-Roosevelt NRCD and the Wickenburg NRCD. The Flood Control District will operate and maintain the structures upon completion.

PROJECT FEATURES

	Saddleback F.R.S.	Saddleback Diversion	Harquahala F.R.S.	Harquahala Floodway	Centennial Levee
Type of structure	Earthfill Dam	Earth Lined Channel	Earthfill Dam	Rock Riprap Channel	Compacted Earth Embankment
Length (miles)	5.27	4.64	11.5	3.43	9.45
Maximum Height (feet)	22	—	55	—	9.5
Drainage area (square miles)	29.6	8.65	102.3	.98	20.99
Total capacity	4,247 AF	6,289 cfs	10,911 AF	1,265 cfs	7,540 cfs
Top width (feet)	11	—	14	—	10
Volume of fill (cubic yards)	584,051	—	4,530,558	—	100,000
Bottom width (feet)	133	35 to 232	234	18 to 35	—
Costs (Estimated)					
Federal (x \$1,000,000)	2.0	2.0	13.0	.5	.5
Local (x \$1,000,000)	.527	.331			.7

Figures from the Supplemental Watershed Work Plan No. 1, Harquahala Valley Watershed, March, 1977

SPONSORING BOARDS

BOARD OF DIRECTORS FLOOD CONTROL DISTRICT

Fred Koory, Jr. (Chairman) Tom Freestone
George Campbell Hawley Atkinson
Ed Pastor

BUCKEYE-ROOSEVELT NRCD

John Fornes (Chairman) R. M. "Corkey" Narramore
Harry Porterfield Dick Napolitano
Wallace Bales

William D. Mathews, Chief Engineer and General Manager
FLOOD CONTROL DISTRICT of Maricopa County

GROUND BREAKING

MUSIC SELECTIONS

Refreshments furnished by
the Harquahala Cotton Company

ANNUAL REPORT

FLOOD CONTROL
DISTRICT

OF
MARICOPA
COUNTY

JULY 1, 1987 to JUNE 30, 1988



003.107

ACTIVITY	OPERATIONS EXPENDITURES		CAPITAL IMPROVEMENTS PROGRAM		
	Administrative	Maintenance	Engineering	Lands	Relocation & Construction
White Tanks Dam #3		25,000			
White Tanks Dam #4		8,000			
McMicken Dam	3,000	29,000			
Dreamy Draw Dam		8,000			
McMicken Dam Outlet					
Channel	2,000	42,000			
Guadalupe Dam	7,000	2,000			
Buckeye #1		45,000			
Buckeye #2		10,000	1,000		
Buckeye #3		8,000			
El Mirage Rd. Drain Channel		14,000			
Spook Hill FRS & Outlet	4,000	39,000			
Signal Butte Floodway		9,000			
Pass Mountain FRS & Outlet		3,000			37,000
Apache Jct. FRS, Floodway, Outlet and Bulldog Floodway	1,000	11,000	13,000	3,000	6,529,000
Signal Butte FRS		9,000			
Powerline Dam		4,000			
Powerline Floodway		22,000			
Vineyard Road FRS		19,000			
Rittenhouse FRS		10,000			
Harquahala FRS & Floodway		18,000			
Saddleback FRS		6,000			
Saddleback Diversion Channel		2,000			
Centennial Levee	2,000	2,000		127,000	
Harquahala Floodway	1,000	1,000			
Sunset FRS		5,000			
Sunnycove FRS		3,000			
Sunset/Sunnycove Pipeline		5,000			
Wittmann ADMS	5,000		82,000		
Cave Buttes Dam	1,000	39,000			
Adobe Dam	3,000	32,000		807,000	
Skunk Creek Channel at I-17		11,000			
New River Dam		40,000		18,000	
Skunk Creek and New River Flowage Easements	6,000	74,000	395,000	1,976,000	3,939,000
Agua Fria River Flowage Easements	10,000		37,000	1,214,000	609,000
East Maricopa ADMS			11,000		
Glendale-Peoria ADMS	14,000		196,000		
East Fork Cave Creek ADMS	3,000		13,000		
Queen Creek ADMS	3,000		35,000		
Bell Road Expansion	27,000		36,000		3,000
Plan VI Funding	2,000				2,466,000
Groundwater Recharge	105,000				
Total	<u>\$4,291,000</u>	<u>\$2,995,000</u>	<u>\$2,519,000</u>	<u>\$15,049,000</u>	<u>\$31,190,000</u>

* Expenditures by Activities and Function will not always agree with Expenditures by Task in the Financial Highlights chart (inside front cover) except in total.