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TS-PIC-90718
February 1990

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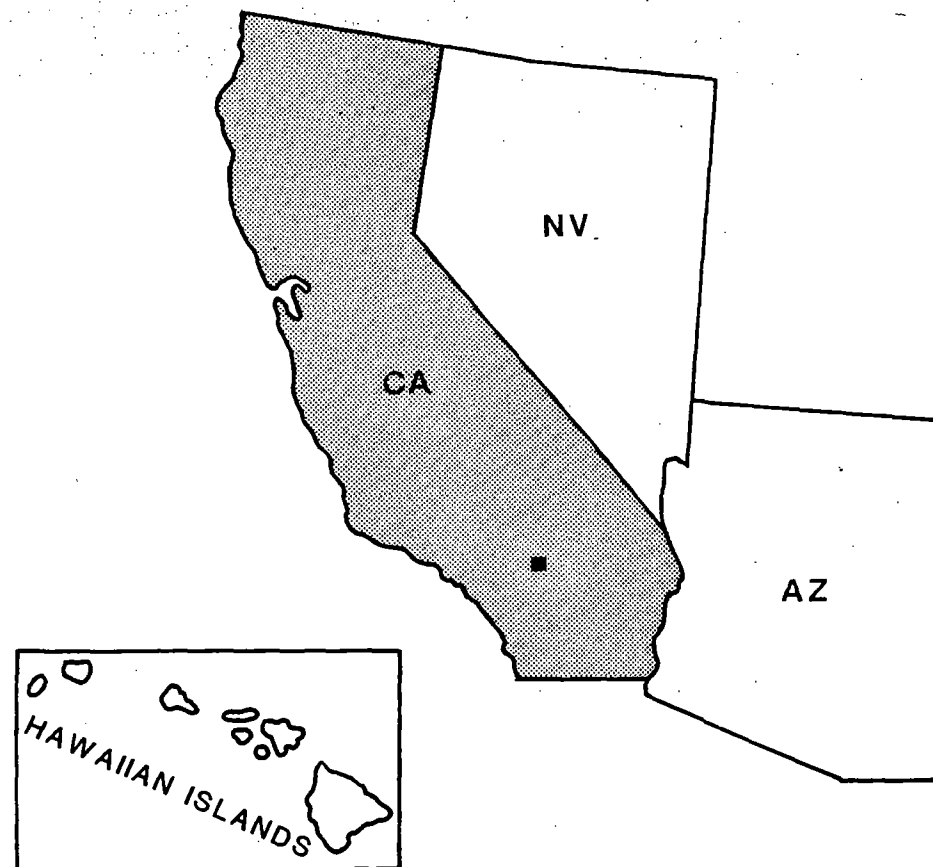
Research and Development



AERIAL PHOTOGRAPHIC ANALYSIS OF GEORGE AIR FORCE BASE

Victorville, California

EPA Region 9



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AERIAL PHOTOGRAPHIC ANALYSIS OF GEORGE AIR FORCE BASE

Victorville, California

by

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Contract No. 68-03-3245

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OFFICE OF RESEARCH AND DEVELOPMENT
U.S. ENVIRONMENTAL PROTECTION AGENCY
LAS VEGAS, NEVADA 89193-3478

NOTICE

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ABSTRACT

George Air Force Base is located approximately 3 miles northwest of Victorville, California on the eastern outskirts of the small community of Adelanto. The base is located on desert-type terrain with negligible variations in terrain elevation (approximately 10 feet in 2000 feet). The Mojave River flows east of the site and riparian growth within its floodplain is the only sign of wetland vegetation within the area. Archival photography covering the site area was only available between the years of 1953 through 1989 and was used as the primary data source for the preparation of this report. Drainage within the area, for the eastern portion of the base, trends to the northeast towards the Mojave River. Drainages in the western portion of the base trend to the northwest.

The 1953 photography showed the base to be fully operational. Several small trenches were noted within the base, but for the most part were empty, and did not appear to be waste related. A few areas of disturbed ground were noted, but activity could not be identified. A clear area northeast of the base housing area showed three trenches, of which one appeared to contain trash. A small waste treatment facility was located in the northeastern portion of the base, and three associated empty percolation ponds were noted north of this facility. South of the ponds, staining was noted in a reported burn area. By 1959, a burn pit and staining were again noted in this burn area. Two waste dumps had been established; one northeast of base housing, where trenches had been noted in 1953, and the other in the southeast portion of the base. Both of these areas showed numerous truck-sized mounds of material. The dump to the south also had seven trenches, two excavations, and four pits. Waste material was noted in several of these. Areas of disturbed ground were noted in the western portion of the base, near the skeet range. Activity within these areas could not be identified. A new burn area with four burn pits had been established in the northeast portion of the base by 1968. The old burn area south of the percolation ponds was still active, showing three possible burn pits. The waste dump northeast of the housing area still appeared active, though the number of mounds visible had decreased. The dump to the south remained

active. Three areas of disturbed ground were now noted in the southwest portion of the base, near the skeet range. These areas appeared to be associated with waste disposal. Only partial coverage of the base was available for the years 1975, 1984, and 1985. It appeared that dumping activity was going on in the southwest portion of the base where areas of disturbed ground were previously noted. The 1984 photography showed a new waste treatment facility had been constructed north of the base, and the small one located on base was inactive. The on-base percolation ponds also appeared abandoned. The dumps noted northeast of the housing area and in the southern portion of the base appeared inactive. The 1985 photo showed possible continuing dumping in the southwest portion of the base near the skeet range. The 1989 photography did not reveal any active on-base dumps. The dump near the housing area had been covered, leveled, and graded. The southern dump did not show any signs of activity, though areas of disturbed ground were noted. One waste disposal area was noted outside the base, north of Adelanto.

The U.S. Environmental Protection Agency's Environmental Monitoring Systems Laboratory in Las Vegas, Nevada, prepared this report for the Agency's Hazardous Waste Management Division in Region 9 at San Francisco, California and the Office of Emergency and Remedial Response in Washington, D.C.

CONTENTS

	<u>Page</u>
Abstract	iii
Introduction	1
Methodology	2
Analysis Summary	5
Photo Analysis	6

FIGURES

<u>Number</u>		
1	Site location map, California	vi
2	Local site location and 1953 photo index map, Victorville, California	4
3-6	George Air Force Base, January 23, 1953	9-15
7	Local site location and 1959 photo index map	17
8,10	George Air Force Base, June 23, 1959	19,23
9,11,12	George Air Force Base, November 7, 1959	21,25,27
13	Local site location and 1968 photo index map	29
14-17	George Air Force Base, May 28, 1968	31-37
18	George Air Force Base, December 1, 1975	39
19	George Air Force Base, October 7, 1984	41
20	George Air Force Base, July 28, 1985	43
21	Local site location and 1989 photo index map	45
22-36	George Air Force Base, October 30, 1989	47-75

TABLE

1 Documentation of Aerial Photography	3
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Figure 1. Site location map, California. Approximate scale 1:4,500,000.

INTRODUCTION

This report presents an intensive aerial photographic analysis of George Air Force Base located approximately 3-miles northwest of Victorville, California, on the east side of the community of Adelanto (Figure 1). Aerial photography spanning 27 years (1953-1989) was the primary source of information provided in this report. The focus of the report is on waste disposal practices at the base during this time frame. The air base occupies approximately 5,600 acres on desert terrain adjacent to the Mojave River. Drainage on the eastern side of base trends to the northeast, towards the river, while the western perimeter of the base drainage trends towards the northwest. The only wetland areas visible consist of riparian growth within the river's floodplain.

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METHODOLOGY

Stereoscopic pairs of historical and current aerial photographs were used to perform the analysis. Stereo viewing enhances the interpretation because it allows the analyst to observe the vertical as well as horizontal spatial relationships of natural and cultural features. Stereoscopy is also an aid in distinguishing between various shapes, tones, textures, and colors that can be found within the study area.

Evidence of waste burial is a prime consideration when conducting a hazardous waste analysis. Leachate or seepage resulting from burial and dumping of hazardous materials might threaten existing surface or ground-water sources. Pools of unexplained liquid are routinely noted because they can indicate seepage from buried wastes that may enter drainage channels and allow contaminants to move off the site. An excellent indicator of how well hazardous materials are being handled at a site is the presence or absence of spills, spill stains, and vegetation damage. Trees and other forms of vegetation that exhibit a marked color difference from surrounding members of the same species are labeled "dead," "stressed," or "damaged," based upon the degree of noticeable variation. Vegetation is so labeled only after consideration of the season in which the photographs were acquired.

The U.S. Environmental Protection Agency's Statement of Procedures on Floodplain Management and Wetlands Protection (Executive Orders 11988 and 11990, respectively) requires EPA to determine if removal or remedial actions at hazardous waste sites will affect wetlands or floodplains and to avoid or minimize adverse impacts on those areas. To aid in compliance with these orders, significant wetland areas located within and adjacent to the sites have been identified and delineated. However, the sites have not been visited to verify the accuracy of wetland identification.

Drainage analysis determines the direction a spill or surface runoff would follow. Direction of drainage is determined from analysis of the photographs and from U.S. Geological Survey topographic maps. Whenever they are available, 7.5-minute quadrangle maps (scale 1:24,000) are used to show site location and to provide geographic and topographic information.

Results of the analysis are shown on annotated overlays attached to the photos. The following table provides documentation of the photographs used in this report:

TABLE 1. DOCUMENTATION OF AERIAL PHOTOGRAPHY

Site name, location, and geographic coordinates	Figures	Date of acquisition	Original scale	Film type†	Photo source‡	Photo I.D.	Frames
George A.F.B.	3-6	01-23-53	1:20,000	B&W	ASCS	AXL	
Victorville, CA	8,10	06-23-59	1:20,000	B&W	ASCS	AXL	SEE
34°35'42"N	9,11,12	11-07-59	1:20,000	B&W	ASCS	AXL	PHOTO
117°23'00"W	14-17	05-28-68	1:20,000	B&W	ASCS	AXL	
SSID# Unlisted	18	12-01-75	1:31,000	CIR	EROS	2287	
	19	10-07-84	1:58,000	B&W	ASCS	NHAP	
	20	07-28-85	1:58,000	B&W	ASCS	NHAP	
	22-36	10-30-89	1:8,200	CC	EMSL	90718	

†Film type identification:

B&W: Black-and-White Panchromatic

CIR: Color Infrared

CC: Conventional Color

‡Photo source identification:

ASCS: U.S. Department of Agriculture, Agricultural Stabilization and Conservation Service, Salt Lake City, Utah.

EROS: U.S. Department of the Interior, Geological Survey, Earth Resources Observation Systems Data center, Sioux Falls, South Dakota.

EMSL: U.S. Environmental Protection Agency, Environmental Monitoring Systems Laboratory, Las Vegas, Nevada.

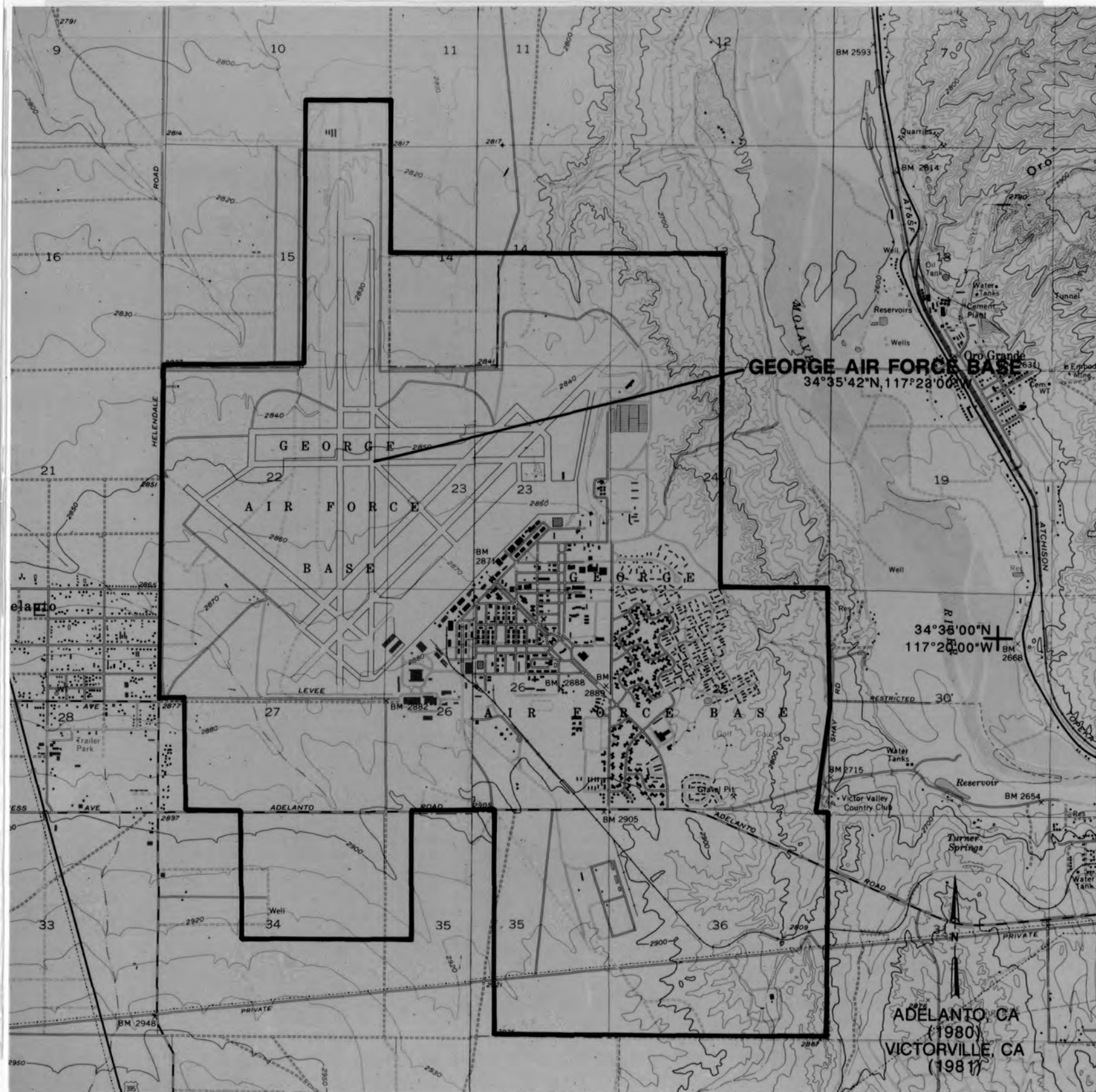


Figure 2. Local site location and 1953 photo index map, Victorville, California.
 Approximate scale 1:35,000.

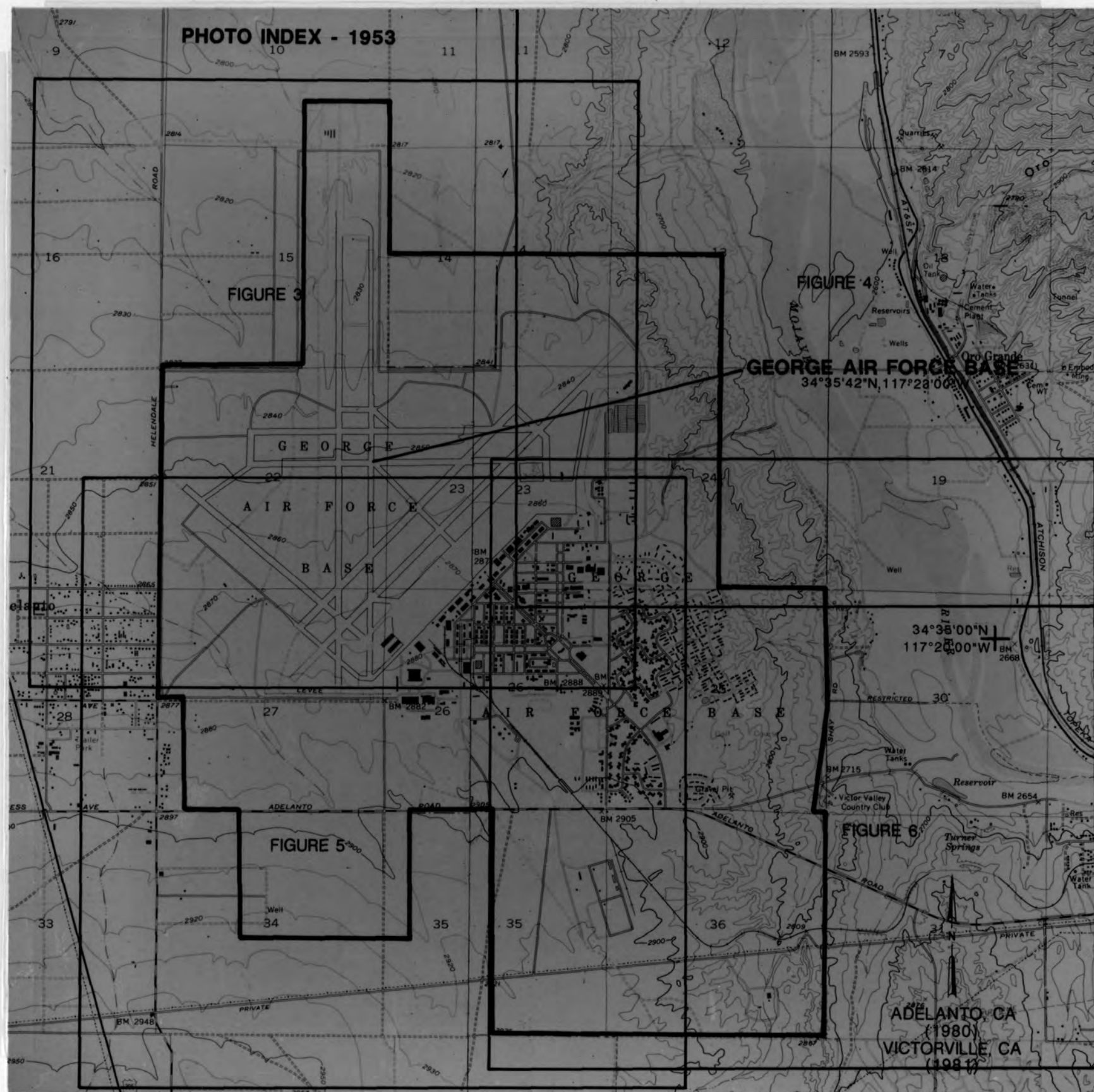


Figure 2. Local site location and 1953 photo index map, Victorville, California. Approximate scale 1:35,000.

ANALYSIS SUMMARY

George Air Force Base occupies approximately 5,600 acres of desert terrain approximately 3-miles northwest of Victorville, California (Figure 2). The community of Adelanto is situated outside the base western perimeter and the Mojave River runs along its eastern perimeter. Aerial photography spanning 27 years (1953-1989) was analyzed to determine waste disposal practices at the air base during this time frame.

The 1953 photography showed the base to be fully operational. Several small trenches were noted within the base, but for the most part were empty, and did not appear to be waste related. A few areas of disturbed ground were noted, but activity could not be identified. A clear area northeast of the base housing area showed three trenches, of which one appeared to contain trash. A small waste treatment facility was located in the northeastern portion of the base, and three associated empty percolation ponds were noted north of this facility. South of the ponds, staining was noted in a reported burn area. By 1959, a burn pit and staining were again noted in this burn area. Two waste dumps had been established; one northeast of base housing, where trenches had been noted in 1953, and the other in the southeast portion of the base. Both of these areas showed numerous truck-sized mounds of material. The dump to the south also had seven trenches, two excavations, and four pits. Waste material was noted in several of these. Areas of disturbed ground were noted in the western portion of the base, near the skeet range. Activity within these areas could not be identified. A new burn area with four burn pits had been established in the northeast portion of the base by 1968. The old burn area south of the percolation ponds was still active, showing three possible burn pits. The waste dump northeast of the housing area still appeared active, though the number of mounds visible had decreased. The dump to the south remained active. Three areas of disturbed ground were now noted in the southwest portion of the base, near the skeet range. These areas appeared to be associated with waste disposal. Only partial coverage of the base was available for years 1975, 1984, and 1985. It appeared that dumping activity was going on in the southwest portion of

the base where areas of disturbed ground were previously noted. The 1984 photography showed a new waste treatment facility had been constructed north of the base, and the small one located on base was inactive. The on-base percolation ponds also appeared abandoned. The dumps noted northeast of the housing area and in the southern portion of the base appeared inactive. The 1985 photo showed possible continuing dumping in the southwest portion of the base near the skeet range. The 1989 photography did not reveal any active on-base dumps. The dump near the housing area had been covered, leveled, and graded. The southern dump did not show any signs of activity, though areas of disturbed ground were noted. One waste disposal area was noted outside the base, north of Adelanto.

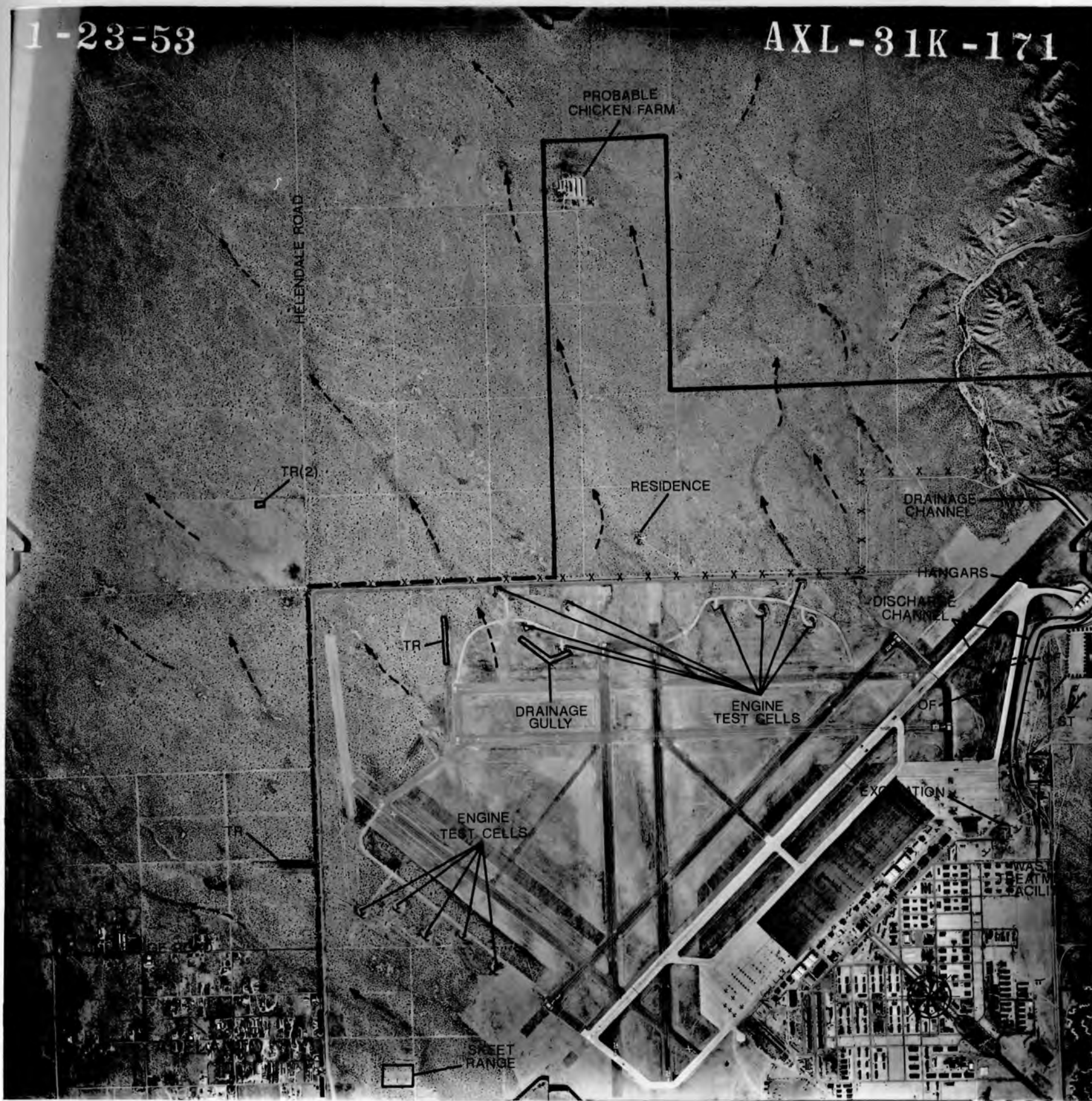
PHOTO ANALYSIS

JANUARY 23, 1953 (FIGURE 3)

This photo shows the northwestern portion of George Air Force Base. Two small trenches are visible in the desert area, outside the northwest corner of the base. These trenches are empty and show no signs of waste disposal activity. A larger trench is noted outside the western perimeter fence. This trench also shows no sign of disposal activity. One trench is noted in the northwest corner of the base. It appears to be drainage related. No disposal activity is visible at this trench. On the eastern side of the base runways is a small waste treatment facility. A manmade drainage channel has been constructed west of this facility and carries drainage to the north, around the end of the runway, into an unidentified creek which empties into the Mojave River. No outfall is noted from the waste treatment facility into this channel, but it is assumed that one is present. A small excavation is noted southwest of the treatment facility; this appears construction related rather than a disposal site. Spill stains are visible on aircraft parking ramps and near maintenance areas.

1-23-53

AXL-31K-171



INTERPRETATION CODE

BOUNDARIES AND LIMITS

- x-x-x-x FENCED SITE BOUNDARY
- UNFENCED SITE BOUNDARY
- x x x x x FENCE
- STUDY AREA

DRAINAGE

- DRAINAGE
- > FLOW DIRECTION
- >> INDETERMINATE DRAINAGE

TRANSPORTATION/UTILITY

- ===== VEHICLE ACCESS
- + + + + + RAILWAY

SITE FEATURES

- ||||||| DIKE
- ===== SL STANDING LIQUID
- SL STANDING LIQUID
- ⊖ EXCAVATION, PIT (EXTENSIVE)
- ⊖ MOUNDED MATERIAL (EXTENSIVE)
- MM MOUNDED MATERIAL (SMALL)
- CR CRATES/BOXES
- DR DRUMS
- HT HORIZONTAL TANK
- PT PRESSURE TANK
- VT VERTICAL TANK
- CA CLEARED AREA
- DG DISTURBED GROUND
- FL FILL
- IM IMPOUNDMENT
- LG LAGOON
- OF OUTFALL
- SD SLUDGE
- ST STAIN
- SW SOLID WASTE
- TR TRENCH
- VS VEGETATION STRESS
- WD WASTE DISPOSAL AREA
- WL WETLAND

Figure 3. George Air Force Base, January 23, 1953. Approximate scale 1:20,000.

JANUARY 23, 1953 (FIGURE 4)

This photo shows the northeastern portion of George Air Force Base. Three percolation ponds are noted. These ponds are probably associated with the waste treatment facility to the south (Figure 3). The ponds are presently empty; two of the ponds have heavily stained floors, while the third is clean. The ponds are unlined. Staining is also noted in an area just to the south of these ponds.

East of the air base, across the Mojave River is the town of Oro Grande. A large cement plant with 19 uncontained vertical tanks is noted north of the town. The tanks probably contain dry products. North of the plant are two vertical tanks with containment berms on the downslope side. The two impoundments between the air base and the railroad are probably reservoirs.



INTERPRETATION CODE

BOUNDARIES AND LIMITS

- x-x-x-x FENCED SITE BOUNDARY
- UNFENCED SITE BOUNDARY
- x x x x x FENCE
- STUDY AREA

DRAINAGE

- ←- - - DRAINAGE
- ← FLOW DIRECTION
- - - - INDETERMINATE DRAINAGE

TRANSPORTATION/UTILITY

- ===== VEHICLE ACCESS
- + + + + RAILWAY

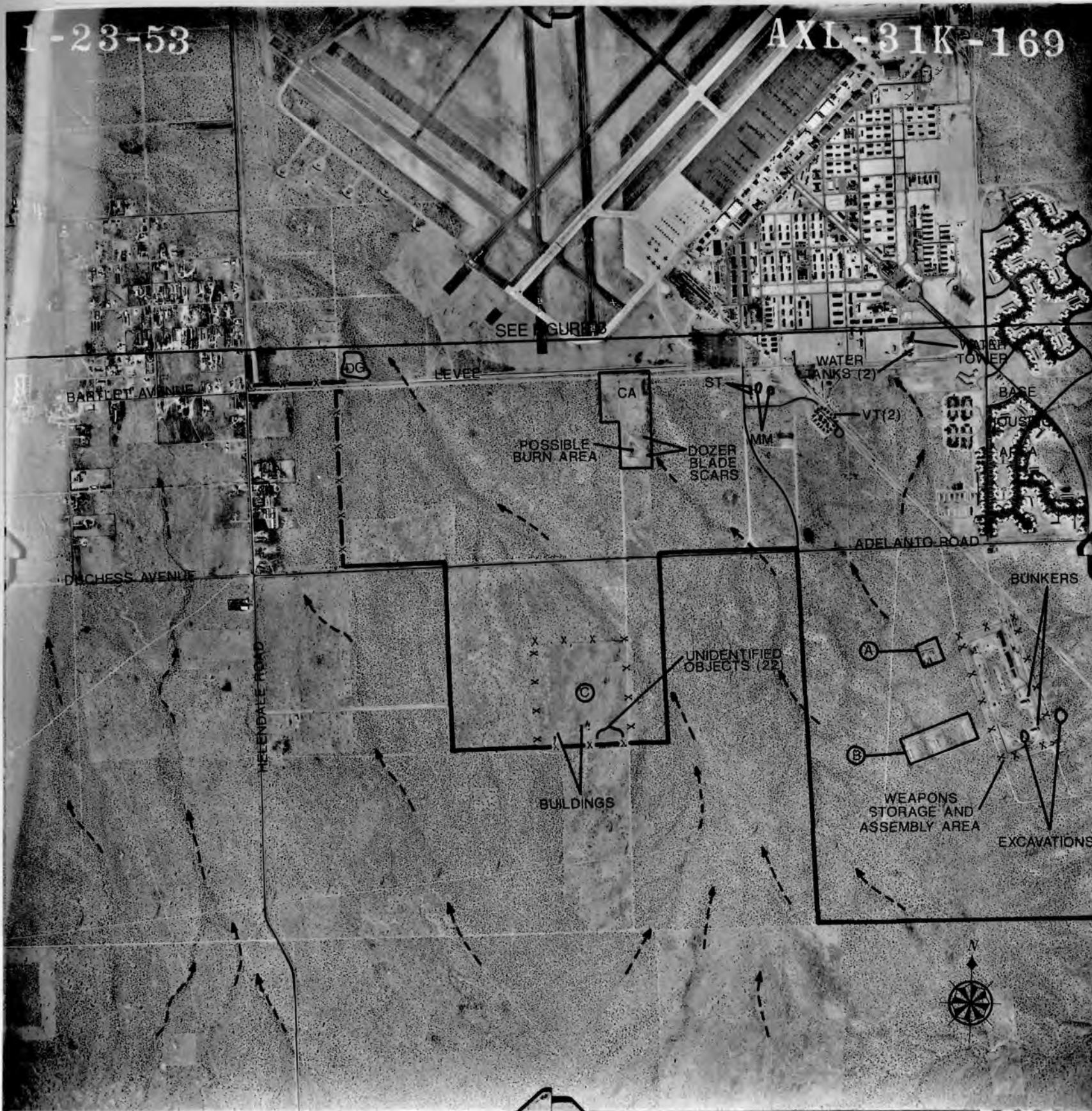
SITE FEATURES

- |||||| DIKE
- ||||| SLANDING LIQUID
- SL SLANDING LIQUID
- ⊖ EXCAVATION, PIT (EXTENSIVE)
- ⊕ MOUNDED MATERIAL (EXTENSIVE)
- MM MOUNDED MATERIAL (SMALL)
- CR CRATES/BOXES
- DR DRUMS
- HT HORIZONTAL TANK
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- FL FILL
- IM IMPOUNDMENT
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- OF OUTFALL
- SD SLUDGE
- ST STAIN
- SW SOLID WASTE
- TR TRENCH
- VS VEGETATION STRESS
- WD WASTE DISPOSAL AREA
- WL WETLAND

Figure 4. George Air Force Base, January 23, 1953. Approximate scale 1:20,000.

JANUARY 23, 1953 (FIGURE 5)

This photo shows the southwest portion of George Air Force Base. Directly south of the main north/south runways is an area which has had the sagebrush and other vegetation removed. The southern portion of the area shows discolored ground, which could possibly be an old burn area, and scars from recent bulldozer activity. East of this area are two stains and some unidentified mounded material. Again, the stains appear to be burn stains. Two, well-contained vertical storage tanks are noted east of this area. South of the base housing area is a separately secured area which appears to be a weapons storage and assembly area. Two earth-covered bunkers, three probable assembly buildings, and four unidentified smaller buildings are noted within the secured area. An excavation is noted in the southern portion of the area and is probably construction related. Annotations A and B, west of this area, are probably assembly related. Annotation A has two drive-thru revetted areas which are presently storing unidentified objects. Annotation B has three drive-thru revetted areas. Annotation C is an unidentified secured, cleared area. Two buildings and 22 unidentified objects (possibly vehicles) are noted within the area.



INTERPRETATION CODE

BOUNDARIES AND LIMITS

- x-x-x-x FENCED SITE BOUNDARY
- UNFENCED SITE BOUNDARY
- x x x x x FENCE
- STUDY AREA

DRAINAGE

- DRAINAGE
- FLOW DIRECTION
- INDETERMINATE DRAINAGE

TRANSPORTATION/UTILITY

- ===== VEHICLE ACCESS
- +++++ RAILWAY

SITE FEATURES

- |||||| DIKE
- ⊞ STANDING LIQUID
- SL STANDING LIQUID
- ⊞ EXCAVATION, PIT (EXTENSIVE)
- ⊞ MOUNDED MATERIAL (EXTENSIVE)
- MM MOUNDED MATERIAL (SMALL)
- CR CRATES/BOXES
- DR DRUMS
- HT HORIZONTAL TANK
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- OF OUTFALL
- SD SLUDGE
- ST STAIN
- SW SOLID WASTE
- TR TRENCH
- VS VEGETATION STRESS
- WD WASTE DISPOSAL AREA
- WL WETLAND

Figure 5. George Air Force Base, January 23, 1953. Approximate scale 1:20,000.

JANUARY 23, 1953 (FIGURE 6)

This photo shows the southeastern portion of George Air Force Base. The only item of environmental significance, within the base area shown, is a cleared area with three trench-like excavations. The westernmost of these excavations contains possible waste material (trash); the remaining two appear empty. Unidentified vehicular activity is visible within this area. The small impoundment noted northeast of the base perimeter appears to contain water. A borrow area is noted along the southern perimeter of the base. An earthen berm is located in a cleared area west of the borrow area. Its purpose is unknown. South of the borrow area and Adelanto Road is an area of extraction activity and two cleared areas. Activity within these areas is unidentified.



INTERPRETATION CODE

BOUNDARIES AND LIMITS

- x-x-x-x FENCED SITE BOUNDARY
- UNFENCED SITE BOUNDARY
- x x x x x FENCE
- - - - STUDY AREA

DRAINAGE

- - - - DRAINAGE
- FLOW DIRECTION
- - - - INDETERMINATE DRAINAGE

TRANSPORTATION/UTILITY

- ==== VEHICLE ACCESS
- + + + + RAILWAY

SITE FEATURES

- |||||| DIKE
- ⊞ STANDING LIQUID
- SL STANDING LIQUID
- ⊞ EXCAVATION, PIT (EXTENSIVE)
- ⊞ MOUNDED MATERIAL (EXTENSIVE)
- MM MOUNDED MATERIAL (SMALL)
- CR CRATES/BOXES
- DR DRUMS
- HT HORIZONTAL TANK
- PT PRESSURE TANK
- VT VERTICAL TANK
- CA CLEARED AREA
- DG DISTURBED GROUND
- FL FILL
- IM IMPOUNDMENT
- LG LAGOON
- OF OUTFALL
- SD SLUDGE
- ST STAIN
- SW SOLID WASTE
- TR TRENCH
- VS VEGETATION STRESS
- WD WASTE DISPOSAL AREA
- WL WETLAND

Figure 6. George Air Force Base, January 23, 1953. Approximate scale 1:20,000.

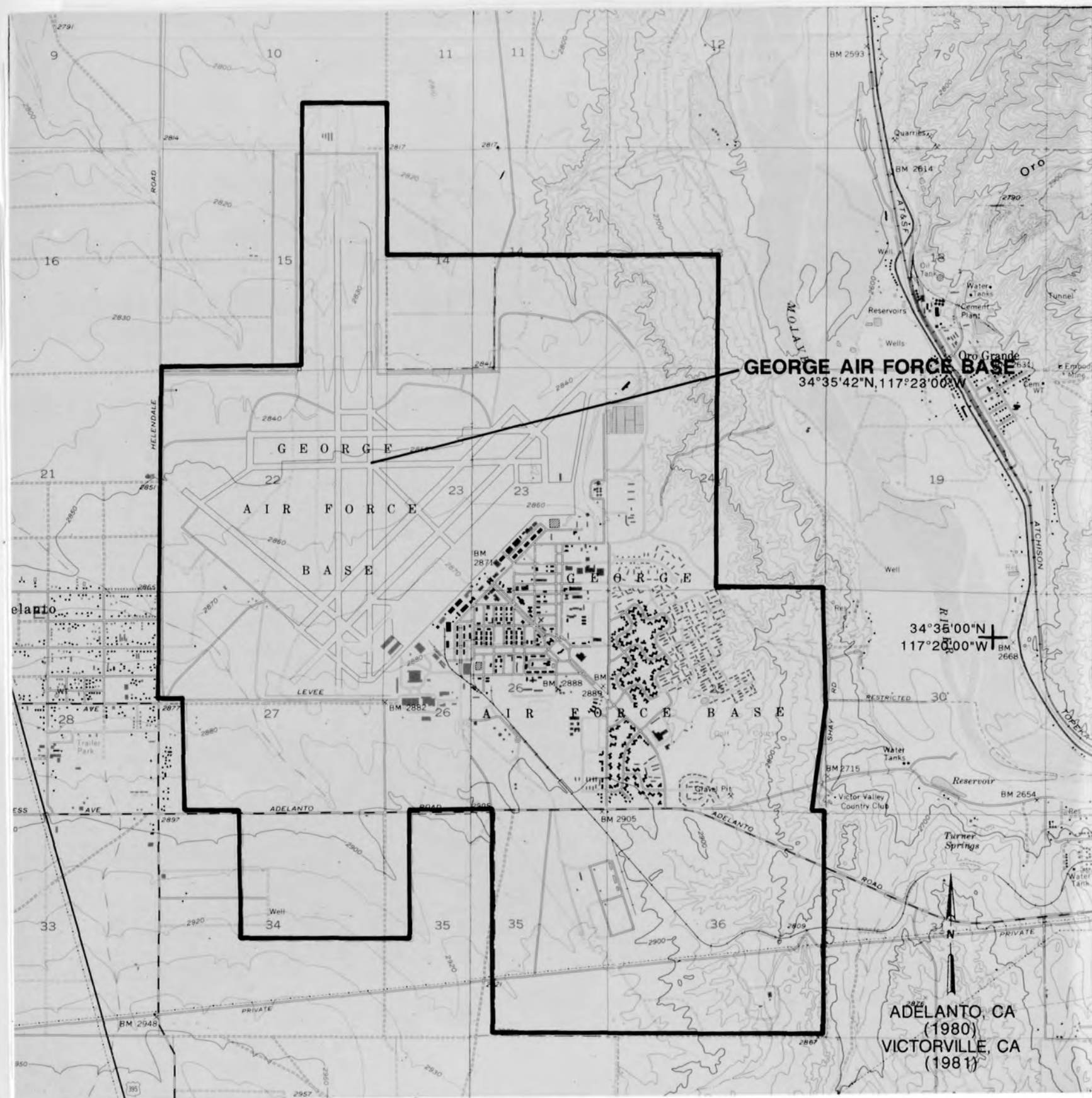


Figure 7. Local site location and 1959 photo index map. Scale 1:35,000.

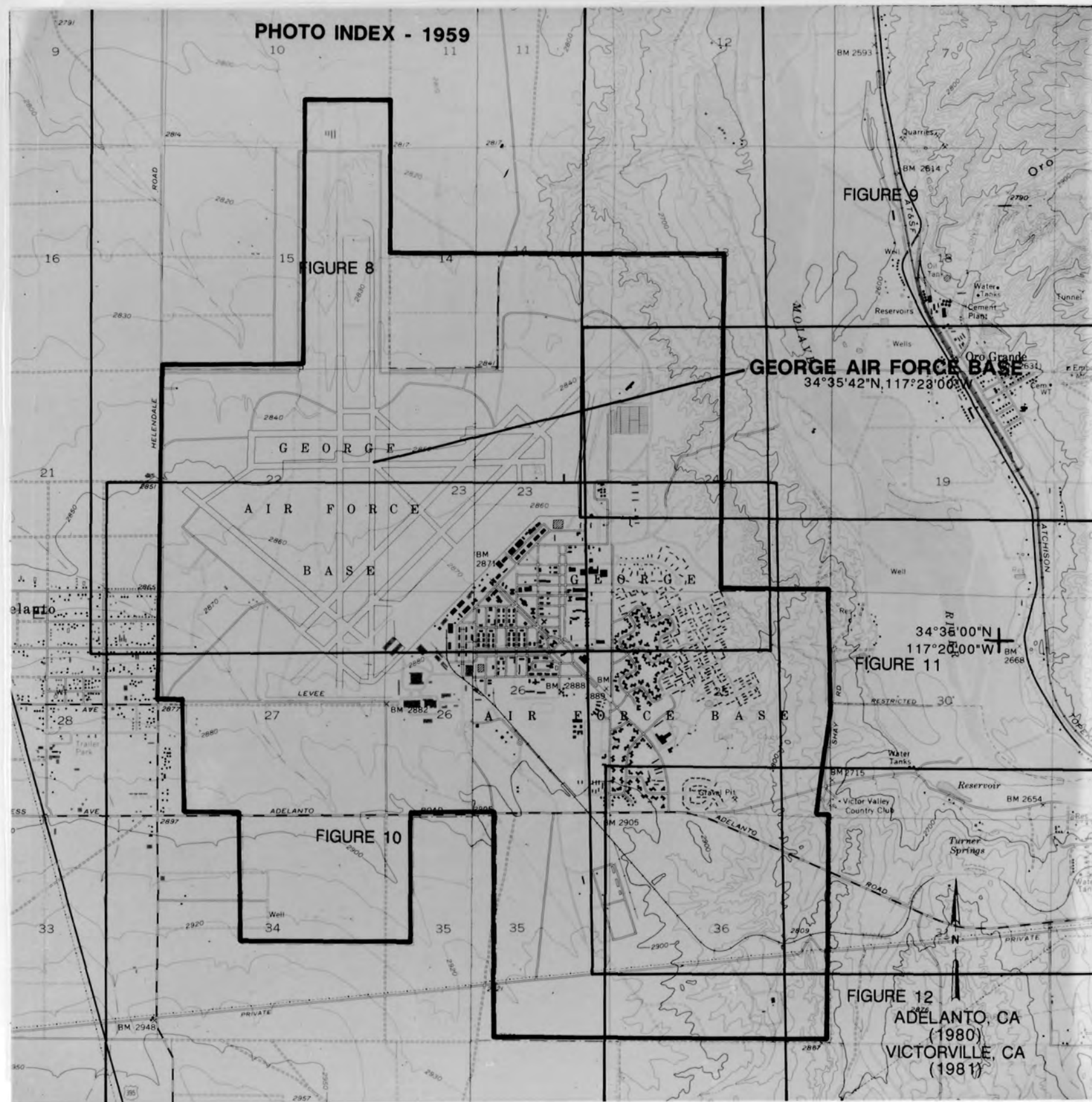


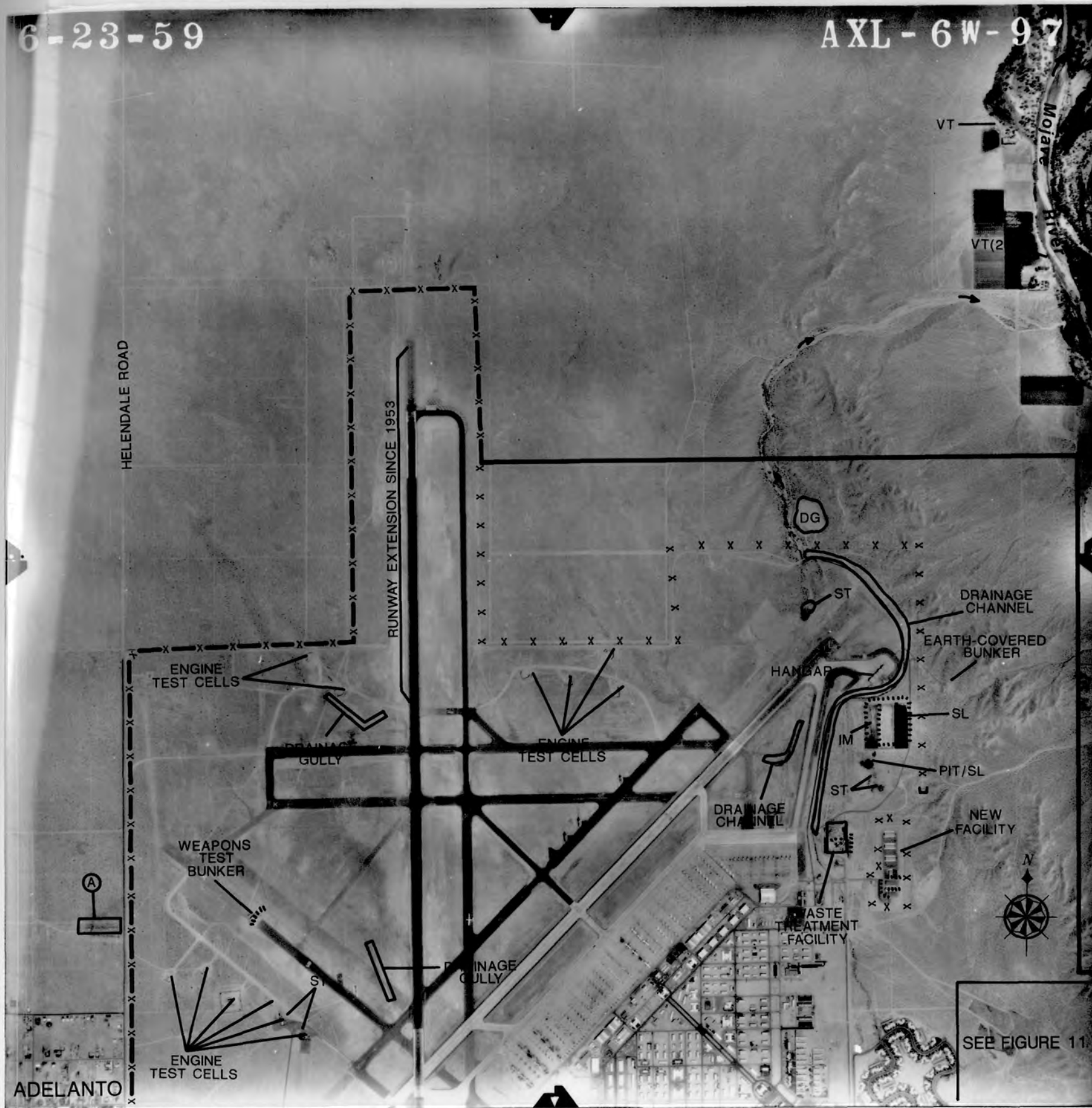
Figure 7. Local site location and 1959 photo index map. Scale 1:35,000.

JUNE 23, 1959 (FIGURE 8)

This photo shows the northwestern portion of George Air Force Base. There has been little change of environmental significance in this portion of the base since the 1953 photo coverage (Figure 3). The main north/south runways have been extended to the north. A new, probable weapons related, facility has been constructed east of the waste treatment facility. The waste treatment facility's percolation ponds, located north of this facility, remain unchanged with the exception that the easternmost pond now contains liquid. The center pond also appears cleaner than previously noted. Staining and standing liquid are noted south of the ponds. This area has been identified as a fire training area. The trench noted in 1953 in the northwest corner of the base is no longer visible. At Annotation A, outside the western perimeter fence, is the location of a trench noted in 1953. The poor resolution of this photo denies confirmation as to whether this trench still exists. Staining is still visible within aircraft parking and maintenance areas.

6-23-59

AXL-6W-97



INTERPRETATION CODE

BOUNDARIES AND LIMITS

- x-x-x FENCED SITE BOUNDARY
- UNFENCED SITE BOUNDARY
- x x x x x FENCE
- - - STUDY AREA

DRAINAGE

- - - DRAINAGE
- ← FLOW DIRECTION
- - - INDETERMINATE DRAINAGE

TRANSPORTATION/UTILITY

- ==== VEHICLE ACCESS
- + + + RAILWAY

SITE FEATURES

- ////// DIKE
- SL STANDING LIQUID
- SL STANDING LIQUID
- ⊖ EXCAVATION, PIT (EXTENSIVE)
- ⊖ MOUNDED MATERIAL (EXTENSIVE)
- MM MOUNDED MATERIAL (SMALL)
- CR CRATES/BOXES
- DR DRUMS
- HT HORIZONTAL TANK
- PT PRESSURE TANK
- VT VERTICAL TANK
- CA CLEARED AREA
- DG DISTURBED GROUND
- FL FILL
- IM IMPOUNDMENT
- LG LAGOON
- OF OUTFALL
- SD SLUDGE
- ST STAIN
- SW SOLID WASTE
- TR TRENCH
- VS VEGETATION STRESS
- WD WASTE DISPOSAL AREA
- WL WETLAND

Figure 8. George Air Force Base, June 23, 1959. Approximate scale 1:20,000.

NOVEMBER 7, 1959 (FIGURE 9)

This photo shows that little change has occurred in the northeastern portion of George Air Force Base since the 1953 photo coverage (Figure 4). The cement plant, north of Oro Grande has undergone considerable expansion as has the Shay Quarry to the east.

11 - 7 - 59

AXL-19W-85

INTERPRETATION CODE

BOUNDARIES AND LIMITS

- x-x-x-x FENCED SITE BOUNDARY
- UNFENCED SITE BOUNDARY
- x x x x x FENCE
- STUDY AREA

DRAINAGE

- DRAINAGE
- ← FLOW DIRECTION
- - - - - INDETERMINATE DRAINAGE

TRANSPORTATION/UTILITY

- ===== VEHICLE ACCESS
- + + + + + RAILWAY

SITE FEATURES

- ||||||| DIKE
- ⊞ STANDING LIQUID
- SL STANDING LIQUID
- ⊞ EXCAVATION, PIT (EXTENSIVE)
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- WL WETLAND

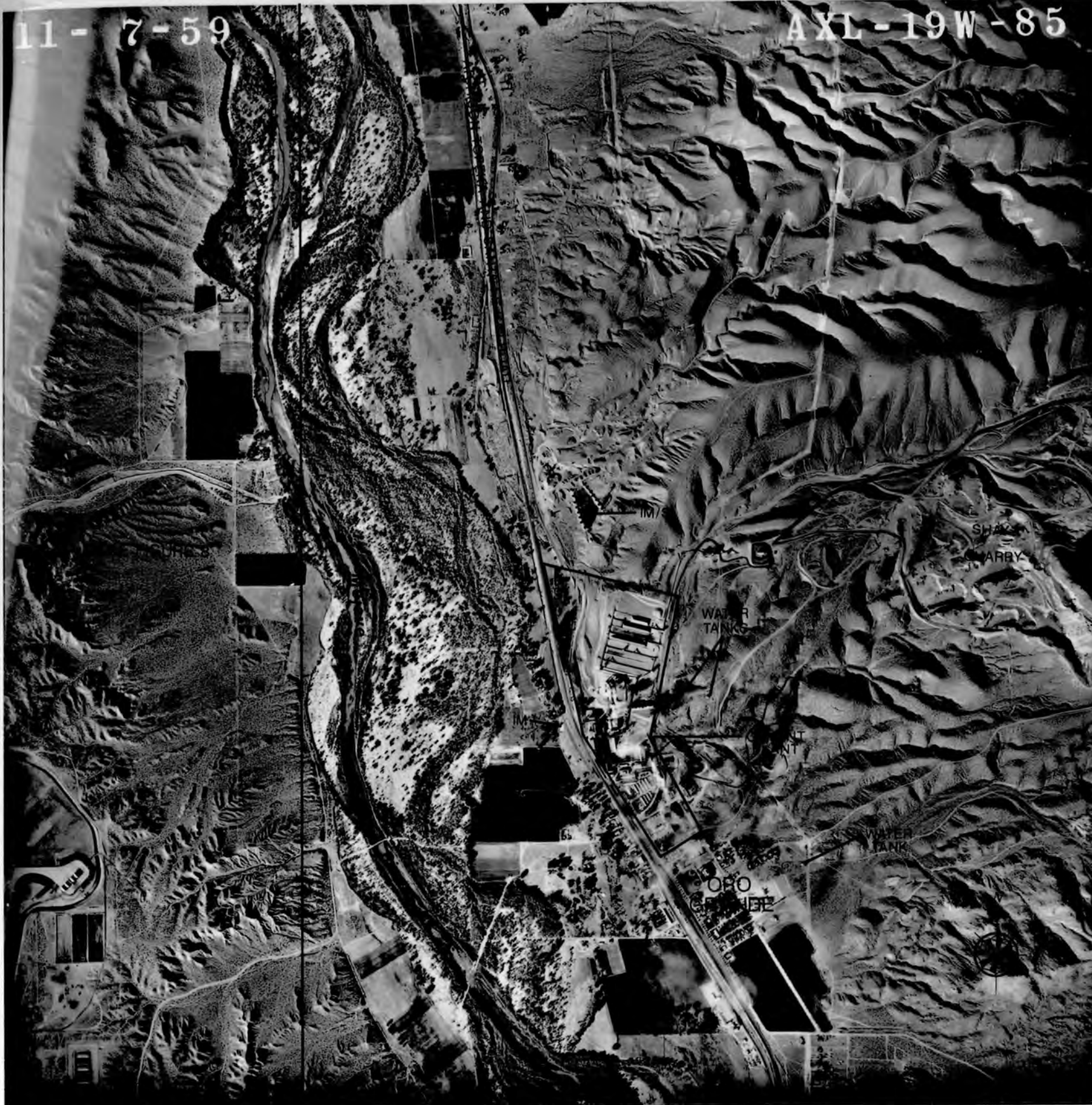


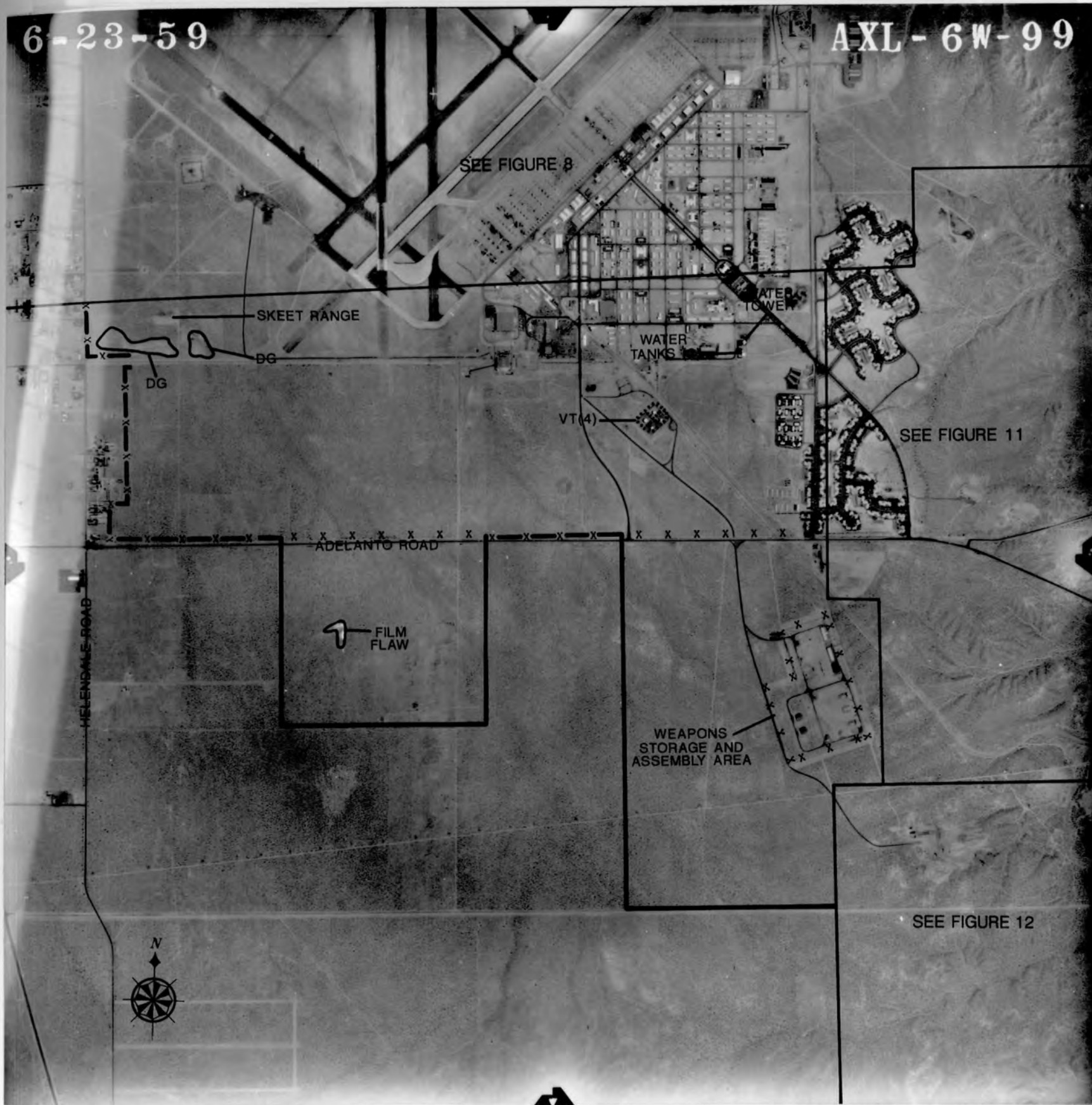
Figure 9. George Air Force Base, November 7, 1959. Approximate scale 1:20,000.

JUNE 23, 1959 (FIGURE 10)

This photo shows the southwest portion of George Air Force Base. The only changes noted since the 1953 photo coverage (Figure 5) are an additional two well-contained, vertical tanks, and an enlargement of the weapons storage and assembly area. Three small earth-covered bunkers and a drive-thru revetment have been added to the area. Annotations A, B, and C, noted on the 1953 photo coverage, are no longer active.

6-23-59

AXL-6W-99



INTERPRETATION CODE

BOUNDARIES AND LIMITS

- x-x-x-x FENCED SITE BOUNDARY
- UNFENCED SITE BOUNDARY
- x x x x x FENCE
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DRAINAGE

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TRANSPORTATION/UTILITY

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- + + + + RAILWAY

SITE FEATURES

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- SL STANDING LIQUID
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- MM MOUNDED MATERIAL (SMALL)
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- HT HORIZONTAL TANK
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- WD WASTE DISPOSAL AREA
- WL WETLAND

Figure 10. George Air Force Base, June 23, 1959. Approximate scale 1:20,000.

NOVEMBER 7, 1959 (FIGURE 11)

This photo shows the southeast portion of George Air Force Base. The major environmentally significant change to this area since the 1953 photo coverage (Figure 6) is in the area northeast of the base housing area. The 1953 photography showed a cleared area with three trenches; one possibly containing waste material. This area is presently covered with hundreds of dump-truck-size mounds of unidentified material. The material appears to be trash. Dirt roads lead both from the housing area and the operational portion of the base. No other significant changes are noted in this area since 1953.



INTERPRETATION CODE

BOUNDARIES AND LIMITS

- x-x-x-x FENCED SITE BOUNDARY
- UNFENCED SITE BOUNDARY
- x x x x x FENCE
- - - - - STUDY AREA

DRAINAGE

- - - - - DRAINAGE
- ← FLOW DIRECTION
- - - - - INDETERMINATE DRAINAGE

TRANSPORTATION/UTILITY

- ===== VEHICLE ACCESS
- + + + + + RAILWAY

SITE FEATURES

- |||||| DIKE
- ⊞ STANDING LIQUID
- SL STANDING LIQUID
- ⊞ EXCAVATION, PIT (EXTENSIVE)
- ⊞ MOUNDED MATERIAL (EXTENSIVE)
- MM MOUNDED MATERIAL (SMALL)
- CR CRATES/BOXES
- DR DRUMS
- HT HORIZONTAL TANK
- PT PRESSURE TANK
- VT VERTICAL TANK
- CA CLEARED AREA
- DG DISTURBED GROUND
- FL FILL
- IM IMPOUNDMENT
- LG LAGOON
- OF OUTFALL
- SD SLUDGE
- ST STAIN
- SW SOLID WASTE
- TR TRENCH
- VS VEGETATION STRESS
- WD WASTE DISPOSAL AREA
- WL WETLAND

Figure 11. George Air Force Base, November 7, 1959. Approximate scale 1:20,000.

NOVEMBER 7, 1959 (FIGURE 12)

This photo shows a new waste disposal area southeast of the weapons storage and assembly area. The 1953 photo coverage (Figure 6) showed two cleared areas and an area of extraction activity, but no active waste dumping in this area. Visible within Annotation A are at least seven trenches, four pits, and two excavations. Two of the three trenches on the west side of this area contain unidentified material, as do the four pits. The two excavations and remaining four trenches are empty. At Annotation B, numerous dump-truck-size mounds of unidentifiable material have been deposited. Dozer blade scars are visible within this area.



INTERPRETATION CODE

BOUNDARIES AND LIMITS

- X-X-X-X FENCED SITE BOUNDARY
- UNFENCED SITE BOUNDARY
- X X X X X X FENCE
- STUDY AREA

DRAINAGE

- DRAINAGE
- FLOW DIRECTION
- INDETERMINATE DRAINAGE

TRANSPORTATION/UTILITY

- ===== VEHICLE ACCESS
- +++++ RAILWAY

SITE FEATURES

- ||||||| DIKE
- ===== STANDING LIQUID
- SL STANDING LIQUID
- ⊖ EXCAVATION, PIT (EXTENSIVE)
- ⊕ MOUNDED MATERIAL (EXTENSIVE)
- MM MOUNDED MATERIAL (SMALL)
- CR CRATES/BOXES
- DR DRUMS
- HT HORIZONTAL TANK
- PT PRESSURE TANK
- VT VERTICAL TANK
- CA CLEARED AREA
- DG DISTURBED GROUND
- FL FILL
- IM IMPOUNDMENT
- LG LAGOON
- OF OUTFALL
- SD SLUDGE
- ST STAIN
- SW SOLID WASTE
- TR TRENCH
- VS VEGETATION STRESS
- WD WASTE DISPOSAL AREA
- WL WETLAND

Figure 12. George Air Force Base, November 7, 1959. Approximate scale 1:20,000.

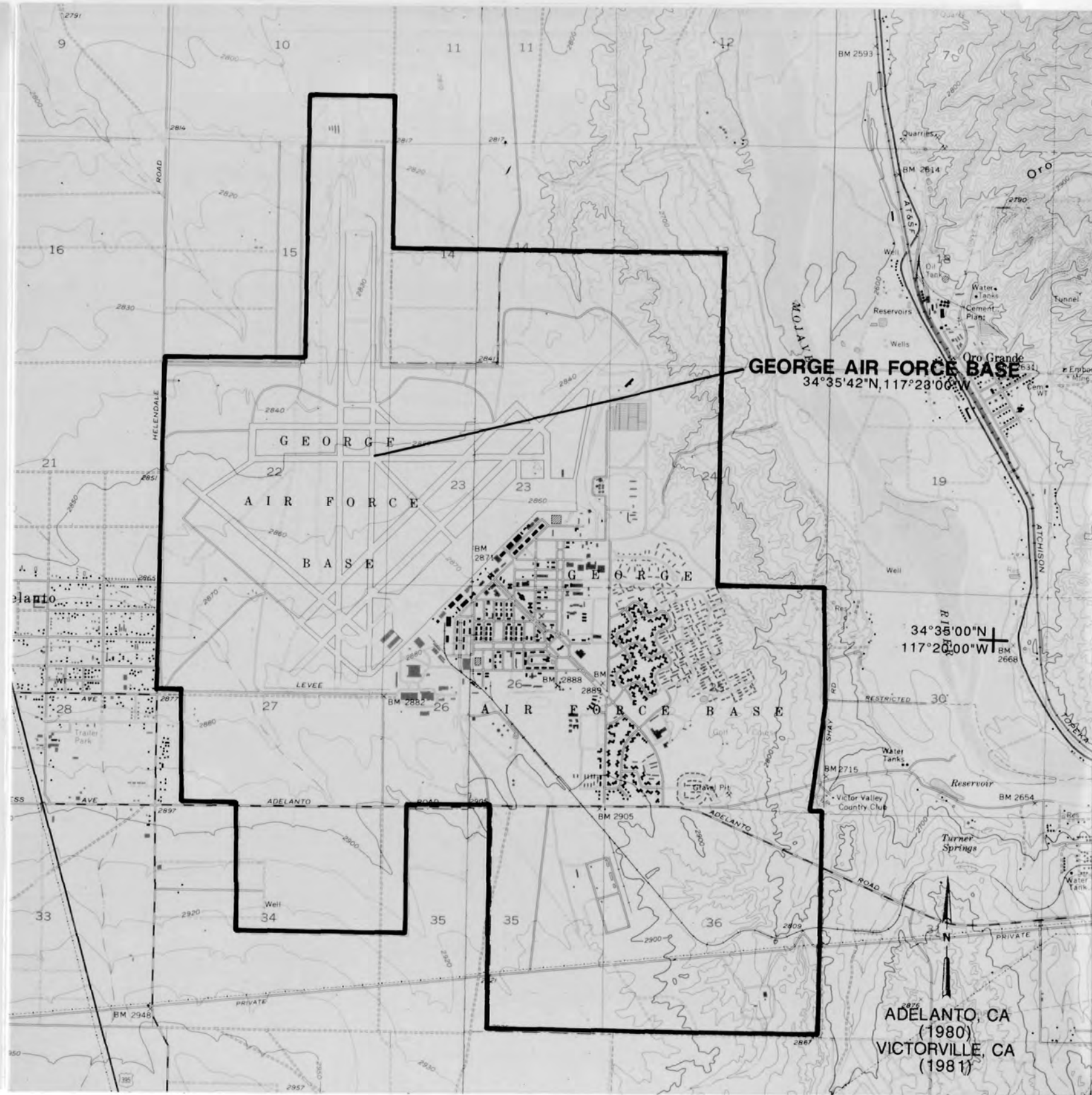


Figure 13. Local site location and 1968 photo index map. Scale 1:35,000.

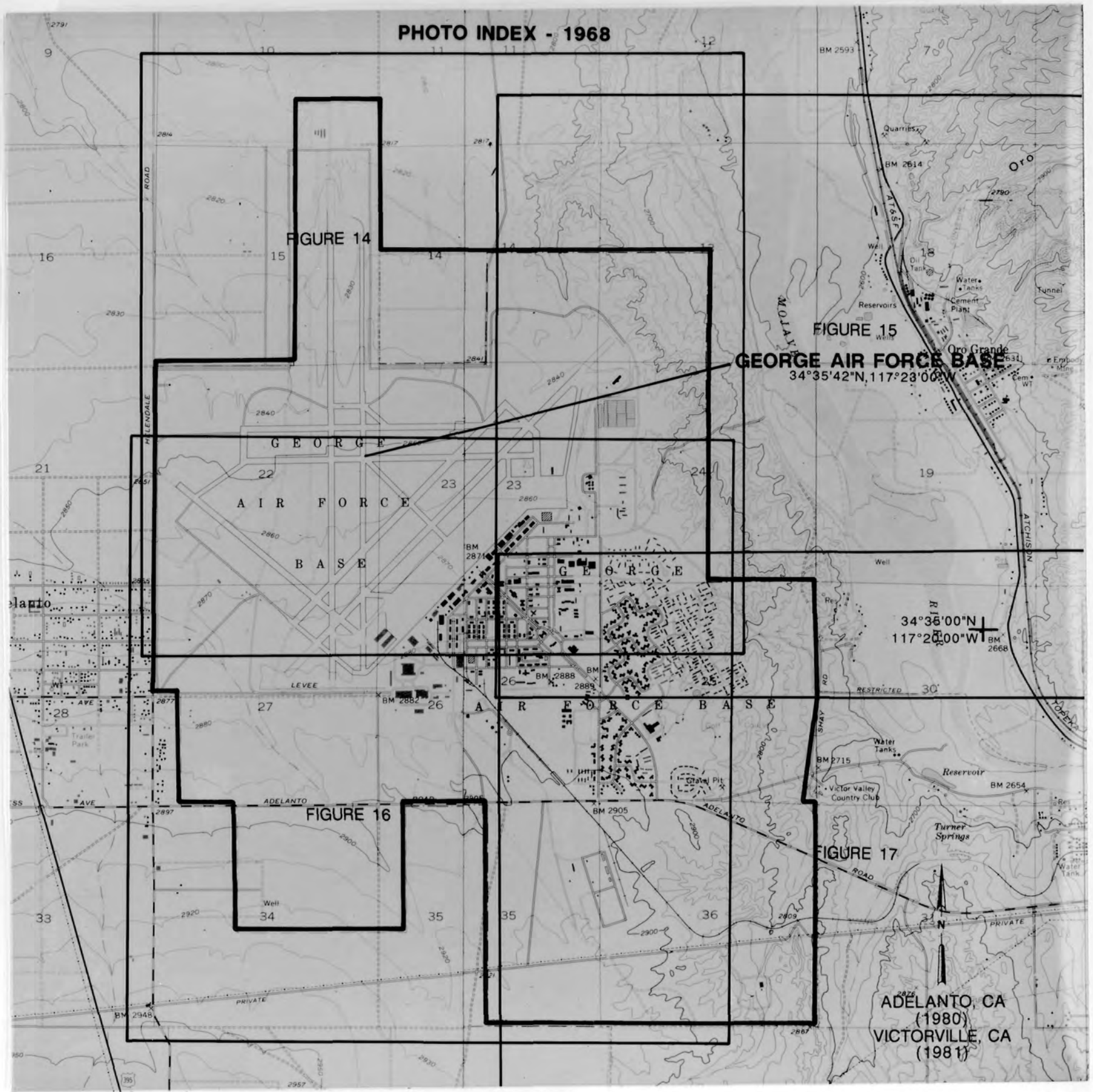


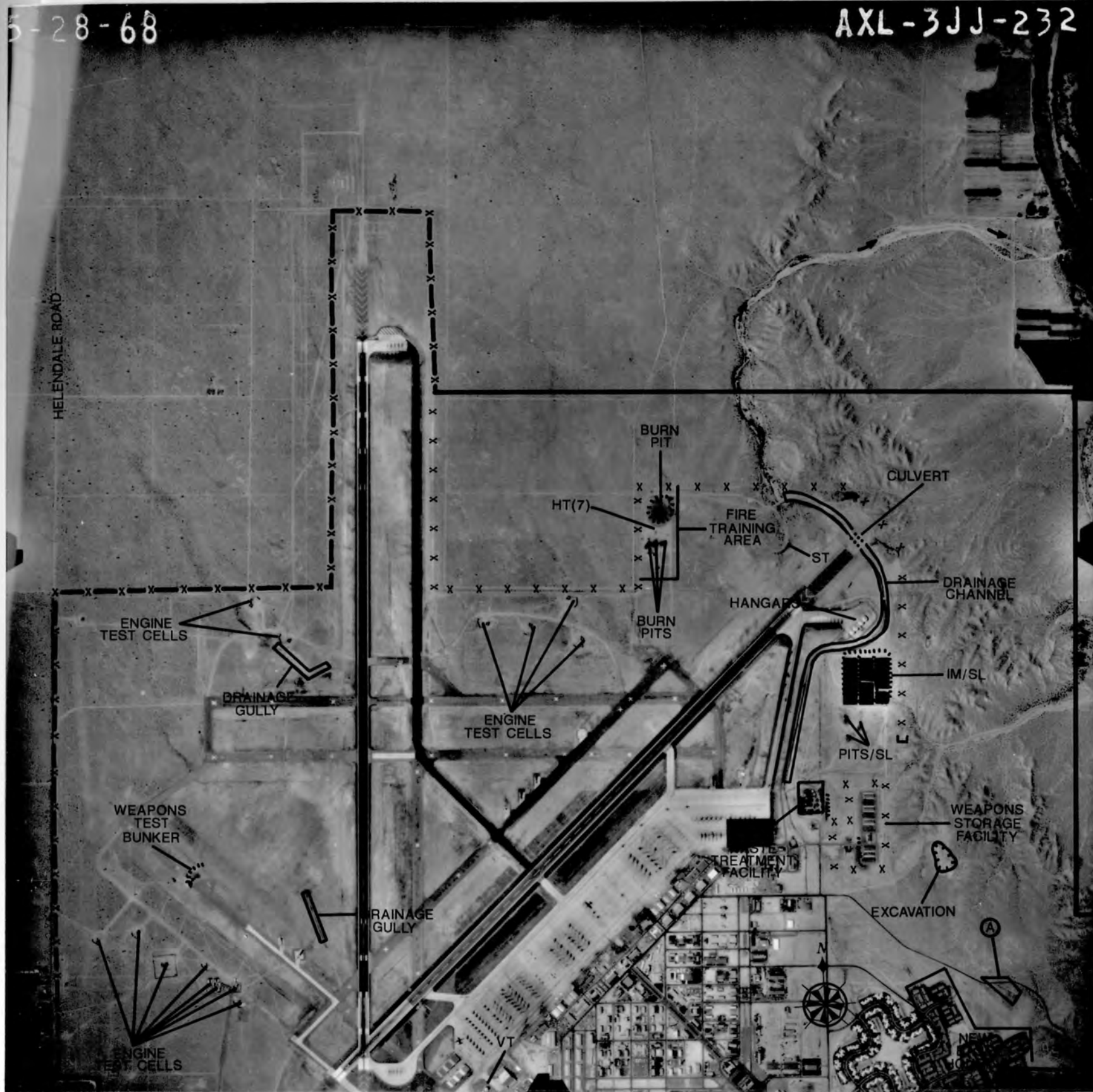
Figure 13. Local site location and 1968 photo index map. Scale 1:35,000.

MAY 28, 1968 (FIGURE 14)

This photo shows that a few changes have occurred in the northwestern portion of George Air Force Base since the 1959 photo coverage (Figure 8). The waste treatment facility's percolation ponds remain, but their configuration has been altered so that there are now five ponds instead of three. All the ponds contain liquid waste. The fire training area south of the ponds has three pits containing an unidentified liquid. A new fire training area has been constructed in the northeast portion of the base, north of the runways. This area has four burn pits, one of which has a low earthen berm surrounding it. Seven horizontal tanks are also noted in the area. The base housing area, in the southeast corner of the photo, has expanded. Numerous dump-truck-sized mounds of unidentifiable material are still visible at Annotation A though fewer than the number seen on the 1959 photo coverage (Figure 11). Staining is still visible in all aircraft parking and maintenance areas.

5-28-68

AXL-3JJ-232



INTERPRETATION CODE

BOUNDARIES AND LIMITS

- X-X-X-X FENCED SITE BOUNDARY
- UNFENCED SITE BOUNDARY
- X X X X X X FENCE
- STUDY AREA

DRAINAGE

- DRAINAGE
- > FLOW DIRECTION
- > INDETERMINATE DRAINAGE

TRANSPORTATION/UTILITY

- ===== VEHICLE ACCESS
- + + + + RAILWAY

SITE FEATURES

- ||||| DIKE
- ~~~~~ STANDING LIQUID
- SL STANDING LIQUID
- ⊖ EXCAVATION, PIT (EXTENSIVE)
- ⊖ MOUNDED MATERIAL (EXTENSIVE)
- MM MOUNDED MATERIAL (SMALL)
- CR CRATES/BOXES
- DR DRUMS
- HT HORIZONTAL TANK
- PT PRESSURE TANK
- VT VERTICAL TANK
- CA CLEARED AREA
- DG DISTURBED GROUND
- FL FILL
- IM IMPOUNDMENT
- LG LAGOON
- OF OUTFALL
- SD SLUDGE
- ST STAIN
- SW SOLID WASTE
- TR TRENCH
- VS VEGETATION STRESS
- WD WASTE DISPOSAL AREA
- WL WETLAND

Figure 14. George Air Force Base, May 28, 1968. Approximate scale 1:20,000.

MAY 28, 1968 (FIGURE 15)

This photo shows the northeastern portion of George Air Force Base. Little change has occurred in this portion of the base since the 1959 photo coverage (Figure 11) with the exception of the base housing expansion.

5-28-68

AXL-3JJ-196



INTERPRETATION CODE

BOUNDARIES AND LIMITS

- x-x-x FENCED SITE BOUNDARY
- UNFENCED SITE BOUNDARY
- x x x x x FENCE
- STUDY AREA

DRAINAGE

- - - DRAINAGE
- ← FLOW DIRECTION
- - - INDETERMINATE DRAINAGE

TRANSPORTATION/UTILITY

- ===== VEHICLE ACCESS
- + + + RAILWAY

SITE FEATURES

- ||||| DIKE
- SL STANDING LIQUID
- SL STANDING LIQUID
- ⊖ EXCAVATION, PIT (EXTENSIVE)
- ⊖ MOUNDED MATERIAL (EXTENSIVE)
- MM MOUNDED MATERIAL (SMALL)
- CR CRATES/BOXES
- DR DRUMS
- HT HORIZONTAL TANK
- PT PRESSURE TANK
- VT VERTICAL TANK
- CA CLEARED AREA
- DG DISTURBED GROUND
- FL FILL
- IM IMPOUNDMENT
- LG LAGOON
- OF OUTFALL
- SD SLUDGE
- ST STAIN
- SW SOLID WASTE
- TR TRENCH
- VS VEGETATION STRESS
- WD WASTE DISPOSAL AREA
- WL WETLAND

Figure 15. George Air Force Base, May 28, 1968. Approximate scale 1:20,000.

MAY 28, 1968 (FIGURE 16)

This photo shows the southwest portion of George Air Force Base. Three areas of disturbed ground are noted in the western portion of this area. The two smaller areas may be waste disposal sites. The larger, southernmost area's purpose is unknown. Poor photo quality precludes interpretation of activity within these areas. South of the main runways is an area where trash has been dumped.

5-28-68

AXL-3JJ-230



INTERPRETATION CODE

BOUNDARIES AND LIMITS

- x-x-x-x FENCED SITE BOUNDARY
- UNFENCED SITE BOUNDARY
- x x x x x x FENCE
- STUDY AREA

DRAINAGE

- DRAINAGE
- ← FLOW DIRECTION
- INDETERMINATE DRAINAGE

TRANSPORTATION/UTILITY

- ===== VEHICLE ACCESS
- + + + + RAILWAY

SITE FEATURES

- ||||| DIKE
- ===== STANDING LIQUID
- SL STANDING LIQUID
- EXCAVATION, PIT (EXTENSIVE)
- MOUNDED MATERIAL (EXTENSIVE)
- MM MOUNDED MATERIAL (SMALL)
- CR CRATES/BOXES
- DR DRUMS
- HT HORIZONTAL TANK
- PT PRESSURE TANK
- VT VERTICAL TANK
- CA CLEARED AREA
- DG DISTURBED GROUND
- FL FILL
- IM IMPOUNDMENT
- LG LAGOON
- OF OUTFALL
- SD SLUDGE
- ST STAIN
- SW SOLID WASTE
- TR TRENCH
- VS VEGETATION STRESS
- WD WASTE DISPOSAL AREA
- WL WETLAND

Figure 16. George Air Force Base, May 28, 1968. Approximate scale 1:20,000.

MAY 28, 1968 (FIGURE 17)

This photo shows the southeast portion of George Air Force Base. The only change noted since the 1959 photo coverage (Figure 12) has occurred in the waste dump area southeast of the weapons storage and assembly area. The numerous trenches, pits, and excavations noted in this area in 1959 have all been covered. Two new empty trenches are noted. The active working face of the waste dump is near the east-central portion of the area. East of the active portion of the dump is an area consisting of several earthen berms. The activity could not be identified in this area, but no waste materials were noted. The numerous dump-truck-size mounds of material noted in 1959 are no longer visible within the dump area. The poor quality of this photo may be obscuring their presence.

5-28-68

AXL-3JJ-198



INTERPRETATION CODE

BOUNDARIES AND LIMITS

- x-x-x-x FENCED SITE BOUNDARY
- UNFENCED SITE BOUNDARY
- x x x x x x FENCE
- STUDY AREA

DRAINAGE

- DRAINAGE
- ← FLOW DIRECTION
- INDETERMINATE DRAINAGE

TRANSPORTATION/UTILITY

- ===== VEHICLE ACCESS
- ++++ RAILWAY

SITE FEATURES

- |||||| DIKE
- ===== STANDING LIQUID
- SL STANDING LIQUID
- ⊖ EXCAVATION, PIT (EXTENSIVE)
- ⊕ MOUNDED MATERIAL (EXTENSIVE)
- MM MOUNDED MATERIAL (SMALL)
- CR CRATES/BOXES
- DR DRUMS
- HT HORIZONTAL TANK
- PT PRESSURE TANK
- VT VERTICAL TANK
- CA CLEARED AREA
- DG DISTURBED GROUND
- FL FILL
- IM IMPOUNDMENT
- LG LAGOON
- OF OUTFALL
- SD SLUDGE
- ST STAIN
- SW SOLID WASTE
- TR TRENCH
- VS VEGETATION STRESS
- WD WASTE DISPOSAL AREA
- WL WETLAND

Figure 17. George Air Force Base, May 28, 1968. Approximate scale 1:20,000.

DECEMBER 1, 1975 (FIGURE 18)

Only a portion of George Air Force Base was covered on this year's photo coverage date. This photo shows the western portion of the base. There has been little change in this portion of the base since the 1968 photo coverage (Figures 14 and 16). The area at Annotation A appears to be a dump area. Two mounds of unidentified material are visible in the eastern portion of this area. Photo scale and quality precluded identification of the type of material. A mound is also noted southeast of Annotation A. The clean appearance of this mound suggests it might be fill material. No other changes are noted in this portion of the site.

INTERPRETATION CODE

BOUNDARIES AND LIMITS

- X-X-X-X FENCED SITE BOUNDARY
- UNFENCED SITE BOUNDARY
- X X X X X X FENCE
- STUDY AREA

DRAINAGE

- DRAINAGE
- FLOW DIRECTION
- INDETERMINATE DRAINAGE

TRANSPORTATION/UTILITY

- ===== VEHICLE ACCESS
- ++++ RAILWAY

SITE FEATURES

- /////// DIKE
- ⊞ STANDING LIQUID
- SL STANDING LIQUID
- ⊞ EXCAVATION, PIT (EXTENSIVE)
- ⊞ MOUNDED MATERIAL (EXTENSIVE)
- MM MOUNDED MATERIAL (SMALL)
- CR CRATES/BOXES
- DR DRUMS
- HT HORIZONTAL TANK
- PT PRESSURE TANK
- VT VERTICAL TANK
- CA CLEARED AREA
- DG DISTURBED GROUND
- FL FILL
- IM IMPOUNDMENT
- LG LAGOON
- OF OUTFALL
- SD SLUDGE
- ST STAIN
- SW SOLID WASTE
- TR TRENCH
- VS VEGETATION STRESS
- WD WASTE DISPOSAL AREA
- WL WETLAND

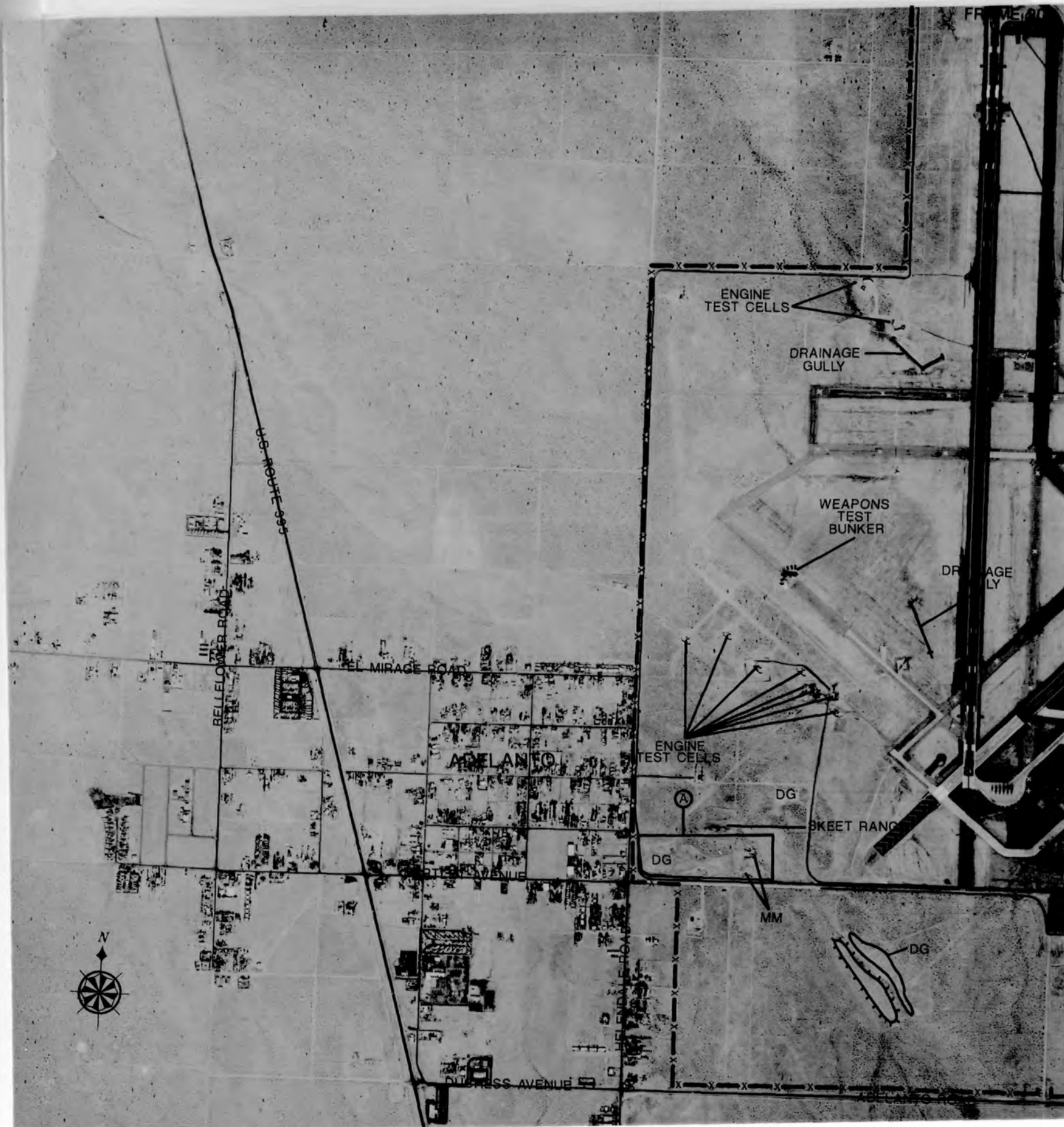


Figure 18. George Air Force Base, December 1, 1975. Approximate scale 1:18,000.

OCTOBER 7, 1984 (FIGURE 19)

This small scale photo shows all but the western portion of George Air Force Base. Due to the photographic scale, only a gross interpretation of features was possible. The changes noted since the 1968 photo coverage (Figures 14-17) are few. A new sewage treatment facility has been constructed northeast of the base, adjacent to the Mojave River. This facility has nine percolation ponds, five of these containing liquid waste. The old percolation ponds, situated on-base near the end of the northeast/southwest runways, are empty and appear abandoned. The on-base sewage treatment facility also appears inactive. The waste disposal area, southeast of the weapons storage and assembly area, does not appear active. The two unlined, possible impoundments, in the eastern portion of this area, are empty but have stained bottoms. No other environmentally significant items were detected.



INTERPRETATION CODE

BOUNDARIES AND LIMITS

- x-x-x-x FENCED SITE BOUNDARY
- UNFENCED SITE BOUNDARY
- x x x x x x FENCE
- STUDY AREA

DRAINAGE

- DRAINAGE
- ← FLOW DIRECTION
- INDETERMINATE DRAINAGE

TRANSPORTATION/UTILITY

- ===== VEHICLE ACCESS
- ++++ RAILWAY

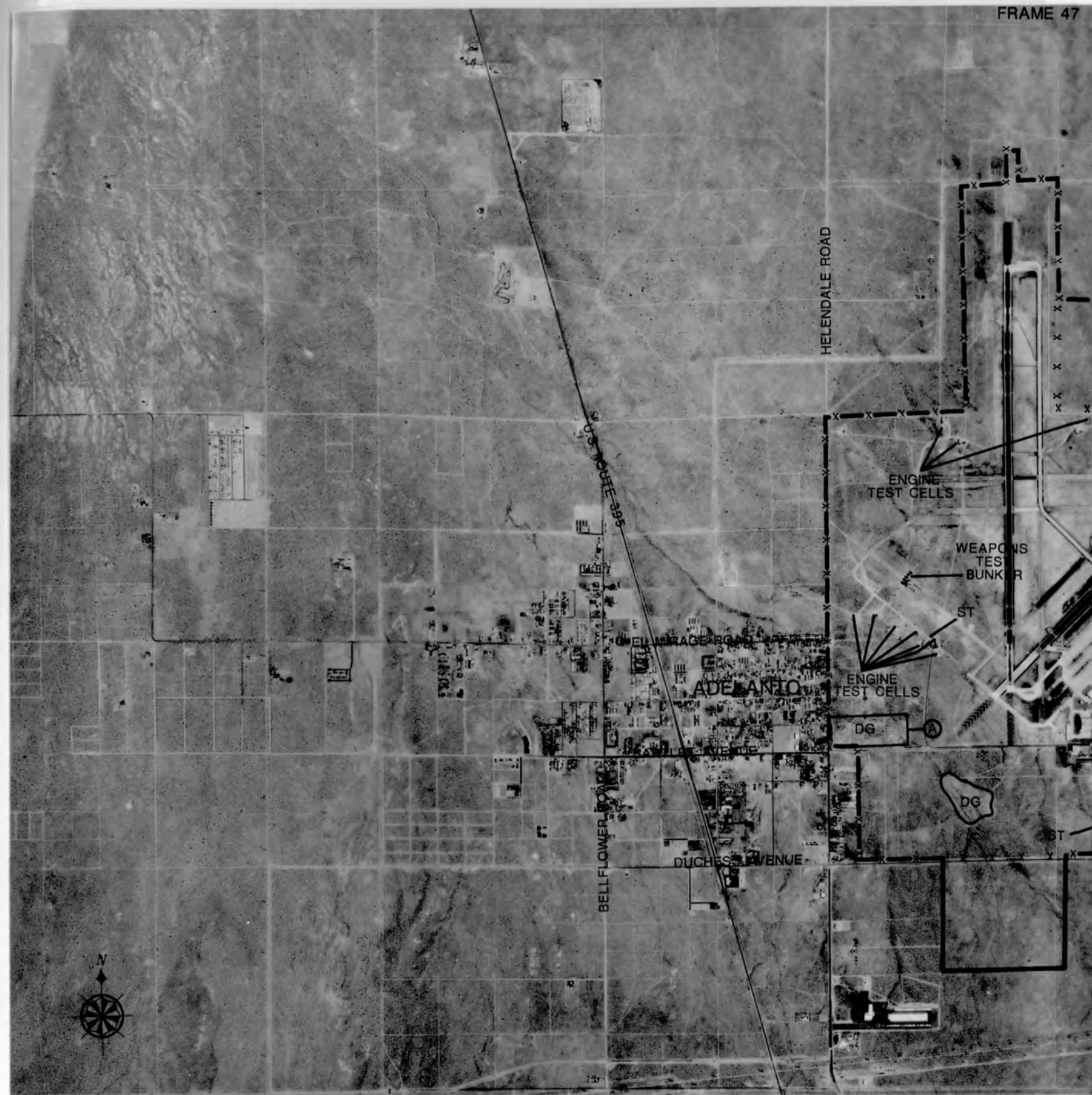
SITE FEATURES

- |||||| DIKE
- ===== STANDING LIQUID
- SL STANDING LIQUID
- ⊖ EXCAVATION, PIT (EXTENSIVE)
- ⊖ MOUNDED MATERIAL (EXTENSIVE)
- MM MOUNDED MATERIAL (SMALL)
- CR CRATES/BOXES
- DR DRUMS
- HT HORIZONTAL TANK
- PT PRESSURE TANK
- VT VERTICAL TANK
- CA CLEARED AREA
- DG DISTURBED GROUND
- FL FILL
- IM IMPOUNDMENT
- LG LAGOON
- OF OUTFALL
- SD SLUDGE
- ST STAIN
- SW SOLID WASTE
- TR TRENCH
- VS VEGETATION STRESS
- WD WASTE DISPOSAL AREA
- WL WETLAND

Figure 19. George Air Force Base, October 7, 1984. Approximate scale 1:33,000.

JULY 28, 1985 (FIGURE 20)

This photo shows the western portion of George Air Force Base. The eastern portion of the base was not covered on this date. See Figure 19 for 1984 coverage of the eastern portion of the base. Little change is visible to this portion of the site since the 1975 photo coverage (Figure 18). Annotation A still shows signs of unidentified activity due to the ground scarring visible, but it does not appear dumping is occurring in the area at this time. The disturbed ground noted southeast of Annotation A remains relatively unchanged, though the mounded material is not noted. The small scale of this photography again hampers detailed interpretation. Staining is noted south of the runways. Its source is unknown. Staining continues to be visible in aircraft parking and maintenance areas.



INTERPRETATION CODE

BOUNDARIES AND LIMITS

- X-X-X-X FENCED SITE BOUNDARY
- UNFENCED SITE BOUNDARY
- X X X X X X FENCE
- - - - - STUDY AREA

DRAINAGE

- - - - - DRAINAGE
- > FLOW DIRECTION
- - - - - INDETERMINATE DRAINAGE

TRANSPORTATION/UTILITY

- ==== VEHICLE ACCESS
- + + + + RAILWAY

SITE FEATURES

- ||||| DIKE
- ⊞ STANDING LIQUID
- SL STANDING LIQUID
- ⊞ EXCAVATION, PIT (EXTENSIVE)
- ⊞ MOUNDED MATERIAL (EXTENSIVE)
- MM MOUNDED MATERIAL (SMALL)
- CR CRATES/BOXES
- DR DRUMS
- HT HORIZONTAL TANK
- PT PRESSURE TANK
- VT VERTICAL TANK
- CA CLEARED AREA
- DG DISTURBED GROUND
- FL FILL
- IM IMPOUNDMENT
- LG LAGOON
- OF OUTFALL
- SD SLUDGE
- ST STAIN
- SW SOLID WASTE
- TR TRENCH
- VS VEGETATION STRESS
- WD WASTE DISPOSAL AREA
- WL WETLAND

Figure 20. George Air Force Base, July 28, 1985. Approximate scale 1:33,000.

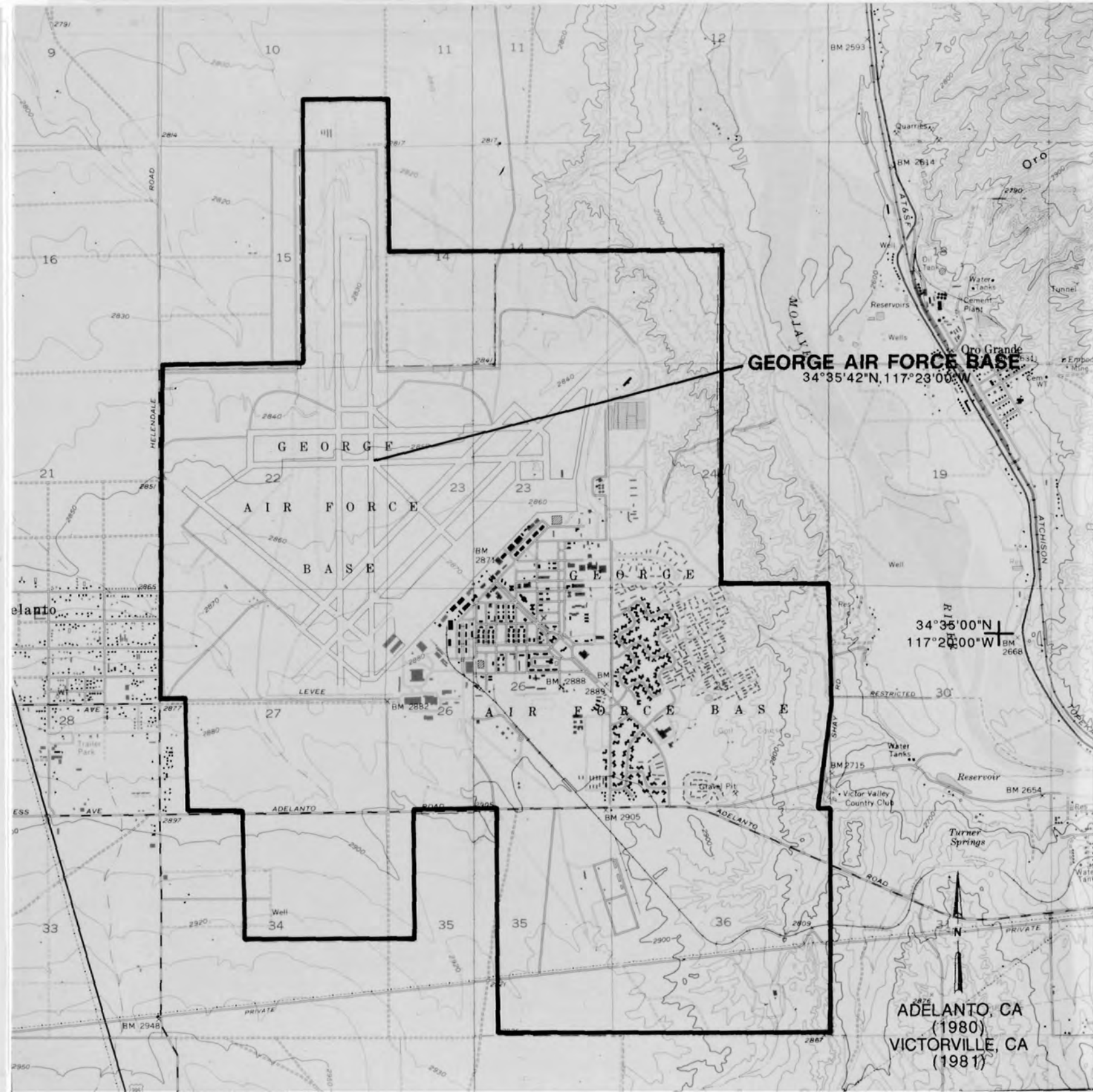


Figure 21. Local site location and 1989 photo index map. Scale 1:35,000.

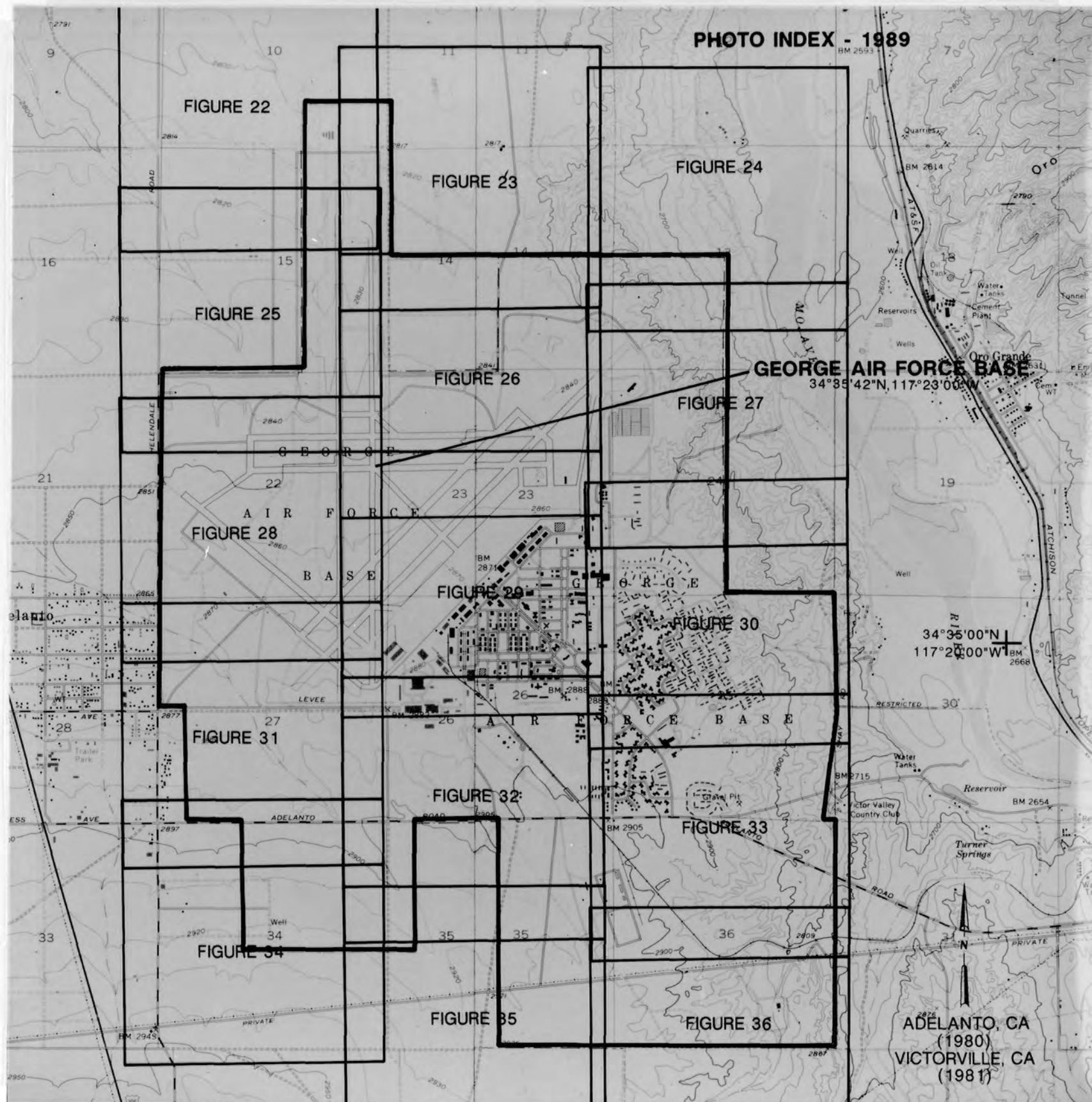
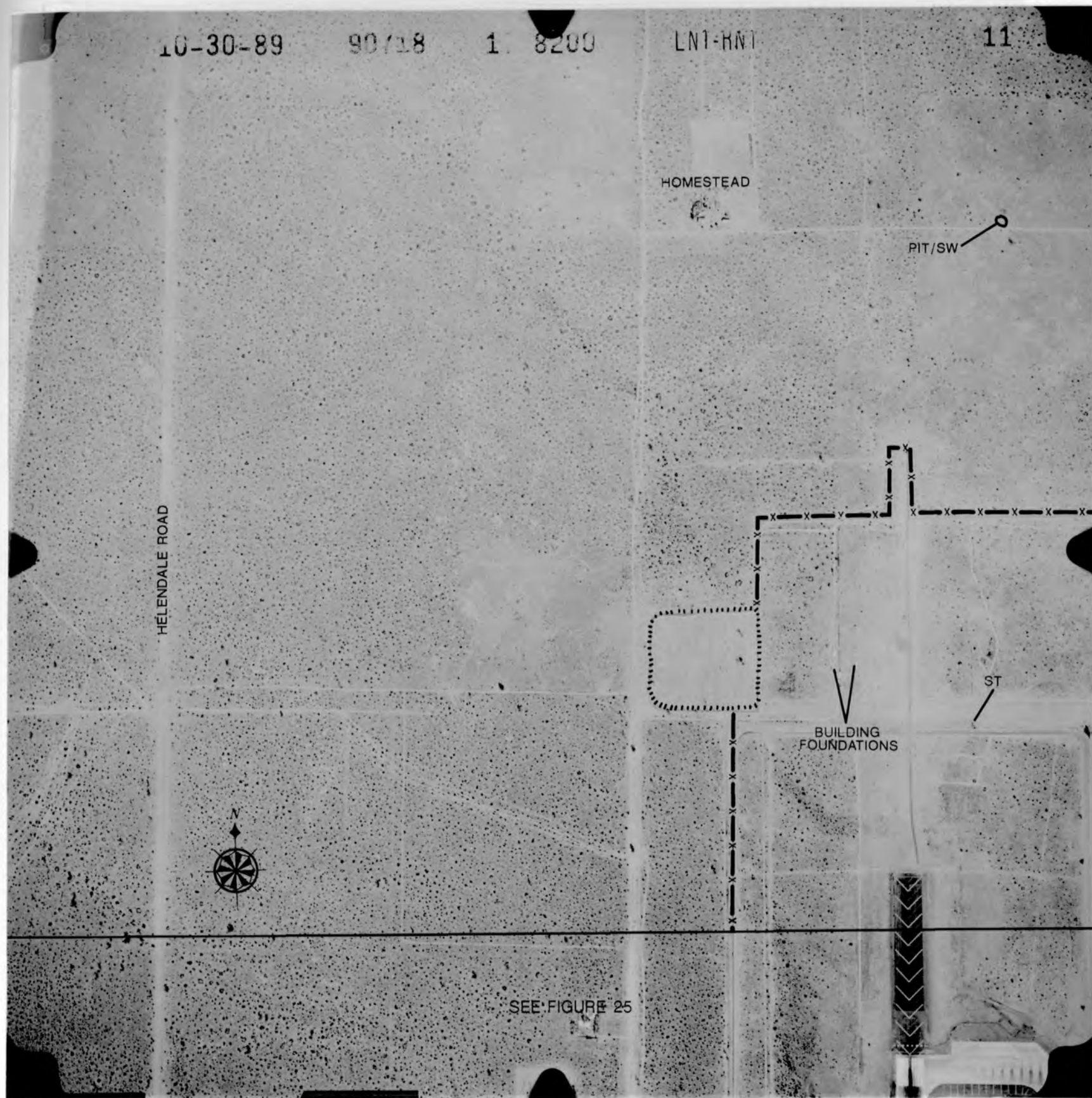


Figure 21. Local site location and 1989 photo index map. Scale 1:35,000.

OCTOBER 30, 1989 (FIGURE 22)

This photo shows the extreme northwestern portion of George Air Force Base. The building foundations noted are those of the probable chicken farm noted in 1953 (Figure 3). East of the building foundations is a dark stain located just off the perimeter road. Source of the staining is unknown, though it appears to be indiscriminate dumping. A cleared, bermed area is noted outside the western perimeter fence. There is nothing within this area; the dark spots noted on the photo are trees and tree shadows. A shallow pit is noted, due north of the runway, off the site. Trash is noted in this pit, probably, again the result of indiscriminate dumping.



INTERPRETATION CODE

BOUNDARIES AND LIMITS

- x-x-x-x-x FENCED SITE BOUNDARY
- UNFENCED SITE BOUNDARY
- x x x x x x FENCE
- STUDY AREA

DRAINAGE

- DRAINAGE
- ← FLOW DIRECTION
- INDETERMINATE DRAINAGE

TRANSPORTATION/UTILITY

- ===== VEHICLE ACCESS
- +++++ RAILWAY

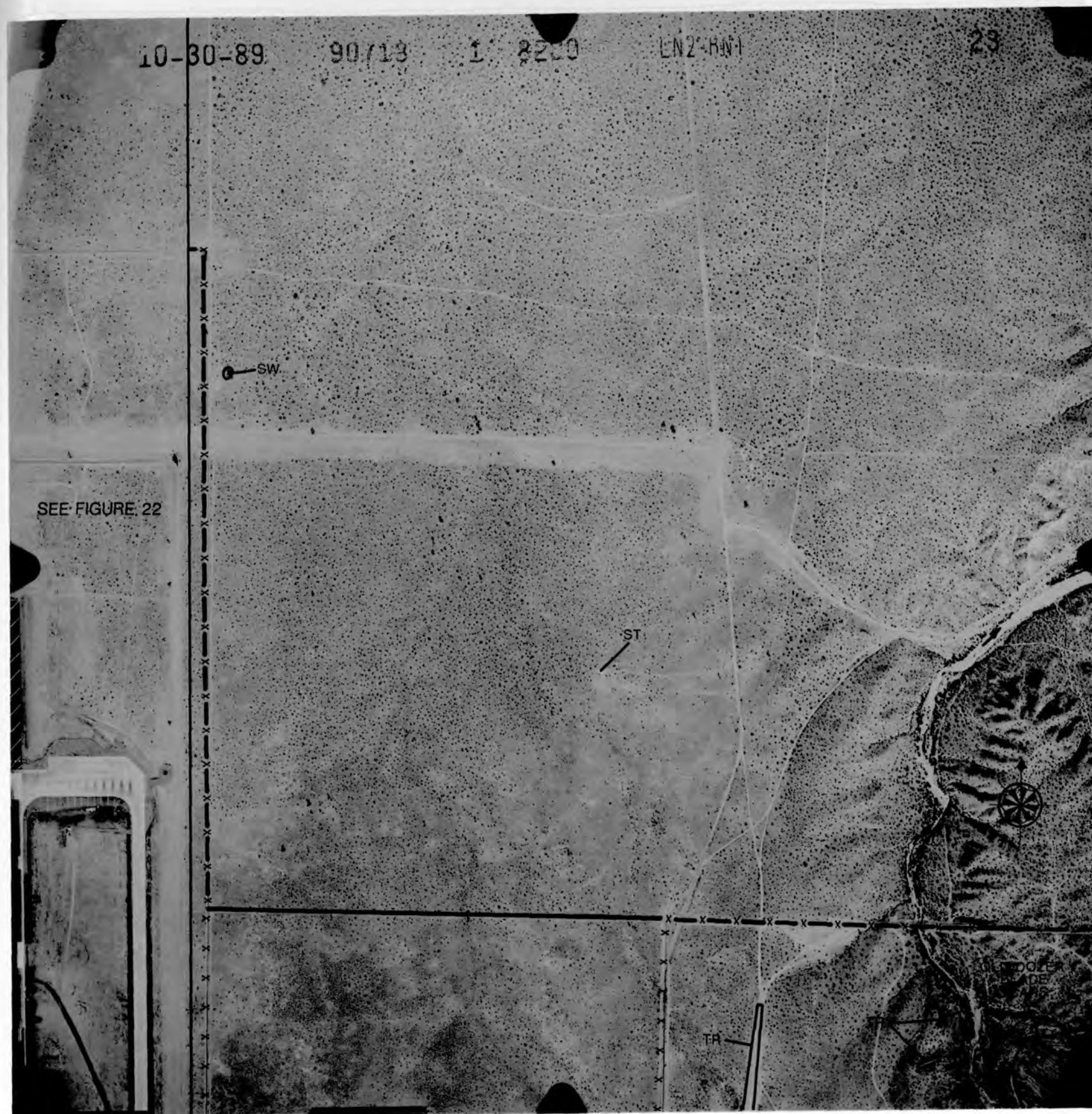
SITE FEATURES

- |||||| DIKE
- ===== SL STANDING LIQUID
- SL STANDING LIQUID
- ⊖ EXCAVATION, PIT (EXTENSIVE)
- ⊖ MOUNDED MATERIAL (EXTENSIVE)
- MM MOUNDED MATERIAL (SMALL)
- CR CRATES/BOXES
- DR DRUMS
- HT HORIZONTAL TANK
- PT PRESSURE TANK
- VT VERTICAL TANK
- CA CLEARED AREA
- DG DISTURBED GROUND
- FL FILL
- IM IMPOUNDMENT
- LG LAGOON
- OF OUTFALL
- SD SLUDGE
- ST STAIN
- SW SOLID WASTE
- TR TRENCH
- VS VEGETATION STRESS
- WD WASTE DISPOSAL AREA
- WL WETLAND

Figure 22. George Air Force Base, October 30, 1989. Approximate scale 1:8,200.

OCTOBER 30, 1989 (FIGURE 23)

This photo shows the north-central portion of George Air Force Base. Three trenches are noted within this portion of the base. These trenches are all empty. The two smaller trenches appear to be cuts made into the desert floor by a bulldozer. The larger trench terminates to the south, ending near the perimeter road (Figure 26). There is no disposal activity within this trench. East of these trenches is an area showing old, weathered bulldozer scars. This may have been an old borrow area. North of the trenches, outside the base perimeter, is a white-toned stain. The stain material appears to be either a white powder or a dried liquid. Its source is unknown. Vehicle tracks in the desert lead to and from this area to an improved dirt road to the east. Trash has been disposed of in a depression northwest of this stain, adjacent to the perimeter fence. The dark tone of the material suggests it may have been burned.



INTERPRETATION CODE

BOUNDARIES AND LIMITS

- x-x-x-x FENCED SITE BOUNDARY
- UNFENCED SITE BOUNDARY
- x x x x x FENCE
- STUDY AREA

DRAINAGE

- ←- - - DRAINAGE
- ← FLOW DIRECTION
- - - - - INDETERMINATE DRAINAGE

TRANSPORTATION/UTILITY

- ===== VEHICLE ACCESS
- + + + + + RAILWAY

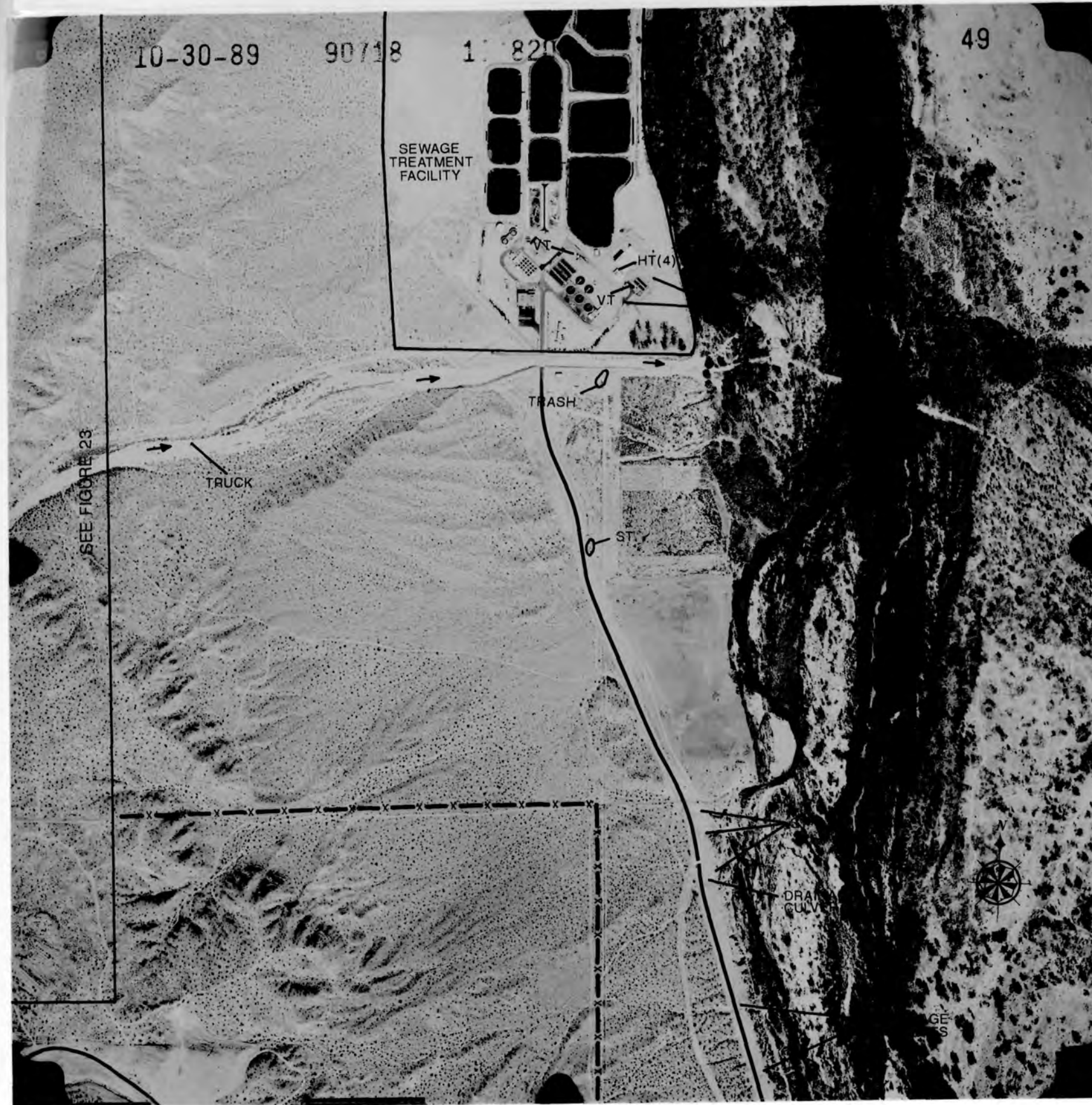
SITE FEATURES

- ||||||| DIKE
- ⊞ STANDING LIQUID
- SL STANDING LIQUID
- ⊞ EXCAVATION, PIT (EXTENSIVE)
- ⊞ MOUNDED MATERIAL (EXTENSIVE)
- MM MOUNDED MATERIAL (SMALL)
- CR CRATES/BOXES
- DR DRUMS
- HT HORIZONTAL TANK
- PT PRESSURE TANK
- VT VERTICAL TANK
- CA CLEARED AREA
- DG DISTURBED GROUND
- FL FILL
- IM IMPOUNDMENT
- LG LAGOON
- OF OUTFALL
- SD SLUDGE
- ST STAIN
- SW SOLID WASTE
- TR TRENCH
- VS VEGETATION STRESS
- WD WASTE DISPOSAL AREA
- WL WETLAND

Figure 23. George Air Force Base, October 30, 1989. Approximate scale 1:8,200.

OCTOBER 30, 1989 (FIGURE 24)

This photo shows the northeastern portion of George Air Force Base. There are no environmentally significant items in this portion of the air base. White-toned stains are noted north and east of the base, along the road to the sewage treatment facility. It appears that a liquid has been dumped down the slope off the side of the road. These may also be just alkali stains from water runoff through the culverts. A small mound of trash is noted outside the south end of the treatment facility.



INTERPRETATION CODE

BOUNDARIES AND LIMITS

- x-x-x-x FENCED SITE BOUNDARY
- UNFENCED SITE BOUNDARY
- x x x x x FENCE
- STUDY AREA

DRAINAGE

- DRAINAGE
- ← FLOW DIRECTION
- INDETERMINATE DRAINAGE

TRANSPORTATION/UTILITY

- ===== VEHICLE ACCESS
- ++++ RAILWAY

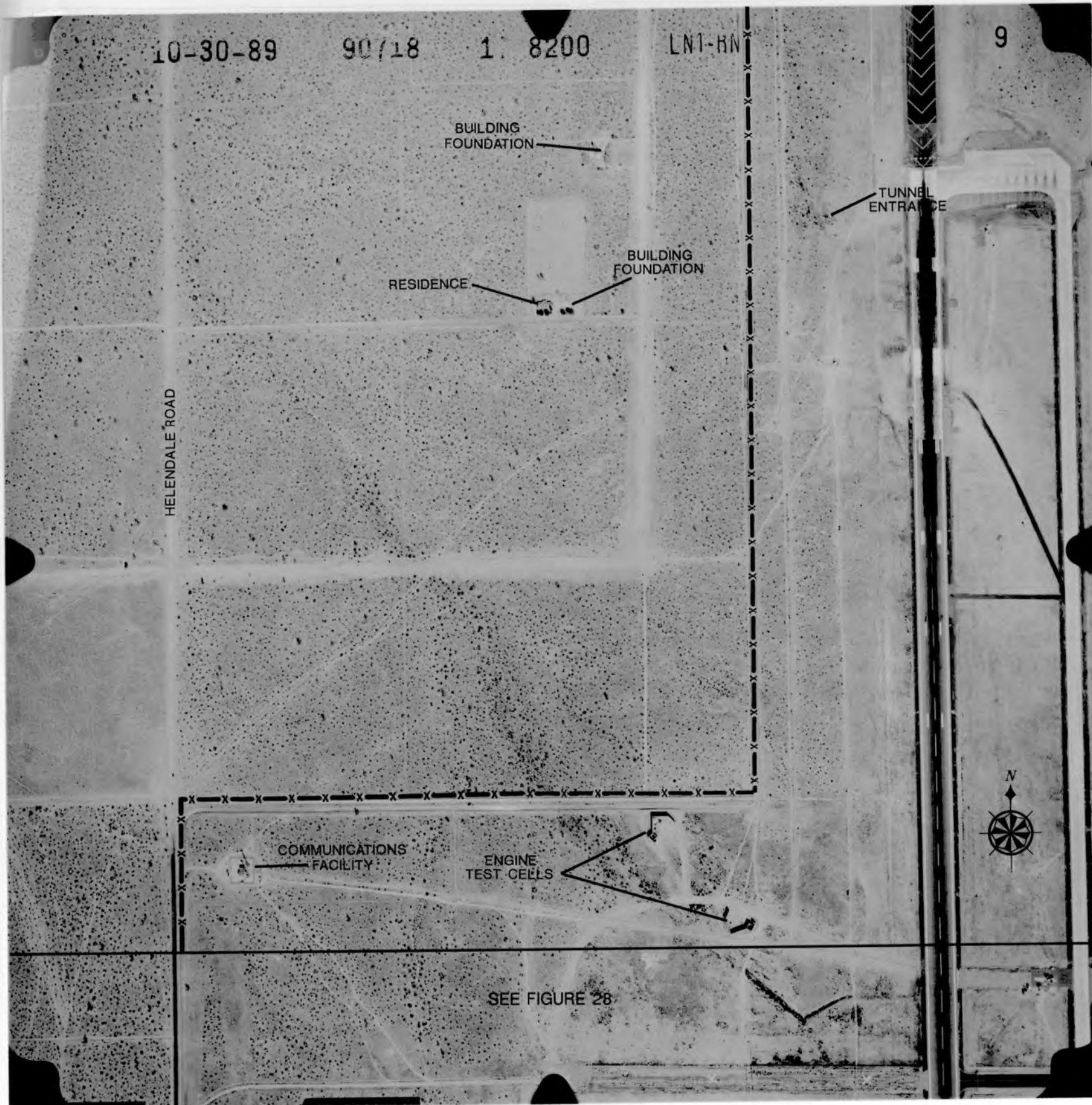
SITE FEATURES

- |||||| DIKE
- ===== STANDING LIQUID
- SL STANDING LIQUID
- ⊖ EXCAVATION, PIT (EXTENSIVE)
- ⊕ MOUNDED MATERIAL (EXTENSIVE)
- MM MOUNDED MATERIAL (SMALL)
- CR CRATES/BOXES
- DR DRUMS
- HT HORIZONTAL TANK
- PT PRESSURE TANK
- VT VERTICAL TANK
- CA CLEARED AREA
- DG DISTURBED GROUND
- FL FILL
- IM IMPOUNDMENT
- LG LAGOON
- OF OUTFALL
- SD SLUDGE
- ST STAIN
- SW SOLID WASTE
- TR TRENCH
- VS VEGETATION STRESS
- WD WASTE DISPOSAL AREA
- WL WETLAND

Figure 24. George Air Force Base, October 30, 1989. Approximate scale 1:8,200.

OCTOBER 30, 1989 (FIGURE 25)

This photo shows the west-central portion of George Air Force Base. Visible are two engine test cells which no longer appear to be in use. No environmentally significant items were noted in this portion of the site.



INTERPRETATION CODE

BOUNDARIES AND LIMITS

- x-x-x-x FENCED SITE BOUNDARY
- UNFENCED SITE BOUNDARY
- x x x x x x FENCE
- - - - STUDY AREA

DRAINAGE

- - - - DRAINAGE
- ← FLOW DIRECTION
- - - - INDETERMINATE DRAINAGE

TRANSPORTATION/UTILITY

- ==== VEHICLE ACCESS
- + + + + RAILWAY

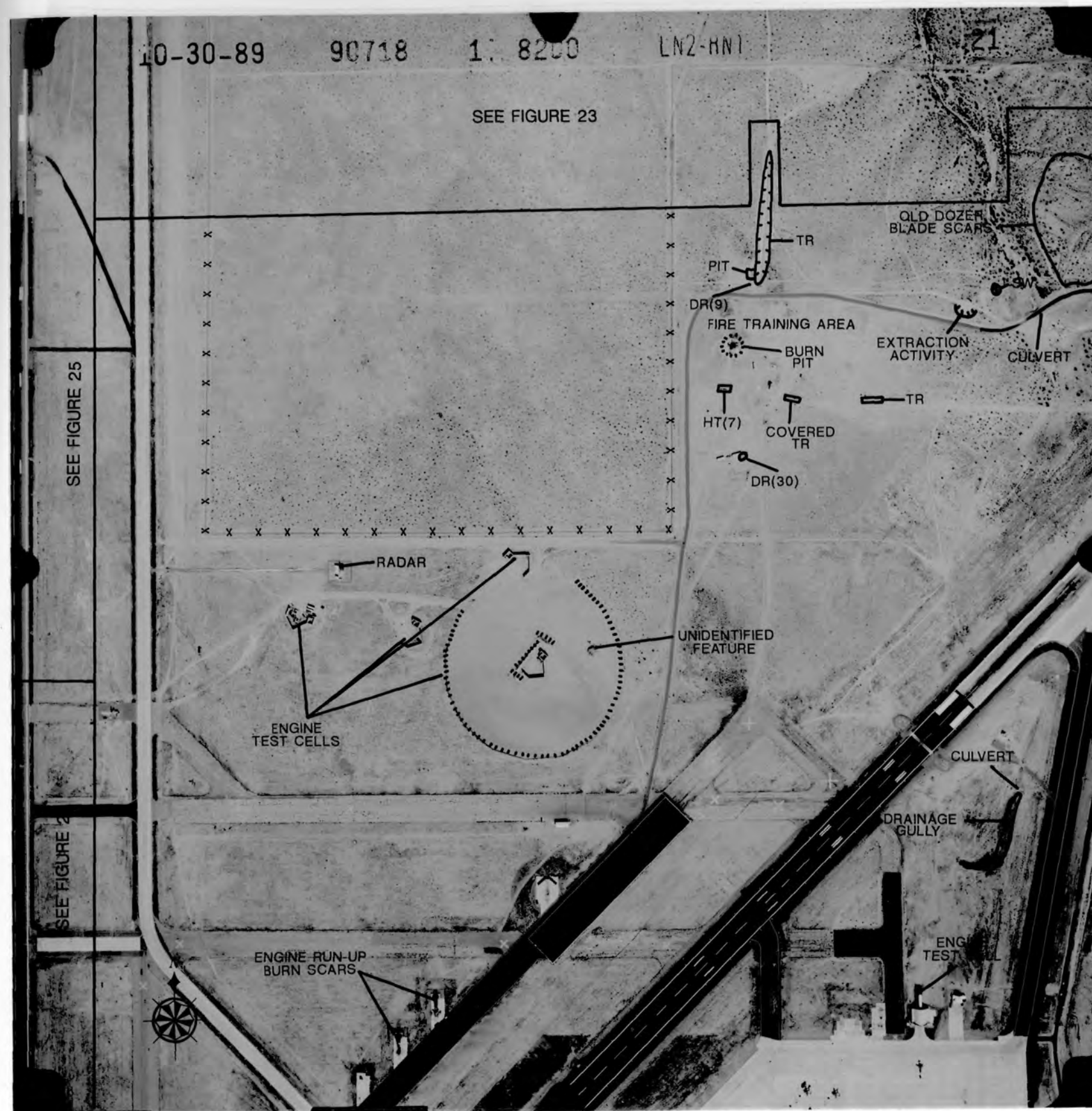
SITE FEATURES

- ////// DIKE
- ⊞ STANDING LIQUID
- SL STANDING LIQUID
- ⊞ EXCAVATION, PIT (EXTENSIVE)
- ⊞ MOUNDED MATERIAL (EXTENSIVE)
- MM MOUNDED MATERIAL (SMALL)
- CR CRATES/BOXES
- DR DRUMS
- HT HORIZONTAL TANK
- PT PRESSURE TANK
- VT VERTICAL TANK
- CA CLEARED AREA
- DG DISTURBED GROUND
- FL FILL
- IM IMPOUNDMENT
- LG LAGOON
- OF OUTFALL
- SD SLUDGE
- ST STAIN
- SW SOLID WASTE
- TR TRENCH
- VS VEGETATION STRESS
- WD WASTE DISPOSAL AREA
- WL WETLAND

Figure 25. George Air Force Base, October 30, 1989. Approximate scale 1:8,200.

OCTOBER 30, 1989 (FIGURE 26)

This photo shows a central portion of George Air Force Base. A long trench with a square pit at its south end is noted north of the fire training area. A square concrete structure is visible within the pit. Its purpose is unknown. The trench is empty and does not appear to be waste related. Nine drums are noted adjacent to the pit. Thirty drums, seven horizontal tanks, two trenches and a burn pit are noted in the fire training area. One of the trenches has been covered with fill, while the other is empty. These trenches do not appear to be waste related. The fire training area appears clean and well maintained. East of this area is an area of extraction activity and a small pile of solid waste. The waste material appears to be burn residue. An area of old bulldozer blade scarring is noted further to the east. Four engine test cells are noted near the center of the photo. The purpose of a low berm surrounding one of these is unknown. An unidentified feature is noted within the bermed area.



INTERPRETATION CODE

BOUNDARIES AND LIMITS

- x-x-x-x FENCED SITE BOUNDARY
- UNFENCED SITE BOUNDARY
- x x x x x x FENCE
- - - - - STUDY AREA

DRAINAGE

- - - - - DRAINAGE
- ← FLOW DIRECTION
- - - - - INDETERMINATE DRAINAGE

TRANSPORTATION/UTILITY

- ===== VEHICLE ACCESS
- + + + + + RAILWAY

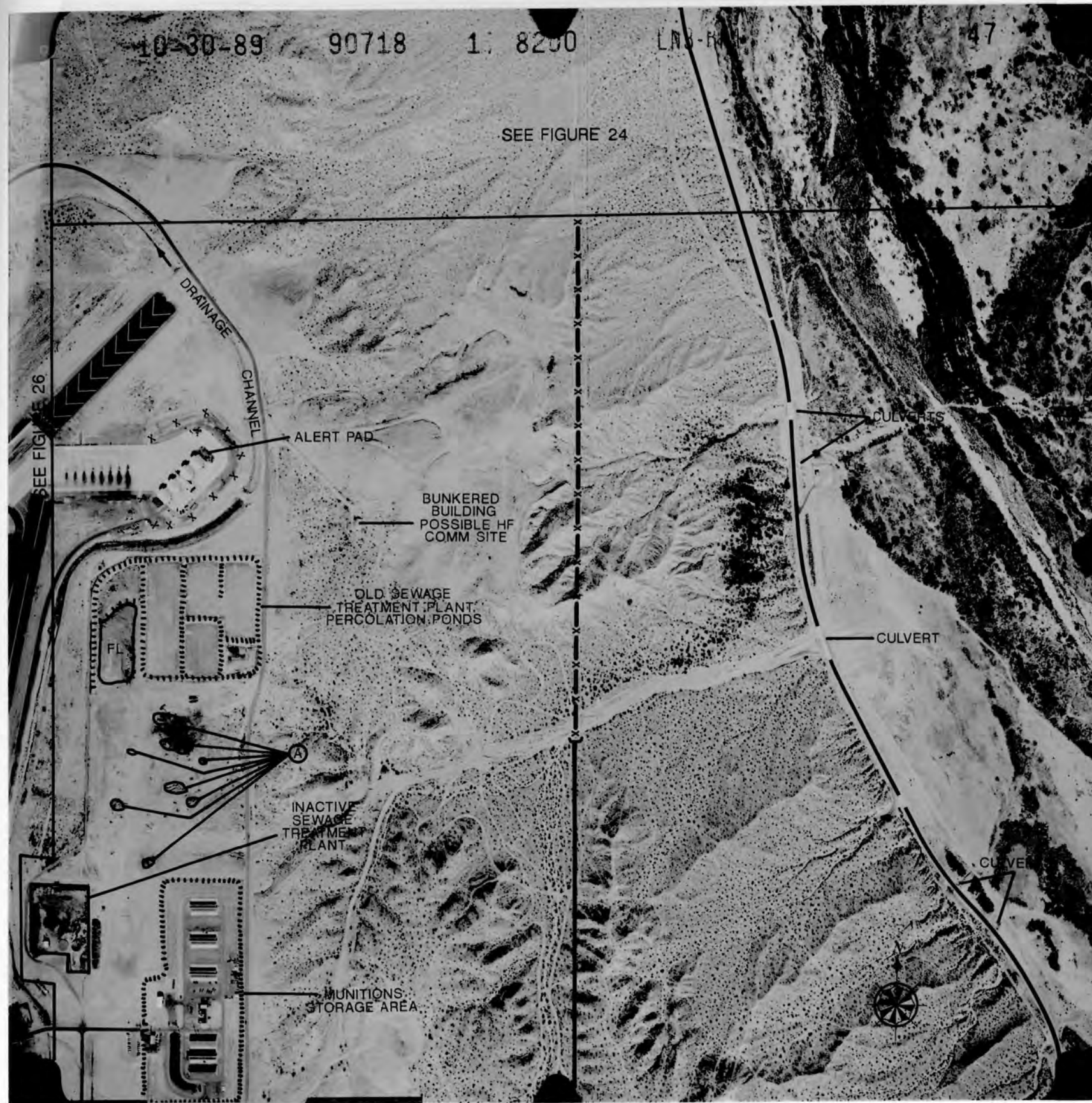
SITE FEATURES

- ||||||| DIKE
- SL STANDING LIQUID
- SL STANDING LIQUID
- EXCAVATION, PIT (EXTENSIVE)
- MOUNDED MATERIAL (EXTENSIVE)
- MM MOUNDED MATERIAL (SMALL)
- CR CRATES/BOXES
- DR DRUMS
- HT HORIZONTAL TANK
- PT PRESSURE TANK
- VT VERTICAL TANK
- CA CLEARED AREA
- DG DISTURBED GROUND
- FL FILL
- IM IMPOUNDMENT
- LG LAGOON
- OF OUTFALL
- SD SLUDGE
- ST STAIN
- SW SOLID WASTE
- TR TRENCH
- VS VEGETATION STRESS
- WD WASTE DISPOSAL AREA
- WL WETLAND

Figure 26. George Air Force Base, October 30, 1989. Approximate scale 1:8,200.

OCTOBER 30, 1989 (FIGURE 27)

This photo shows the east-central portion of George Air Force Base. The old sewage treatment facility's percolation ponds have been emptied and cleaned. The westernmost pond, which was not present on the 1984 photo (Figure 19) is being filled. The material being used as filler is of various colors and is unidentifiable. It is possibly a mixture of soil and waste material. Several mounds of multi-hued, unidentified material (Annotation A) are visible south of the ponds.



INTERPRETATION CODE

BOUNDARIES AND LIMITS

- X-X-X-X FENCED SITE BOUNDARY
- UNFENCED SITE BOUNDARY
- X X X X X X FENCE
- STUDY AREA

DRAINAGE

- DRAINAGE
- ← FLOW DIRECTION
- INDETERMINATE DRAINAGE

TRANSPORTATION/UTILITY

- ===== VEHICLE ACCESS
- ++++ RAILWAY

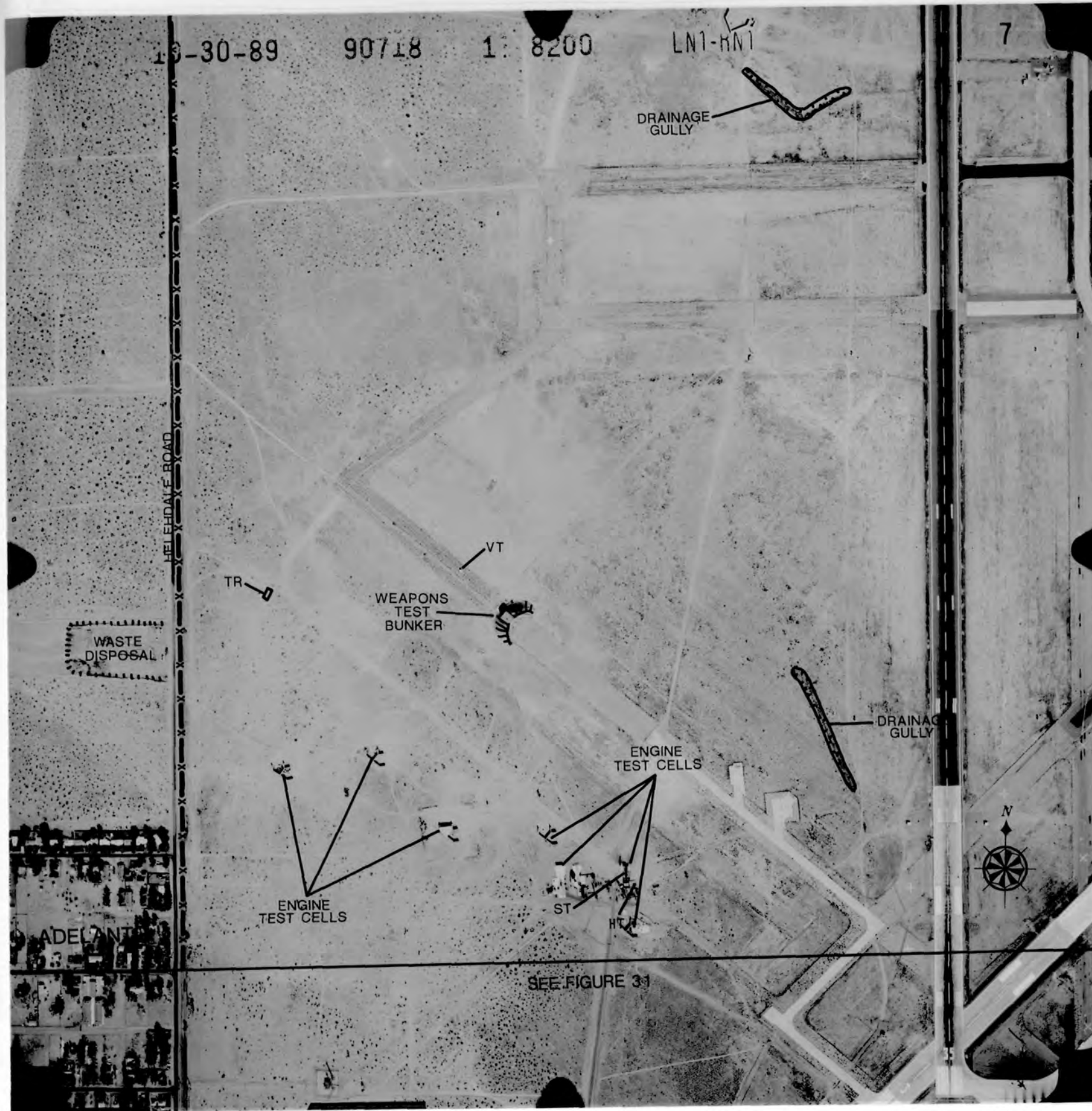
SITE FEATURES

- ||||| DIKE
- ⊞ STANDING LIQUID
- SL STANDING LIQUID
- ⊞ EXCAVATION, PIT (EXTENSIVE)
- ⊞ MOUNDED MATERIAL (EXTENSIVE)
- MM MOUNDED MATERIAL (SMALL)
- CR CRATES/BOXES
- DR DRUMS
- HT HORIZONTAL TANK
- PT PRESSURE TANK
- VT VERTICAL TANK
- CA CLEARED AREA
- DG DISTURBED GROUND
- FL FILL
- IM IMPOUNDMENT
- LG LAGOON
- OF OUTFALL
- SD SLUDGE
- ST STAIN
- SW SOLID WASTE
- TR TRENCH
- VS VEGETATION STRESS
- WD WASTE DISPOSAL AREA
- WL WETLAND

Figure 27. George Air Force Base, October 30, 1989. Approximate scale 1:8,200.

OCTOBER 30, 1989 (FIGURE 28)

This photo shows a west-central portion of George Air Force Base. There has been little change in this portion of the site since the 1985 photo coverage (Figure 20). A small trench is noted west of the weapons test bunker. The trench is empty and is probably not waste related. An area of waste disposal is noted outside the western perimeter fence, north of the town of Adelanto. The material appears to be municipal trash. A trench was noted in this area in 1953 (Figure 3).



INTERPRETATION CODE

BOUNDARIES AND LIMITS

- x-x-x-x FENCED SITE BOUNDARY
- UNFENCED SITE BOUNDARY
- x x x x x x FENCE
- - - - STUDY AREA

DRAINAGE

- - - - DRAINAGE
- ← FLOW DIRECTION
- - - - INDETERMINATE DRAINAGE

TRANSPORTATION/UTILITY

- ==== VEHICLE ACCESS
- + + + + RAILWAY

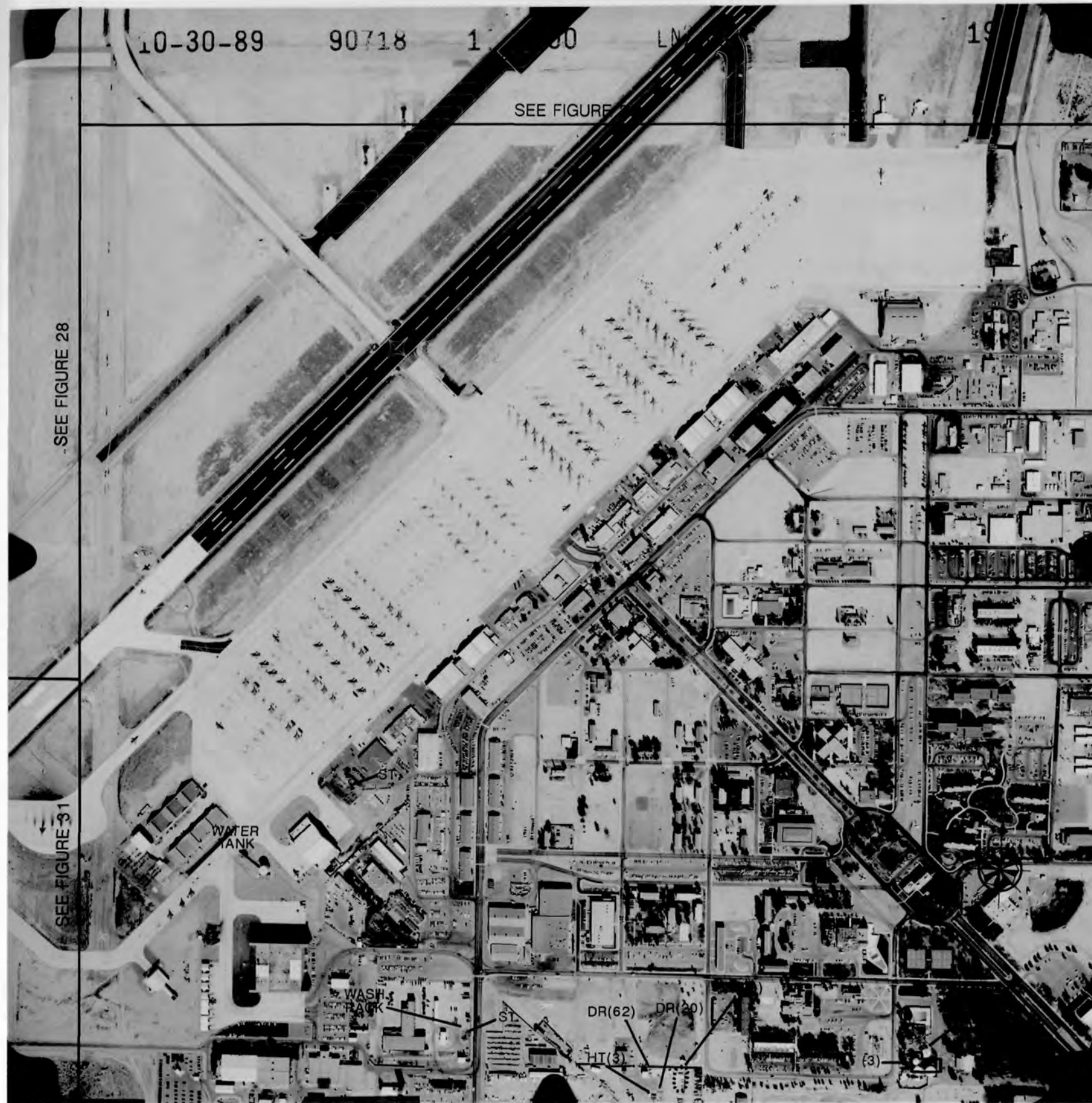
SITE FEATURES

- |||||| DIKE
- ⊞ STANDING LIQUID
- SL STANDING LIQUID
- ⊞ EXCAVATION, PIT (EXTENSIVE)
- ⊞ MOUNDED MATERIAL (EXTENSIVE)
- MM MOUNDED MATERIAL (SMALL)
- CR CRATES/BOXES
- DR DRUMS
- HT HORIZONTAL TANK
- PT PRESSURE TANK
- VT VERTICAL TANK
- CA CLEARED AREA
- DG DISTURBED GROUND
- FL FILL
- IM IMPOUNDMENT
- LG LAGOON
- OF OUTFALL
- SD SLUDGE
- ST STAIN
- SW SOLID WASTE
- TR TRENCH
- VS VEGETATION STRESS
- WD WASTE DISPOSAL AREA
- WL WETLAND

Figure 28. George Air Force Base, October 30, 1989. Approximate scale 1:8,200.

OCTOBER 30, 1989 (FIGURE 29)

This photo shows a central portion of George Air Force Base. A dark stain is noted near a maintenance building adjacent to the parking apron. Another stain is noted at a wash rack in the motor pool area to the south. The three-bay wash rack appears to have a center drain. Numerous stains are noted on the parking apron itself, the result of aircraft run-up operations. Approximately 167 drums are noted in a storage yard near the bottom of the photo. Three vertical and three horizontal tanks are also noted.



INTERPRETATION CODE

BOUNDARIES AND LIMITS

- x-x-x-x FENCED SITE BOUNDARY
- UNFENCED SITE BOUNDARY
- x x x x x FENCE
- STUDY AREA

DRAINAGE

- DRAINAGE
- FLOW DIRECTION
- INDETERMINATE DRAINAGE

TRANSPORTATION/UTILITY

- ===== VEHICLE ACCESS
- + + + + RAILWAY

SITE FEATURES

- |||||| DIKE
- ===== STANDING LIQUID
- SL STANDING LIQUID
- ⊖ EXCAVATION, PIT (EXTENSIVE)
- ⊕ MOUNDED MATERIAL (EXTENSIVE)
- MM MOUNDED MATERIAL (SMALL)
- CR CRATES/BOXES
- DR DRUMS
- HT HORIZONTAL TANK
- PT PRESSURE TANK
- VT VERTICAL TANK
- CA CLEARED AREA
- DG DISTURBED GROUND
- FL FILL
- IM IMPOUNDMENT
- LG LAGOON
- OF OUTFALL
- SD SLUDGE
- ST STAIN
- SW SOLID WASTE
- TR TRENCH
- VS VEGETATION STRESS
- WD WASTE DISPOSAL AREA
- WL WETLAND

Figure 29. George Air Force Base, October 30, 1989. Approximate scale 1:8,200.

OCTOBER 30, 1989 (FIGURE 30)

This photo shows an east-central portion of George Air Force Base. The area covers the base housing area and a small portion of the base golf course. The fill and graded area on the eastern fringe of the housing area is the same area on which a waste dump was noted in 1959 (Figure 11). A borrow area is noted east of this area.



INTERPRETATION CODE

BOUNDARIES AND LIMITS

- x-x-x-x FENCED SITE BOUNDARY
- UNFENCED SITE BOUNDARY
- x x x x x x FENCE
- STUDY AREA

DRAINAGE

- DRAINAGE
- ← FLOW DIRECTION
- INDETERMINATE DRAINAGE

TRANSPORTATION/UTILITY

- ===== VEHICLE ACCESS
- ++++ RAILWAY

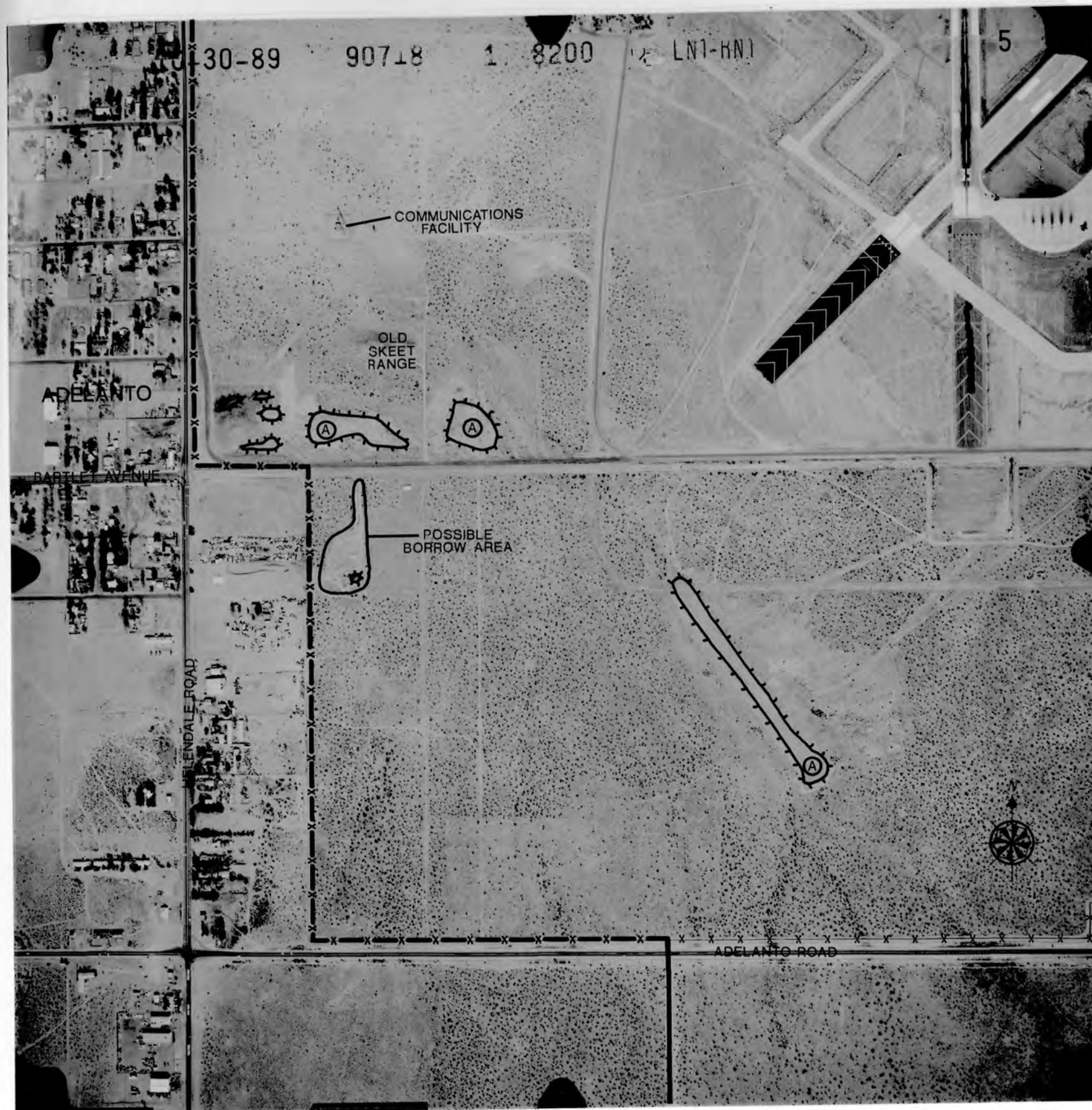
SITE FEATURES

- //////// DIKE
- ===== STANDING LIQUID
- SL STANDING LIQUID
- ⊖ EXCAVATION, PIT (EXTENSIVE)
- ⊕ MOUNDED MATERIAL (EXTENSIVE)
- MM MOUNDED MATERIAL (SMALL)
- CR CRATES/BOXES
- DR DRUMS
- HT HORIZONTAL TANK
- PT PRESSURE TANK
- VT VERTICAL TANK
- CA CLEARED AREA
- DG DISTURBED GROUND
- FL FILL
- IM IMPOUNDMENT
- LG LAGOON
- OF OUTFALL
- SD SLUDGE
- ST STAIN
- SW SOLID WASTE
- TR TRENCH
- VS VEGETATION STRESS
- WD WASTE DISPOSAL AREA
- WL WETLAND

Figure 30. George Air Force Base, October 30, 1989. Approximate scale 1:8,200.

OCTOBER 30, 1989 (FIGURE 31)

This photo shows the southwestern portion of George Air Force Base. Annotations A are three areas of mounded material. Ground disturbances have been noted in the area of the two northernmost mounds as early as 1953 (Figure 5), and the southern mound since 1968 (Figure 16). It has been reported that these areas were once used as disposal areas for construction rubble. Prior years of photography did not permit the identification of materials supposedly dumped in these areas due to photographic scale and quality. Smaller unidentified mounds of material are noted west of the northernmost mounds.



INTERPRETATION CODE

BOUNDARIES AND LIMITS

- x-x-x-x-x FENCED SITE BOUNDARY
- UNFENCED SITE BOUNDARY
- x x x x x x FENCE
- STUDY AREA

DRAINAGE

- ←- - - - DRAINAGE
- ← FLOW DIRECTION
- - - - - INDETERMINATE DRAINAGE

TRANSPORTATION/UTILITY

- ===== VEHICLE ACCESS
- + + + + + RAILWAY

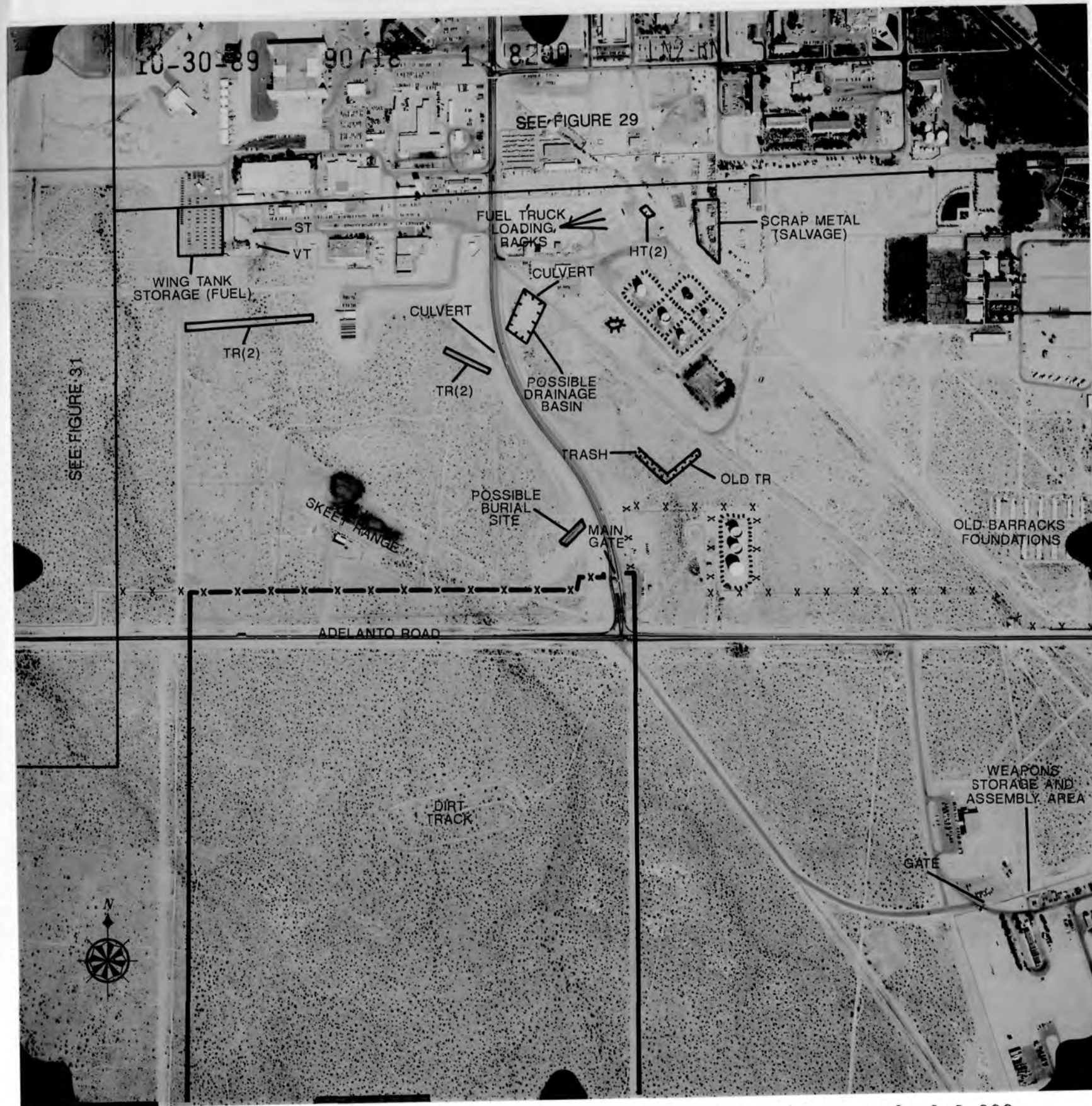
SITE FEATURES

- ||||||| DIKE
- ||||| STANDING LIQUID
- SL STANDING LIQUID
- ⊖ EXCAVATION, PIT (EXTENSIVE)
- ⊕ MOUNDED MATERIAL (EXTENSIVE)
- MM MOUNDED MATERIAL (SMALL)
- CR CRATES/BOXES
- DR DRUMS
- HT HORIZONTAL TANK
- PT PRESSURE TANK
- VT VERTICAL TANK
- CA CLEARED AREA
- DG DISTURBED GROUND
- FL FILL
- IM IMPOUNDMENT
- LG LAGOON
- OF OUTFALL
- SD SLUDGE
- ST STAIN
- SW SOLID WASTE
- TR TRENCH
- VS VEGETATION STRESS
- WD WASTE DISPOSAL AREA
- WL WETLAND

Figure 31. George Air Force Base, October 30, 1989. Approximate scale 1:8,200.

OCTOBER 30, 1989 (FIGURE 32)

This photo shows the central portion of George Air Force Base. Four empty trenches are noted. These trenches do not appear to be waste related. A V-shaped trench is noted near the center of the photo. Trash is visible in the northwest end of this trench. A possible burial site is noted just northwest of the main gate. A medium and a light gray material has been spread over an area of the desert floor. This may be a cover material. Salvageable scrap metal is noted in a storage yard, which is probably the marketing/redistribution facility.



INTERPRETATION CODE

BOUNDARIES AND LIMITS

- X-X-X FENCED SITE BOUNDARY
- UNFENCED SITE BOUNDARY
- X X X X X FENCE
- - - - - STUDY AREA

DRAINAGE

- - - - - DRAINAGE
- ← FLOW DIRECTION
- - - - - INDETERMINATE DRAINAGE

TRANSPORTATION/UTILITY

- ==== VEHICLE ACCESS
- + + + + RAILWAY

SITE FEATURES

- ||||| DIKE
- SL STANDING LIQUID
- SL STANDING LIQUID
- EXCAVATION, PIT (EXTENSIVE)
- MOUNDED MATERIAL (EXTENSIVE)
- MM MOUNDED MATERIAL (SMALL)
- CR CRATES/BOXES
- DR DRUMS
- HT HORIZONTAL TANK
- PT PRESSURE TANK
- VT VERTICAL TANK
- CA CLEARED AREA
- DG DISTURBED GROUND
- FL FILL
- IM IMPOUNDMENT
- LG LAGOON
- OF OUTFALL
- SD SLUDGE
- ST STAIN
- SW SOLID WASTE
- TR TRENCH
- VS VEGETATION STRESS
- WD WASTE DISPOSAL AREA
- WL WETLAND

Figure 32. George Air Force Base, October 30, 1989. Approximate scale 1:8,200.

OCTOBER 30, 1989 (FIGURE 33)

This photo shows the southeast portion of George Air Force Base. There are no environmentally significant items noted on this photo. Annotations A are explosive storage bunkers.



INTERPRETATION CODE

BOUNDARIES AND LIMITS

- x-x-x-x FENCED SITE BOUNDARY
- UNFENCED SITE BOUNDARY
- x x x x x FENCE
- STUDY AREA

DRAINAGE

- ←- - - DRAINAGE
- ← FLOW DIRECTION
- - - - INDETERMINATE DRAINAGE

TRANSPORTATION/UTILITY

- ===== VEHICLE ACCESS
- + + + + RAILWAY

SITE FEATURES

- |||||| DIKE
- ===== STANDING LIQUID
- SL STANDING LIQUID
- ⊖ EXCAVATION, PIT (EXTENSIVE)
- ⊕ MOUNDED MATERIAL (EXTENSIVE)
- MM MOUNDED MATERIAL (SMALL)

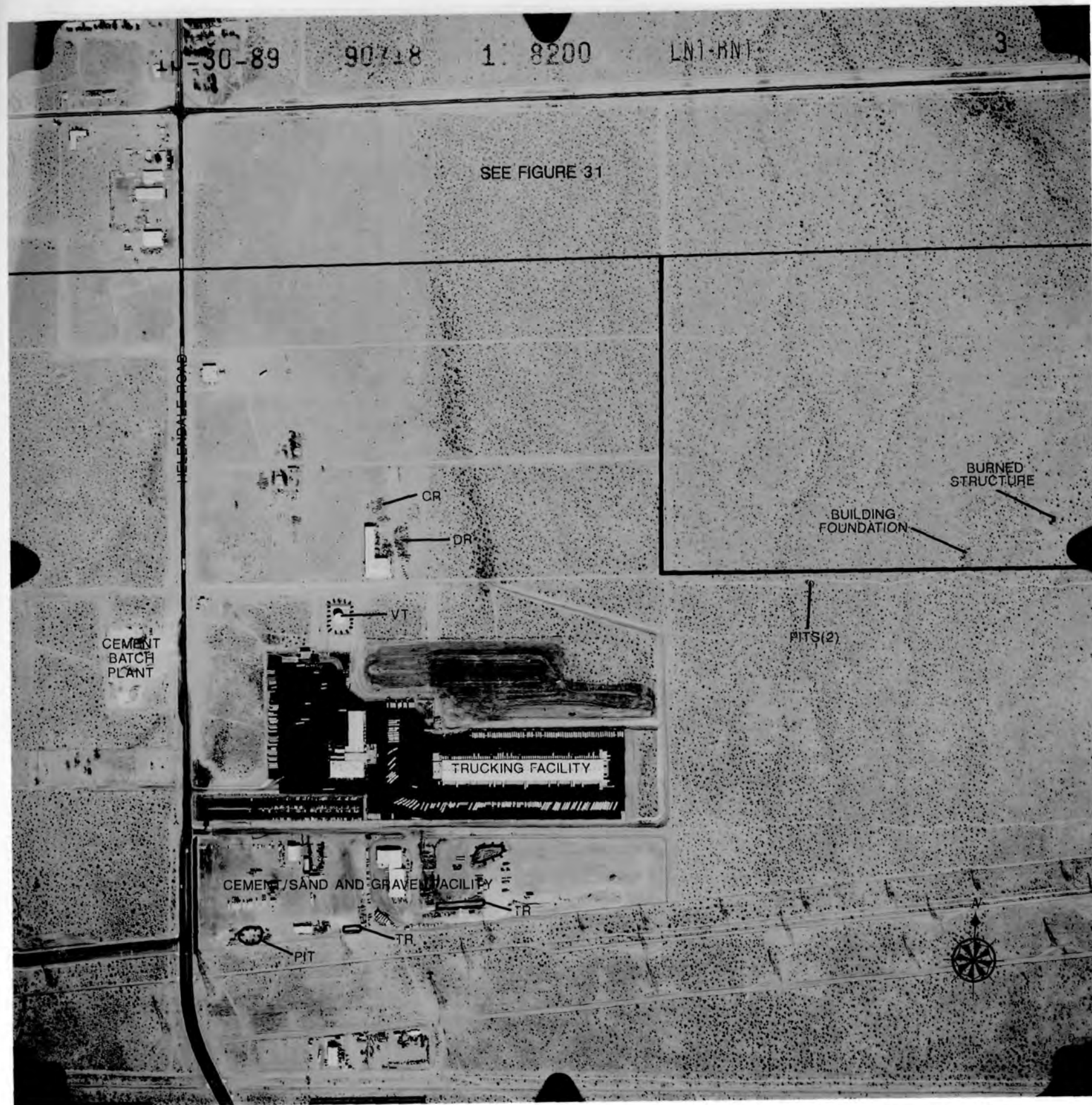
- CR CRATES/BOXES
- DR DRUMS
- HT HORIZONTAL TANK
- PT PRESSURE TANK
- VT VERTICAL TANK

- CA CLEARED AREA
- DG DISTURBED GROUND
- FL FILL
- IM IMPOUNDMENT
- LG LAGOON
- OF OUTFALL
- SD SLUDGE
- ST STAIN
- SW SOLID WASTE
- TR TRENCH
- VS VEGETATION STRESS
- WD WASTE DISPOSAL AREA
- WL WETLAND

Figure 33. George Air Force Base, October 30, 1989. Approximate scale 1:8,200.

OCTOBER 30, 1989 (FIGURE 34)

This photo shows the extreme southwest corner of George Air Force Base. A burned structure and an old building foundation are noted in this portion of the site. Two circular pits are noted just outside the base perimeter. These pits have the appearance of old bomb craters. A trucking facility with one well-contained vertical tank, a cement/sand and gravel facility, and a cement batch plant are also noted. Two trenches and a pit are noted in the cement/sand and gravel facility. North of these facilities is an unidentified facility with drums and crates visible.



INTERPRETATION CODE

BOUNDARIES AND LIMITS

- X-X-X-X FENCED SITE BOUNDARY
- UNFENCED SITE BOUNDARY
- X X X X X X FENCE
- STUDY AREA

DRAINAGE

- DRAINAGE
- FLOW DIRECTION
- INDETERMINATE DRAINAGE

TRANSPORTATION/UTILITY

- VEHICLE ACCESS
- RAILWAY

SITE FEATURES

- DIKE
- STANDING LIQUID
- SL STANDING LIQUID
- EXCAVATION, PIT (EXTENSIVE)
- MOUNDED MATERIAL (EXTENSIVE)
- MM MOUNDED MATERIAL (SMALL)
- CR CRATES/BOXES
- DR DRUMS
- HT HORIZONTAL TANK
- PT PRESSURE TANK
- VT VERTICAL TANK
- CA CLEARED AREA
- DG DISTURBED GROUND
- FL FILL
- IM IMPOUNDMENT
- LG LAGOON
- OF OUTFALL
- SD SLUDGE
- ST STAIN
- SW SOLID WASTE
- TR TRENCH
- VS VEGETATION STRESS
- WD WASTE DISPOSAL AREA
- WL WETLAND

Figure 34. George Air Force Base, October 30, 1989. Approximate scale 1:8,200.

OCTOBER 30, 1989 (FIGURE 35)

This photo shows the extreme south-central portion of George Air Force Base. A small unidentified facility, outside the southern perimeter of the base, has an empty pit and a pile of trash visible. Two shallow pits, possibly bomb craters are also noted. No other significant items are noted.



INTERPRETATION CODE

BOUNDARIES AND LIMITS

- x-x-x-x FENCED SITE BOUNDARY
- UNFENCED SITE BOUNDARY
- x x x x x FENCE
- STUDY AREA

DRAINAGE

- DRAINAGE
- ← FLOW DIRECTION
- INDETERMINATE DRAINAGE

TRANSPORTATION/UTILITY

- ===== VEHICLE ACCESS
- +++++ RAILWAY

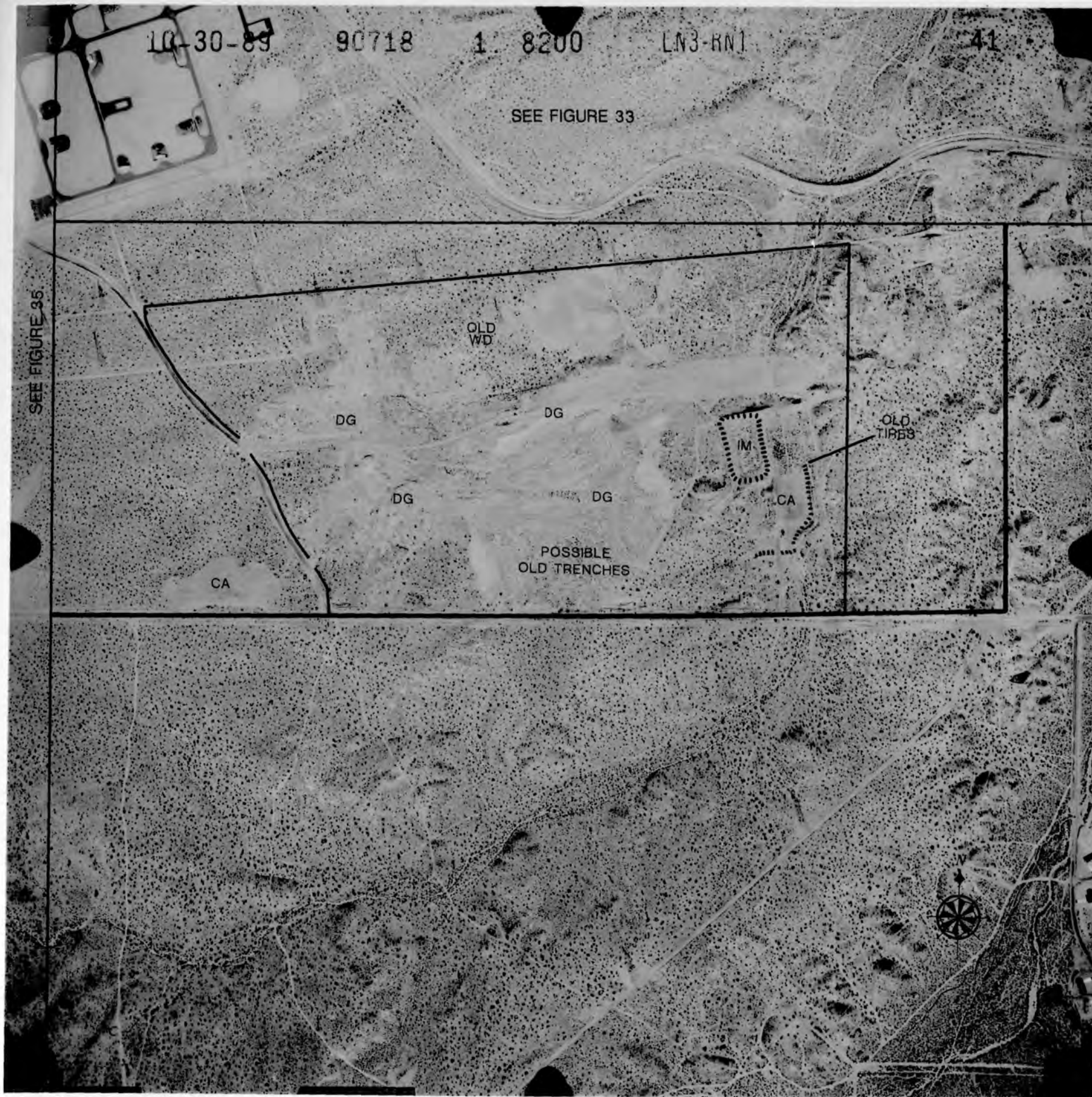
SITE FEATURES

- |||||| DIKE
- ===== STANDING LIQUID
- SL STANDING LIQUID
- ⊖ EXCAVATION, PIT (EXTENSIVE)
- ⊕ MOUNDED MATERIAL (EXTENSIVE)
- MM MOUNDED MATERIAL (SMALL)
- CR CRATES/BOXES
- DR DRUMS
- HT HORIZONTAL TANK
- PT PRESSURE TANK
- VT VERTICAL TANK
- CA CLEARED AREA
- DG DISTURBED GROUND
- FL FILL
- IM IMPOUNDMENT
- LG LAGOON
- OF OUTFALL
- SD SLUDGE
- ST STAIN
- SW SOLID WASTE
- TR TRENCH
- VS VEGETATION STRESS
- WD WASTE DISPOSAL AREA
- WL WETLAND

Figure 35. George Air Force Base, October 30, 1989. Approximate scale 1:8,200.

OCTOBER 30, 1989 (FIGURE 36)

This photo shows the extreme southeast portion of George Air Force Base. The old waste dump noted no longer appears to be active. Considerable ground scarring is visible within the area. The scarring appears to have been caused by bulldozer activity. The only visible waste in the area is a pile of old tires at the east end of the dump. The impoundment noted is empty and does not appear to have been in use for some time. Desert shrubs cover the floor of the impoundment. No other items of significance are noted.



INTERPRETATION CODE

BOUNDARIES AND LIMITS

- X-X-X-X FENCED SITE BOUNDARY
- UNFENCED SITE BOUNDARY
- X X X X X X FENCE
- STUDY AREA

DRAINAGE

- DRAINAGE
- ← FLOW DIRECTION
- INDETERMINATE DRAINAGE

TRANSPORTATION/UTILITY

- ===== VEHICLE ACCESS
- + + + + RAILWAY

SITE FEATURES

- ||||||| DIKE
- ===== STANDING LIQUID
- SL STANDING LIQUID
- EXCAVATION, PIT (EXTENSIVE)
- MOUNDED MATERIAL (EXTENSIVE)
- MM MOUNDED MATERIAL (SMALL)
- CR CRATES/BOXES
- DR DRUMS
- HT HORIZONTAL TANK
- PT PRESSURE TANK
- VT VERTICAL TANK
- CA CLEARED AREA
- DG DISTURBED GROUND
- FL FILL
- IM IMPOUNDMENT
- LG LAGOON
- OF OUTFALL
- SD SLUDGE
- ST STAIN
- SW SOLID WASTE
- TR TRENCH
- VS VEGETATION STRESS
- WD WASTE DISPOSAL AREA
- WL WETLAND

Figure 36. George Air Force Base, October 30, 1989. Approximate scale 1:8,200.