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MINUTES FROM TECHNICAL REVIEW COMMITTEE MEETING ON 8 DECEMBER 1993 NAS FORT WORTH TX

12/8/1993

AERONAUTICS SYSTEMS HEADQUARTERS

File: 17G
A.F.

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NAVAL AIR STATION
FORT WORTH JRB
CARSWELL FIELD
TEXAS

ADMINISTRATIVE RECORD
COVER SHEET

AR File Number 176

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D.B.
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AIR FORCE PLANT 4

Technical Review Committee Meeting

December 8, 1993

NAME	REPRESENTING	PHONE
Fred Oelrich	ASC/EMVR/OL-BA, Ft Worth, TX	817-334-8500
George Walters	ASC/EMVR, WPAFB, OH	513-255-7716
Corey Lam	ASC/EMVR, WPAFB, OH	513-255-7716
Gary Baumgarten	US EPA (6H-ET)	214-655-6749
Brian Boerner	City of Ft. Worth (DEM)	817-871-6107
Lt. Eric Mclaurin	AFCEE, Brooks AFB, TX	210-536-5283
Randy Tarbell	AF Regional Compliance Office	214-767-4677
Victor Dozzi	IT Corporation	412-858-3960
Randy Varner	301 FW, Carswell AFB	817-782-6277
Peggy Grubbs	USACE Ft. Worth	817-334-2730
Harry McWreath	USGS Ft. Worth	817-334-5551
Bob Peters	Argonne National Lab, IL	708-252-7773
Paul Bounds	City of White Settlement	817-246-4971
George Sperl	Engineering Resources, AR	501-575-4108
Norman Robbins	Lockheed, Ft. Worth	817-777-8294
Chris Hughes	Ft. Worth IWS	817-871-8305
Neven Kresic	Texas Christian University	817-921-7506
Lel Medford	TNRCC	512-234-2440
Jim Scanlan	Ft. Worth Water Department	817-871-8203
Andrew Ellison	Metcalf & Eddy, Inc.	214-754-8725
Lynn Schuetter	Jacobs Engineering	303-595-8855
Dan Schultz	Jacobs Engineering	303-595-8855
Cecil Irby	TNRCC	512-908-2365
Joel Lusk	US Fish & Wildlife Service	817-885-7830
Sam Ogden	Ogden & Company	817-294-9366
David Mockler	Lockheed Corp.	817-777-5729
Wade Stone	TNRCC	512-239-2487
Sam Marutzky	Rust Geotech	303-248-6059
Mark Plessinger	Rust Geotech	303-248-6571
Dave Donohue	Rust Geotech	303-248-6511
Luke Gilpin	Lockheed Corp.	817-777-8203
Aynthia Schmidt	Texas Christian University	817-927-7764
Kauhlya Sanghaer	Texas Christian University	817-922-8811
Mahipal Jadeja	Texas Christian University	817-921-7270
Boby Hernandez	AFBCA/OL-H - Carswell AF	817-731-8924
David Moccia	Environmental Science & Eng.	904-333-3601
Greg Harvey	ASC/EMVR, WPAFB, OH	513-255-7716
W Olshefski	Lake Worth Civic Club	817-246-3788
Thomas Reid	Lake Worth Civic Club	817-246-3759
Richard Jackson	INTERA	512-346-2000
Peter Waterreus	TNRCC, Austin, TX	512-908-2484
Jim Bartolino	USGS-WRD, Austin	512-873-3083

DEPARTMENT OF THE AIR FORCE

HEADQUARTERS AERONAUTICAL SYSTEMS CENTER (AFMC)
WRIGHT-PATTERSON AIR FORCE BASE, OHIO

176 02

FROM: ASC/EMVR Bldg 17
2060 Monahan Way
Wright-Patterson AFB OH 45433-7203

SUBJ: Air Force Plant 4 - Technical Review Committee Meeting Minutes

TO: See Distribution

1. The Technical Review Committee meeting was held at the Worthington Hotel, Fort Worth, TX, on 8 December 1993. The following is the summary of the topics discussed at the meeting.

a. The meeting began with each member introducing themselves and their organization (see attachment).

b. OVERVIEW. George Walters and Fred Oelrich (on-site Project Manager) are the Remedial Project Managers of Air Force Plant 4 (AFP 4). Fred gave an overview of the background of the AFP 4 Installation Restoration Program (IRP). AFP 4 is a superfund site and was placed on the National Priority List (NPL) in 1990. Because it is a superfund site, it is governed by Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and National Contingency Plan (NCP). Basically, the requirements for CERCLA/NCP are to: Identify and clean-up contamination; protect human health and the environment; and to inform and involve the community. The main purpose of the TRC is to disseminate information about various clean-up activities and to receive feedback from the members. Members of the TRC are the Air Force, Environmental Protection Agency (EPA), Texas Natural Resource Conservation Commission (TNRCC), community officials, and local citizens.

George gave an overview of the ASC/EMVR organization structure. ASC/EMVR manages the Government-Owned, Contractor-Operated plants across the country under Susan Schmidt's (Restoration Branch Chief) leadership. There are four Service Centers working under the project managers of AFP 4 to take care of the contracting activities. George also discussed the successes of the partnering and went over the partnering goals. Copies of the slides are attached.

c. Carswell AFB - Bobby Hernandez gave a detailed presentation of the current IRP activities at Carswell AFB. Carswell AFB has a total of 19 sites, 7 of the 19 sites are No Further Action (NFA). He reviewed the status of each site and identified the type of contamination. Some successes at Carswell AFB include: Bioremediation project, disposal of the contaminated pesticide storage facility, PCB transformer removals, completion of the historical baseline survey and the partnership with ASC. Carswell AFB

has an active Environmental Protection Committee and active Community Relation Program. Copies of the slides are attached.

d. CERCLA Process - Fred Oelrich gave an overview where AFP 4 is in the CERCLA process, of the ongoing early remedial actions and discussed the programmed projects for the fiscal year of 1994, 1995, and beyond. Copies of the slides are attached.

e. Rust Geotech

- Sam Marutzsky gave an update on the Remedial Investigation/Feasibility Study (RI/FS). Rust Geotech has been involved in AFP 4 since 1989. The planning stage of the RI/FS was completed in 1990. The final RI/FS report was published in September 1993 and it is available at the White Settlement library. Rust Geotech is also working on the regional groundwater simulation. This project will be completed by the end of December 1993.

- David Donohue summarized of the RI groundwater contamination findings and the status of the groundwater simulation. Geotech is developing a local scale three dimensional flow simulation for the upper zone above the walnut formation and the paluxy aquifer.

- Sam Marutzky summarized the risk assessment findings. He explained that the methods used are approved by the EPA. Several steps are involved in making sure that the risk assessment is performed correctly. It begins with the data evaluation, quantifies the human health risks, and then performs the study of the ecological risks. He also showed a slide of possible exposure pathways. The ecological risk assessment did not prove to be a driver in the overall risk assessment.

- Mark Plessinger discussed new technology that is being investigated. The innovative technology that looks most promising for attacking the TCE plume is surfactant injection which increases the solubility of the DNAPL thus allowing for removal of greater quantities of the contaminant.

f. USGS - Jim Bartolino gave a presentation on the projects that the USGS is working for AFP 4. USGS engaged in several activities: Sampling of the Lake Worth residential wells in April 1993, and conducted well sampling on 26 wells in the baseline study. USGS is preparing a water level map by doing two synoptic water surveys of the paluxy aquifer and the upper alluvial aquifer. Finally, USGS is developing a groundwater plume model of the alluvial acquifer.

g. COE - Peggy Grubbs gave a presentation on the projects that are currently ongoing and future projects. A new project started this year is the supplemental feasibility study, which consolidated all the data between AFP 4 and Carswell AFB and will investigate the feasibility of new technology for long-term remediation of the TCE plume. Final draft will be due in August 1994. COE is responsible for several projects currently ongoing: Early

action for the pump and treat systems on Carswell AFB and in the east parking lot at Lockheed, soil vapor extraction of TCE in the soil under Building 181 which is the primary source of the TCE plume and characterization of the plume on Carswell AFB. The groundwater treatment on the East side consists of seven wells, and it is located in the window area. The plant will be constructed next month. The operation and maintenance will be performed through a contract with Lockheed.

h. Lockheed - Luke Gilpin gave a presentation of the projects underway at AFP 4 that are contracted through Lockheed. Lockheed is responsible for remedial systems installed at the site. Lockheed is working on the two groundwater treatment systems including Fuel Saturation System #1 (French Drain #1 and #2) & Fuel Saturation Area #3. Other projects are the O&M tasks for soil vapor extraction system and the East parking lot system. He also briefed about the 1993 IRP accomplishments.

i. AFCEE - Lt Eric McLaurin gave a current status of the two projects contracted to them by ASC. The first project is the quarterly monitoring activities, and the second is the Landfill #3 project, which was undertaken a year ago. Landfill #3 was previously used for landfill activities back in the early days of plant operations. It consisted of approximately three acres and is located adjacent to the Meandering Road Creek. LNAPL, DNAPL, and TCE were found in Landfill #3 during the Remedial Investigation. International Technology (IT) corporation is performing the activities which includes preparation of planning documents, a design strategy plan and field investigation plan. As a result of the investigation, the design strategy report has been completed. Currently it is being reviewed by the regulators. Eric presented different alternatives to remove the contamination in Landfill #3.

j. Jacobs Engineering - Dan Schultz gave a presentation on the quarterly sampling activities. Jacobs Engineering has been doing quarterly monitoring at AFP 4 and Carswell AFB since October 1991. They sample 32 locations around the perimeter of the installation. All locations are sampled for VOCs and usually 6 to 8 locations will be sampled for full analysis based on the expected contamination.

k. Public Affairs - Roy Thomason gave a presentation on community involvement. The Community Relation Plan is being developed and is in draft form. The Administrative Record, and the Fact Sheet are available at the White Settlement Library for anyone interested in reviewing them. A public information meeting was held on 8 Dec 93 in the White Settlement, Senior Citizens Center to update the public on the currently clean-up work at AFP 4 and Carswell AFB.

Public involvement from December 1992 to 1993 consisted of: Participation in the earth week display in AFP 4 (Apr 93); media event with Carswell (Apr 93); community interviews (Sep 93); and a number of Newspaper articles.

2. NEW TECHNOLOGIES

a. Richard Jackson (INTERA) gave a presentation on a concept and the application of surfactants to enhance aquifer characterization and remediation to remove LNAPL and especially DNAPL.

b. Bob Peters (Argonne National Laboratory) gave a presentation on a treatment system using the principle of Ultra-sonic (also called Mega-sonic) destruction (applying high energy sound wave to the contaminated groundwater) to treat TCE contaminated groundwater.

c. George Speri (Engineering Resources) briefed Biorock technology. He identified different ways that it can be used to control when and where rock is formed.

3. George and Fred thanked everyone for attending and invited them to a tour of the AFP 4 sites after the meeting. Approximately twelve people accepted the invitation.

Fred Oelrich

FRED OELRICH
Remedial Program Manager
Fort Worth Operating Location
Restoration Branch
Environmental Engineer

3 Atch
1 Attendees
2 Carswell Slices
3 TRC Slices

Air Force Base Conversion Agency Environmental Briefing

Introduction

- Size: 3,267 ACRES
- Number of sites: IRP: 19 EC - CR: Projects
- Number of operable units: 8
- Number of disposal parcels: 8
- Closure date: 30 Dec 93
- NPL status: Non-NPL
- Service centers: Ft Worth District Corps of Engineers

AFCEE (Modern Technologies)

Environmental personnel	Auth	Assigned
AFBDA	13	11

Overview

- Introduction
- Environmental Programs
- Installation Restoration Program (IRP)
- Environmental Compliance

ENVIRONMENTAL PROGRAMS

- **Installation Restoration Program (IRP)**
  - **Identify sites**
  - **Investigate threats to environment**
  - **Clean sites**
  - **Close out sites**
  - **Cleanup expected in CY 2000?**

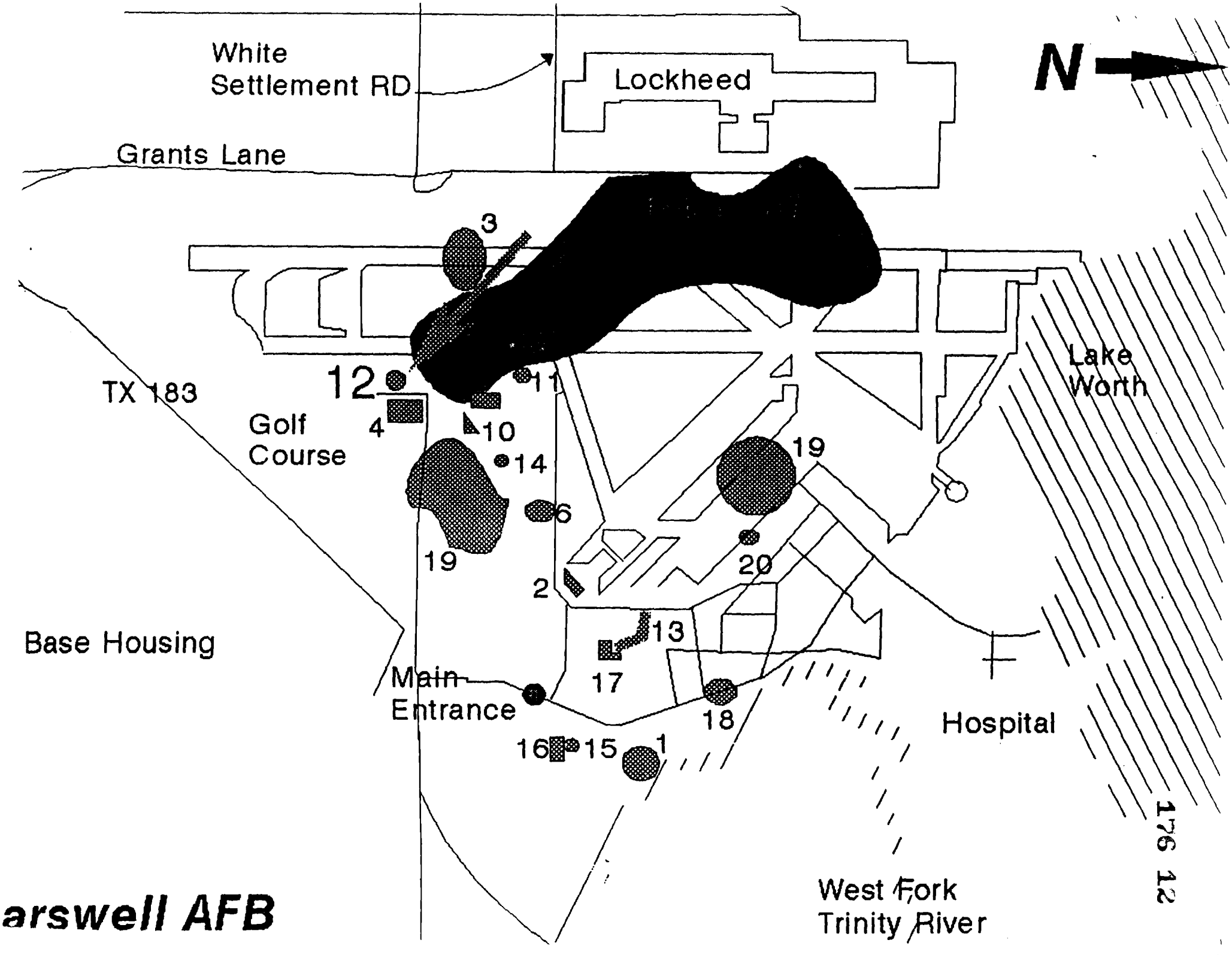
NO FURTHER ACTION SITES

Site - Site Closure Date

- Site #1 - Landfill #1 - 30 Mar 89
- Site #2 - Landfill #2 - 30 Mar 89
- Site #3 - Landfill #3 - 30 Mar 89
- Site #11 - Fire Training Area #1 - 17 Dec 91
- Site #14 - Pesticide rinse area - 30 Mar 89
- Site #15 - Entomology dry well - 17 Dec 91
- SWMU 65 - WSA disposal - 17 Jun 91
- Concurrence with documentation from Texas Water Commission in writing

FIRE TRAINING AREA #2 (SITE #2)

- Soil and groundwater contamination
  - JP-4, hydrocarbons, metals
- Remedial design complete
- Project awarded Oct 92
- Remedial action currently ongoing
- Estimated cost to remediate: $ .590K
- Soil Farming
- Risk assessment pending - AFCEE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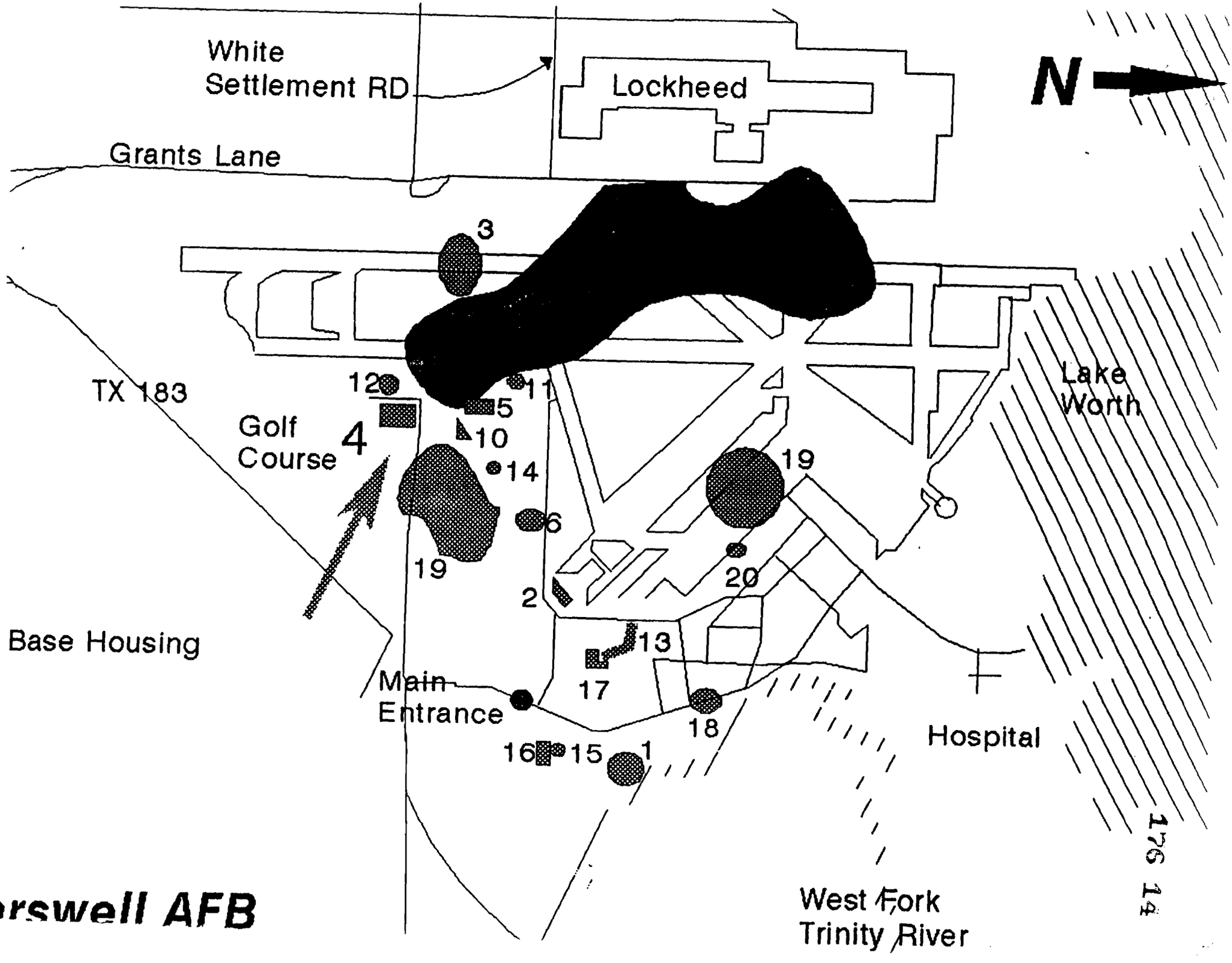
LANDFILL #4 (SITE #4)

- Soil and groundwater contamination
  - Metals, TCE
- Remedial design in FY 95/96
- Remedial action in FY 95/95
- Estimated cost to remediate: $3.688M
- Decision Document in FY 95/96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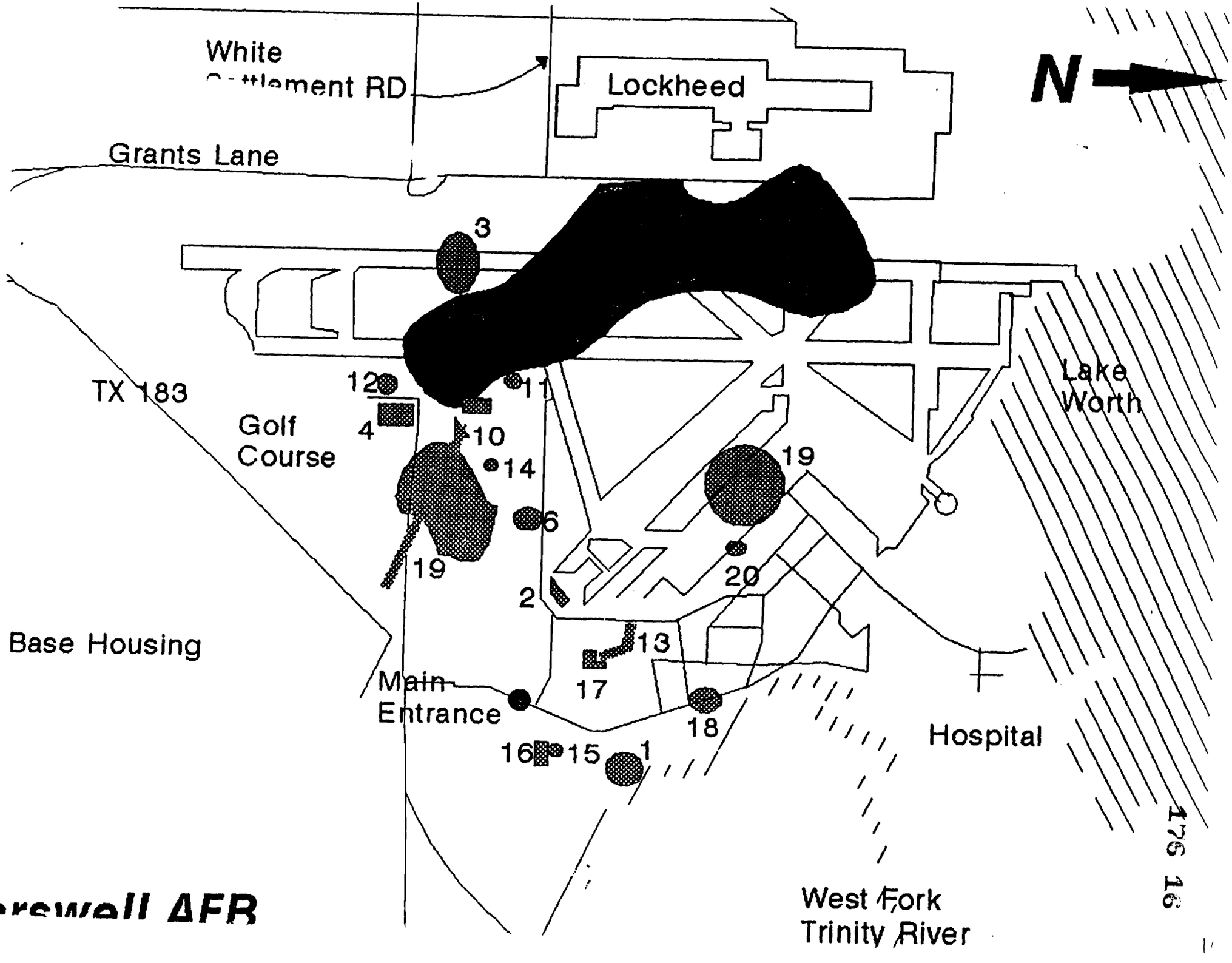
LANDFILL #5 (SITE #5)

- Soil and groundwater contamination
  - Metals, TCE
- Remedial design in FY 95/96
- Remedial action in FY 95/96
- Estimated cost to remediate: $1.979M
- Decision document in FY 95/96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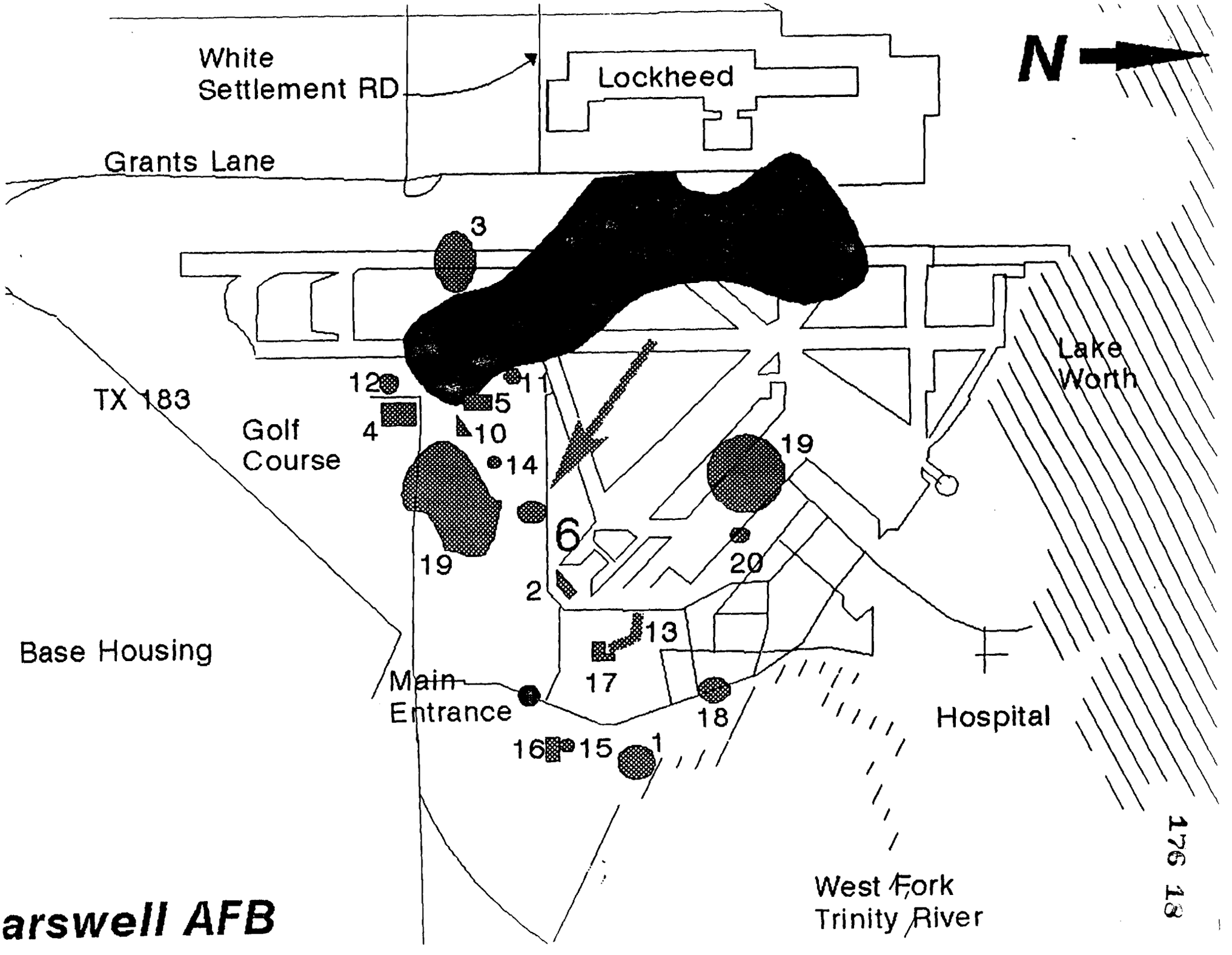
LANDFILL #6 (SITE #6)

- Construction rubble and suspected hydraulic fluid
- Currently in remedial investigation/feasibility study
- Remedial investigation to be completed Summer '94
- Groundwater monitoring in FY 94/95
- Interim removal in FY 94/95 (if necessary)
- Remedial action in FY 96 (if necessary)
- Estimated cost to remediate: $ .213M
- Decision document in FY 95/96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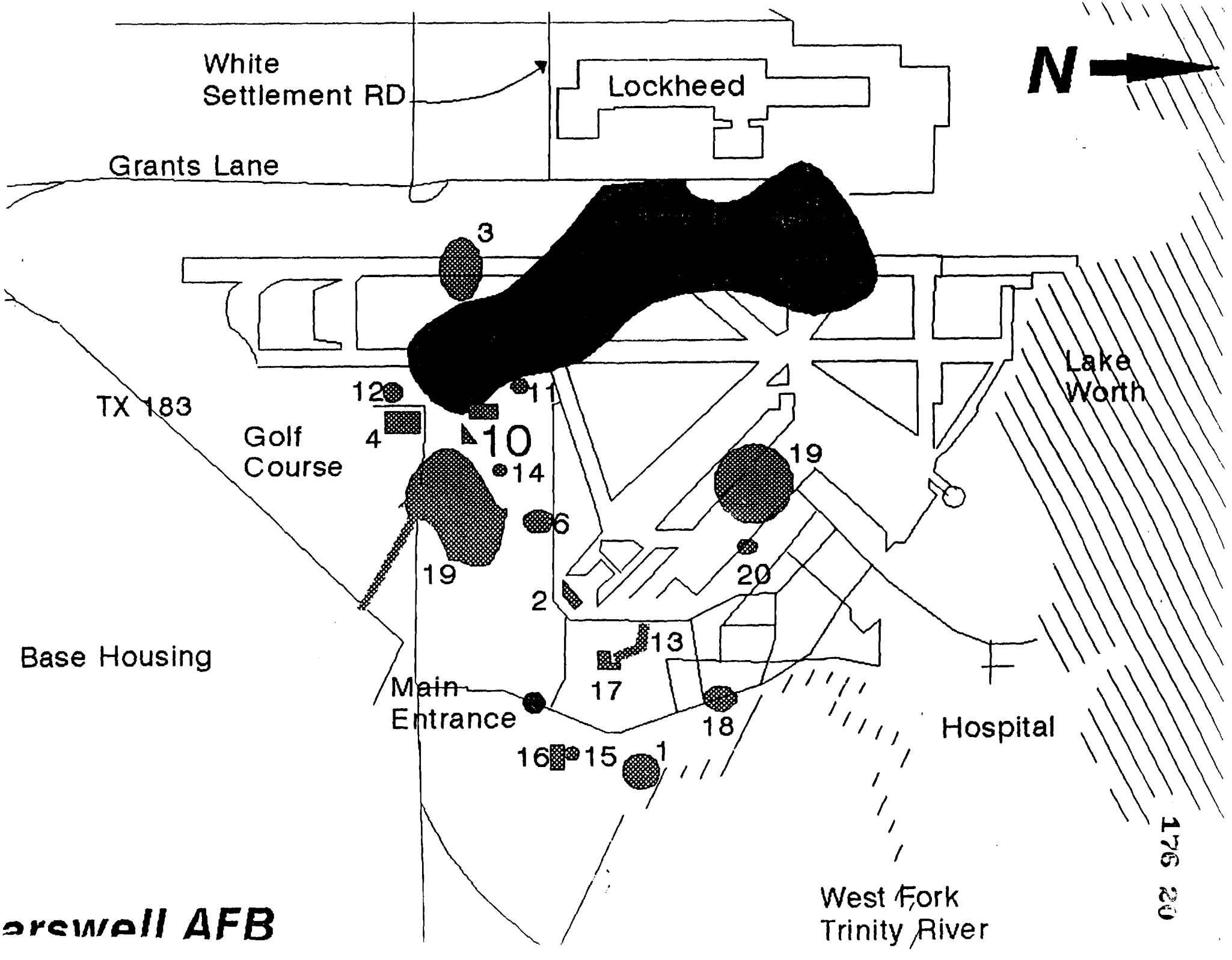
WASTE BURIAL AREA (SITE #10)

- Soil and groundwater contamination
  - Metals, TCE
- 40 barrels removed Jan 91
- Remedial design in FY 95/96
- Interim removal in FY 95/96
- Estimated cost to remediate: $ .820M
- Decision document in FY 95/96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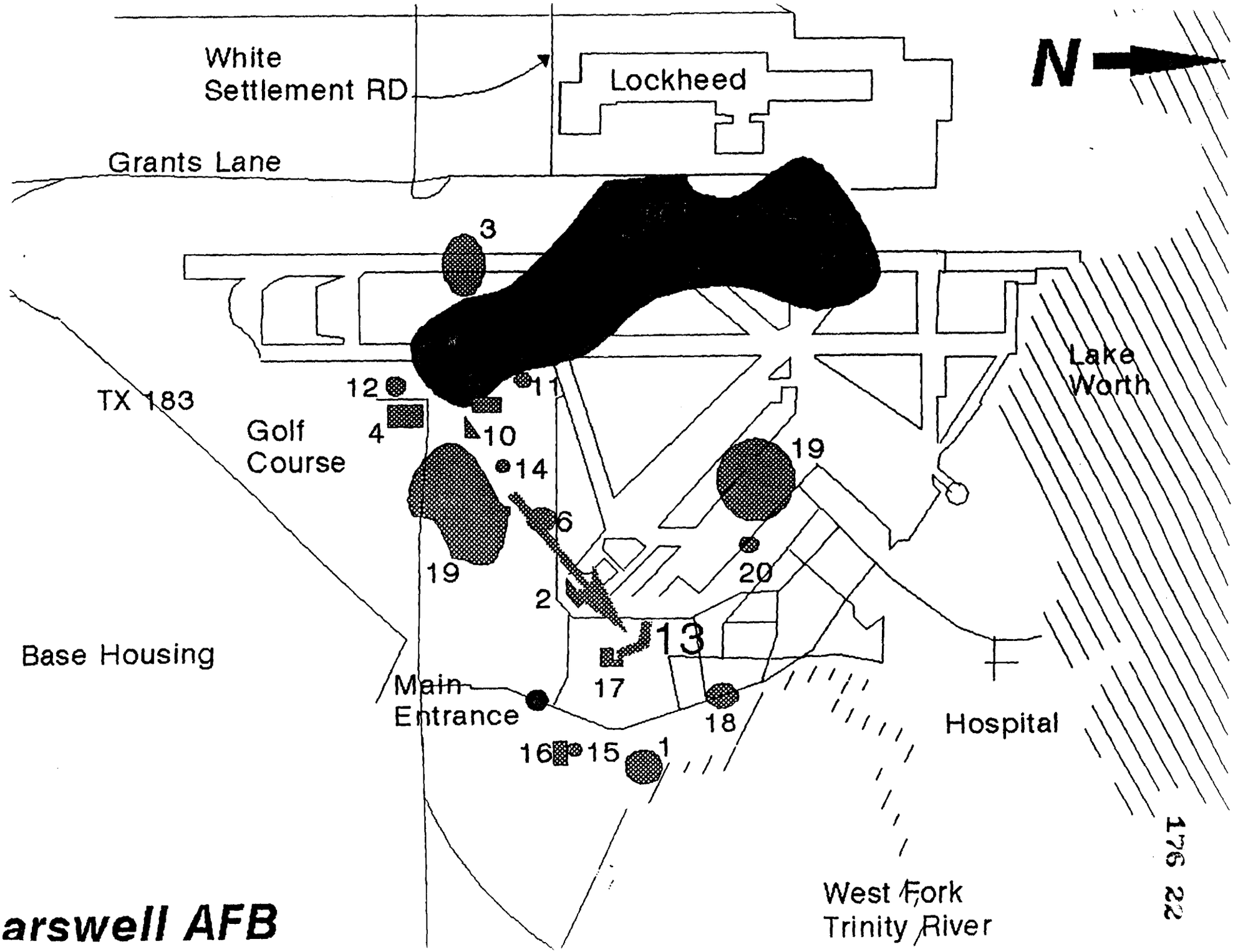
FLIGHT LINE DRAINAGE DITCH (SITE #13)

- Soil contamination
  - Hydrocarbons and detergents
- Remedial design complete
- Project awarded Oct 92
- Remedial action currently ongoing
- Additional characterization required
- Estimated cost to remediate: $ .530M



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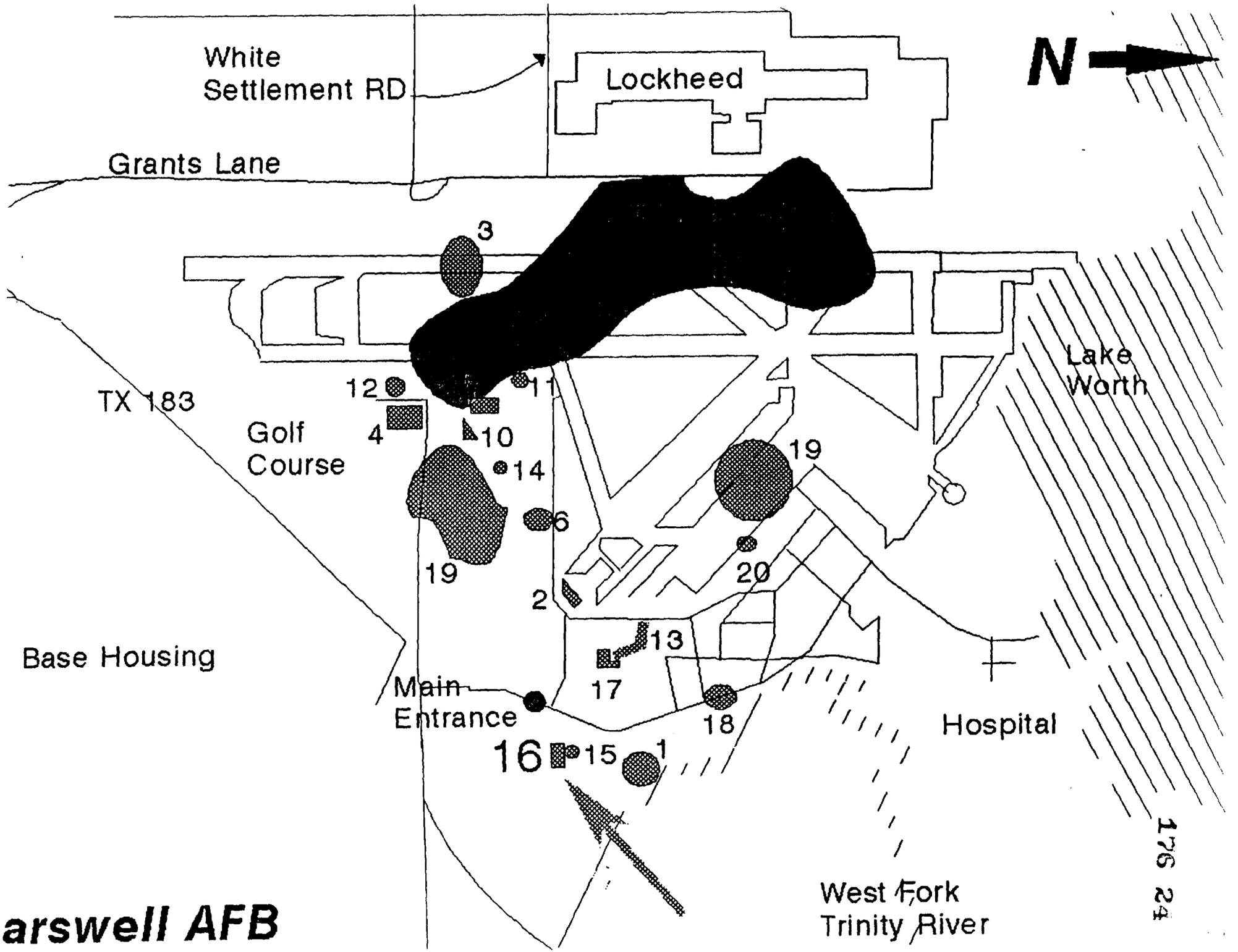
UNNAMED STREAM (SITE #16)

- Soil, ground/surface water contamination
  - Hydrocarbons
- Remedial investigation/feasibility study in FY 93/94
- Remedial action in FY 94
- Estimated cost to remediate: $ .314M
- Decision document in FY 95



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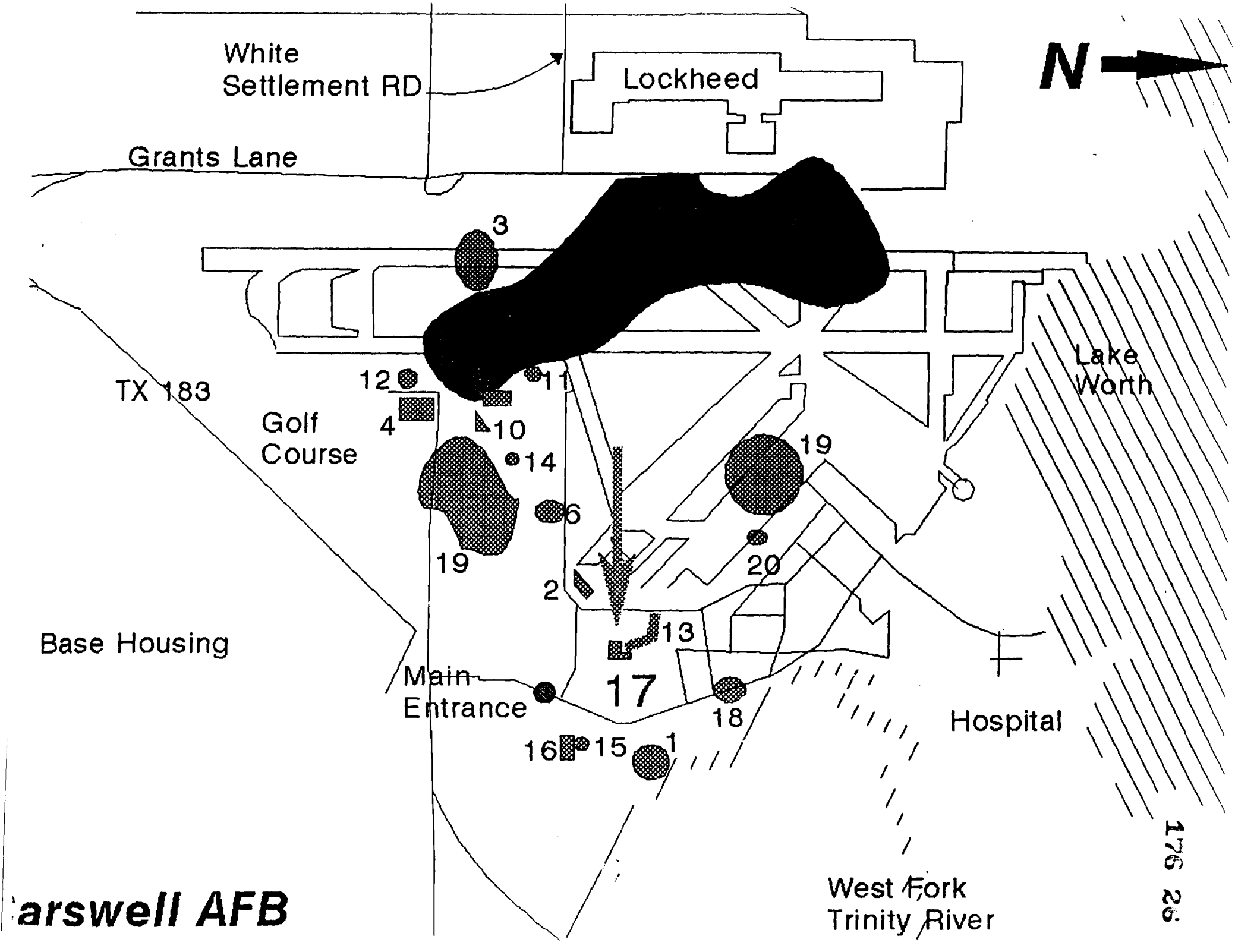
POL TANK FARM (SITE #17)

- Soil and groundwater contamination
  - Hydrocarbons
- Treatability study currently in progress - Bioventing
- Remedial action in FY 94
- Estimated cost to remediate: $1.27M
- Decision document in FY 94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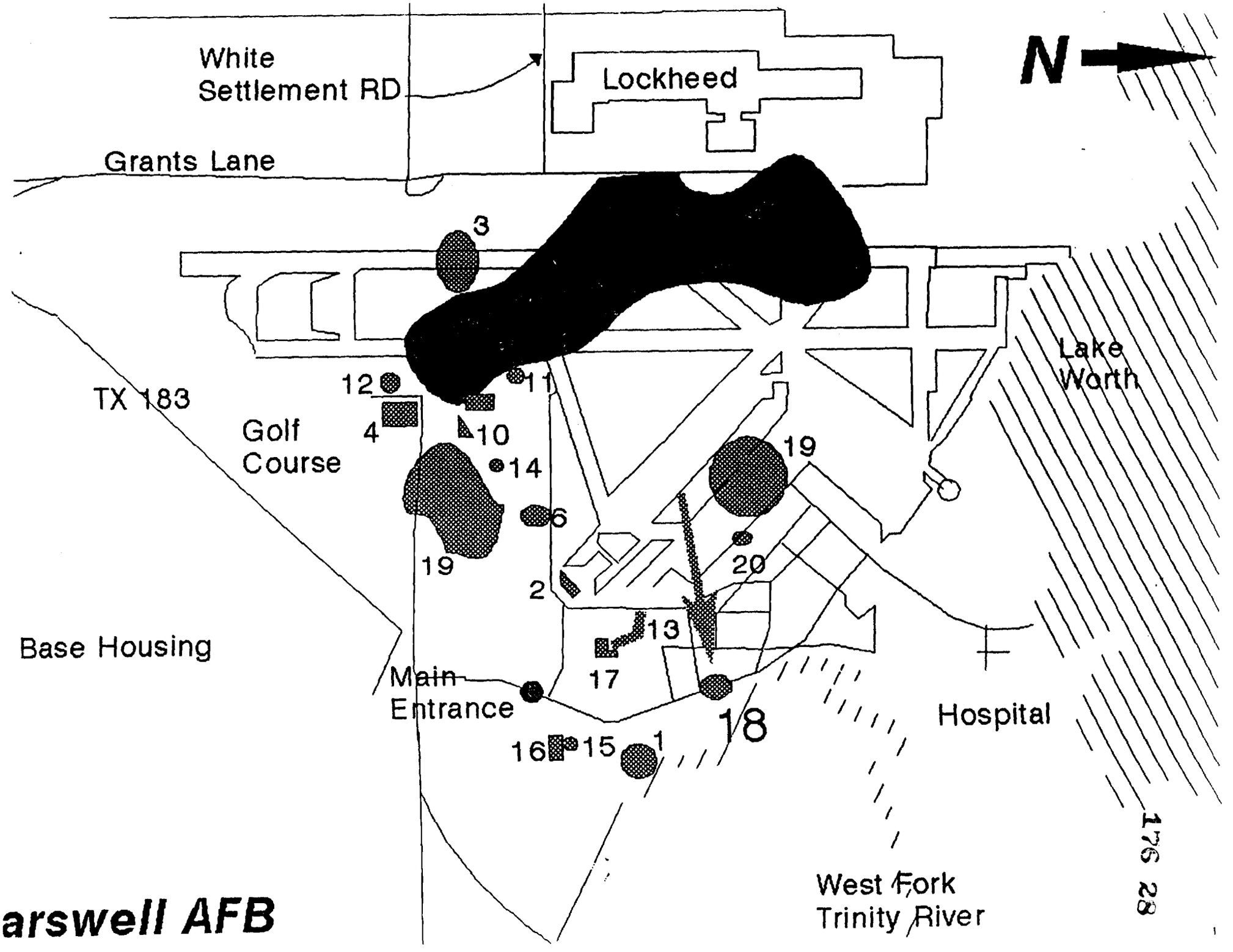
BASE SERVICE STATION (SITE #18)

- Soil and groundwater contamination
  - Petroleum hydrocarbons
- Remedial investigation/Feasibility study in progress
- NOV being addressed - NOV inherited by AFBCA
- Remedial action in FY 95/96
- 4 Tanks removed in May 93
- Estimated cost to remediate: $2.101M
- Decision document in FY 95



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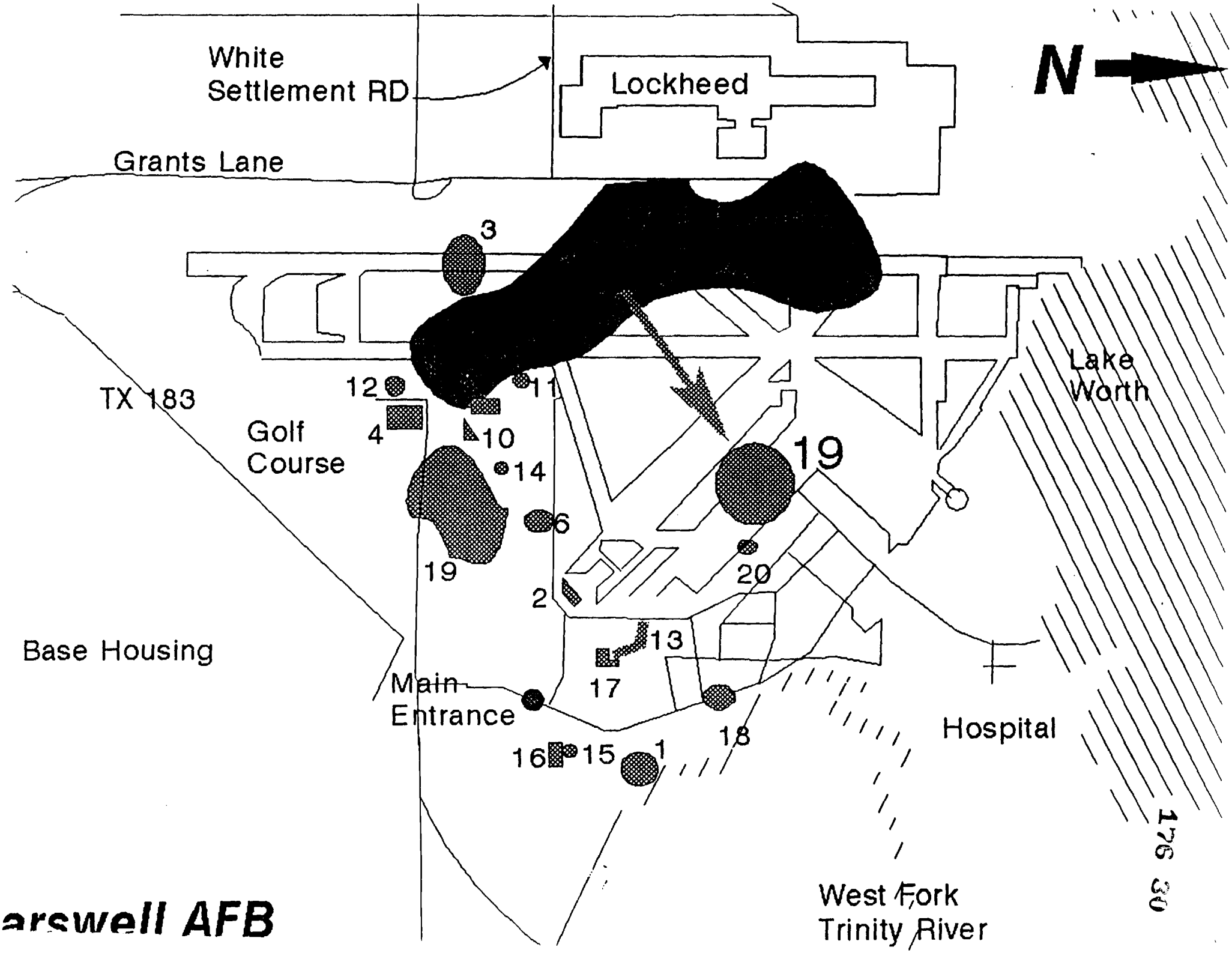
AIRFIELD GROUNDWATER (SITE #19)

- Site added in FY 91
  - TCE and hydrocarbons
- Remedial investigation in FY 94
- More site characterization necessary
- Well monitoring FY 95
- Remedial design in FY 96
- Remedial action in FY 96
- Estimated cost to remediate: $1.022M
- Decision document in FY 96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WEAPONS STORAGE AREA (SWMU #60)

- Soil and groundwater contamination
  - Low level radium 226 and 228
- Interim removal action in FY 94 - Removal of containers
- Estimated cost to remediate: $ .680
- Decision document in FY 94

UNDERGROUND STORAGE TANKS

- 78 TOTAL
  - 11 scheduled for removal
  - 41 recommended for removal
  - 26 remain open for use
- Contaminated soil disposal of or treated on site
- Cost: $1.07M
- Estimated completion: FY 94

ASBESTOS PROGRAM

- Basewide survey completed 13 Nov 92
- Abatement of child development center - Jun 93
- Cost: $ .031M
- Estimated completion: Dec 93

HAZARDOUS MATERIALS/WASTE MANAGEMENT

- IAW Texas RCRA requirements
- Active accumulation points
  - 5 hazardous waste accumulation points
  - 5 satellite hazardous waste accumulation points
  - 1 Texas Class I waste accumulation point
  - 1 RCRA permitted TSD facility
- Deactivated
  - 2 satellite hazardous waste accumulation points
  - 13 hazardous waste accumulation points
- Closure plan submitted to TWC - Apr 93

SOLID WASTE MANAGEMENT UNITS (SWMUs)

- 5 active sites
  - SWMU #16 - bldg 1060 - Waste Accum
  - SWMU #32 - bldg 1410 - Waste Accum
  - SWMU #35 - Oil/water separation system
  - SWMU #36 - bldg 1191 - Waste Accum
  - SWMU #61 - bldg 1320 - Waste Accum
- Non IRP
- Approved remedial actions
- Cost: $ .260M (awaiting funding from AFBDA per March 93 request)

PCB PROGRAM

- PCB removal project complete by 01 Aug 93
  - 2 transformers remain for disposal
  - Retrofilling 2 transformers
  - Replaced & disposed of 77 transformers
  - 8 PCB capacitors to remain
    - Airfield lighting vault
    - No danger to reuse
- Cost: $ 250K
- Estimated completion

WEAPONS STORAGE AREA WASTE DUMP

- Rubble and waste removal
- AFCEE contract for cleanup awarded 3 Mar 93
- Cost: $ .102M
- Estimated completion: early FY 94
- Waste removed late FY 93, sampling results negative
- Additional site monitoring required FY 94

SUCCESS STORIES

- Lead soil removal from base firing range
- Lead paint disposal from airfield renovation
- Bioremediation of petroleum contaminated soils
- Disposal of contaminated pesticide storage facility
- Identification of all PCB contaminated transformers and capacitors
- Completed basewide Historical Preservation Survey
- Cleanup of off-base waste dump
- Pilot plant study in progress with AF Plant 4
- Remedial action on Flightline Ditch and Fire Training Area 2

SUCCESS STORIES

- **In partnership with Aeronautical Systems Center in clean-up of AF plant 4 TCE plume (eastside)**
- **Active Environmental Protection Committee (AFBDA Co-chair)**
- **Active Community Relations Program**

Aeronautical Systems Center
Acquisition Environmental Management
Installation Restoration Program

AFP 4 - TECHNICAL REVIEW COMMITTEE MEETING

DECEMBER 8, 1993

WORTHINGTON HOTEL
FORT WORTH, TEXAS

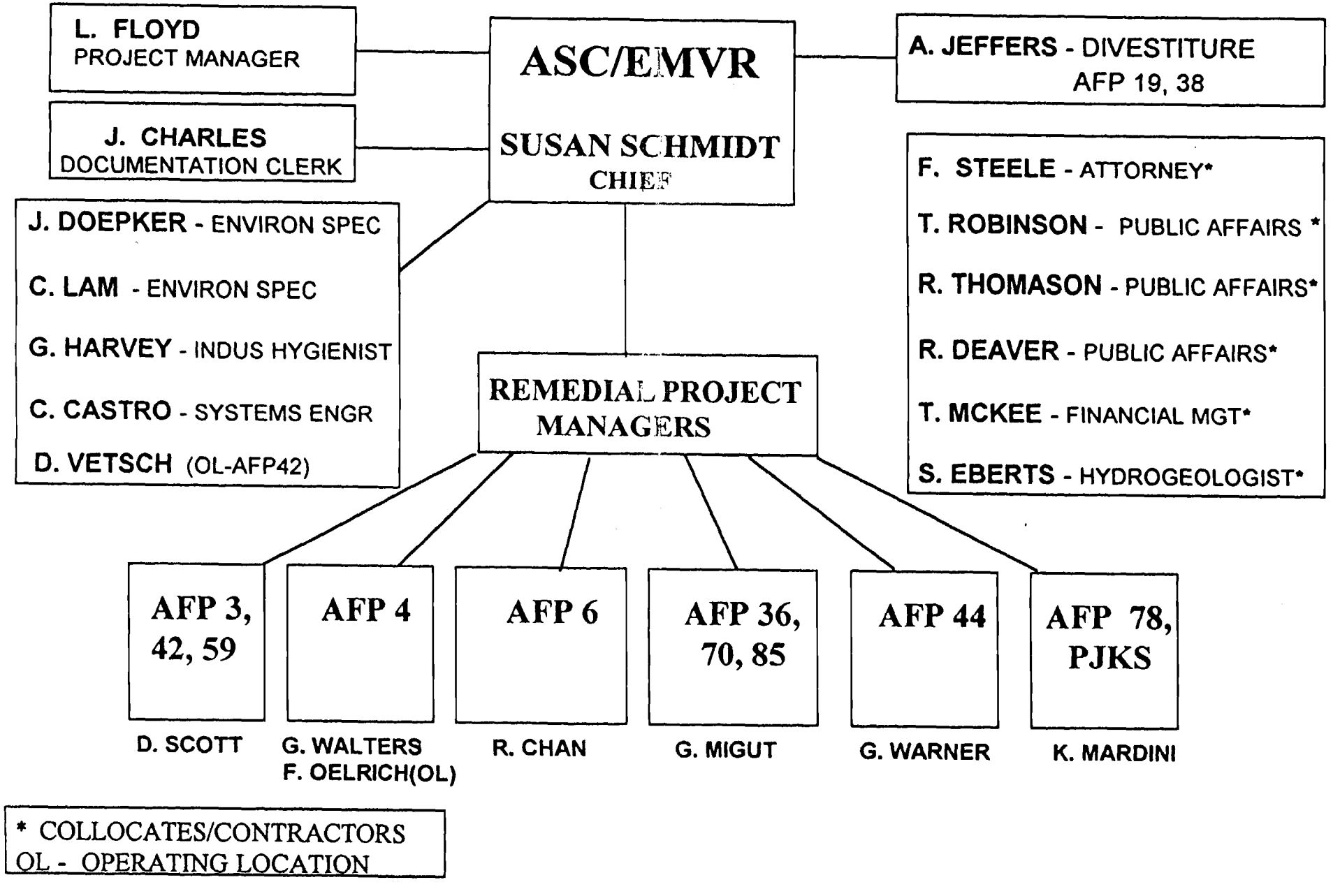
175 40

TRC PURPOSE

- Disseminate Information
- Receive Feedback From Members

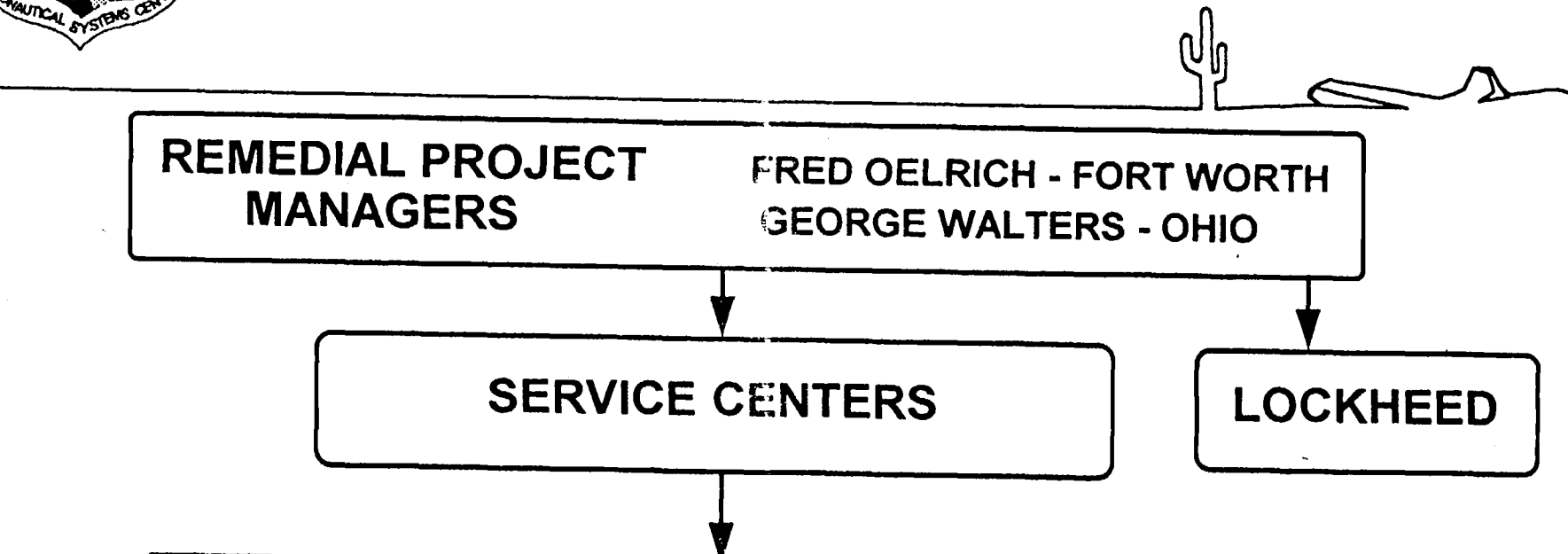
INSTALLATION RESTORATION PROGRAM

GOVERNMENT-OWNED , CONTRACTOR-OPERATED PLANTS



* COLLOCATES/CONTRACTORS
OL - OPERATING LOCATION

ORGANIZATION FLOW CHART



SERVICE CENTER CONTRACTORS

RPMs

↓

SERVICE CENTERS

- CORP OF ENG
  - -IT CORP
    - -EAST SIDE TREATMENT SYSTEM
    - -CARSWELL TREATMENT SYSTEM

SERVICE CENTER CONTRACTORS
(CON'T)

- **CORP OF ENG (CON'T)**
  - ENVIRONMENTAL SCIENCE AND ENGINEERING
    - VAPOR EXTRACTION (BLDG 181)
  - GEO-MARINE
    - PLUME CHARACTERIZATION

- **AFCEE (AF CENTER FOR ENV EXCELLENCE)**
  - IT CORP
    - LANDFILL #3 EARLY ACTIONS
  - JACOB'S ENGINEERING
    - GROUNDWATER MONITORING

SERVICE CENTER CONTRACTORS
(CON'T)

- DEPARTMENT OF ENERGY
  - RUST GEOTECH
    - REMEDIAL INVESTIGATION/FEASIBILITY STUDY
    - GROUNDWATER MODELING
- LOCKHEED
  - OPERATE TREATMENT SYSTEM
  - DISPOSAL OF WASTE
- US GEOLOGICAL SURVEY
  - GROUNDWATER DATA

AIR FORCE PARTNERING

CARSWELL AFB
IRP

AFP 4
IRP

PARTNERING

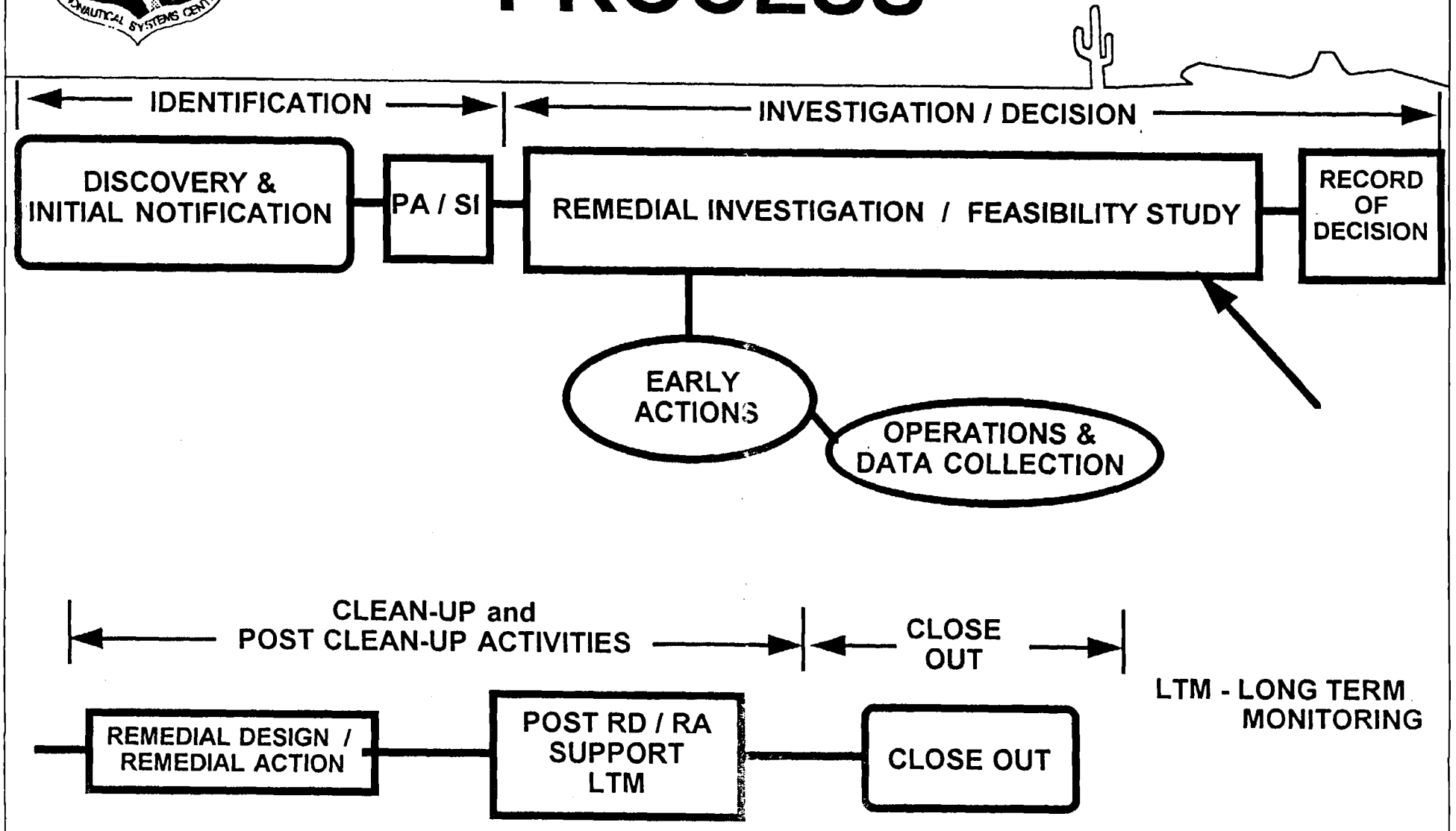
PARTNERING GOALS

- SHARE INFORMATION
- MANAGERS AND CONTRACTORS KNOW EACH OTHER
- INTEGRATE CLEANUP THROUGH EFFECTIVE PROJECT MANAGEMENT
- DEVELOP A JOINT MASTER PLAN (JMP)

PARTNERING GOALS
(CONTINUED)

- UTILIZE PROJECT MANAGEMENT PROBLEM SOLVING STRATEGY
- COORDINATED PUBLIC AFFAIRS EFFORTS
- MAINTAIN THE PARTNERING AGREEMENT THROUGH THE LIFE OF THE PROGRAM

CERCLA PROCESS



INVESTIGATIONS

- Private Well Sampling
- Baseline Sampling
- RI / FS
- Supplemental Feasibility Study of TCE Plume

ONGOING EARLY REMEDIAL ACTIONS

- Reduce Harm to Public/Environment
  - Landfill #3 (Under Review)
  - Eastside Pump and Treat (Const)
  - Building 181 SVEPP
  - Carswell Pump and Treat
  - Fuel Saturation Areas
  - Bioventing Pilot System

OPERATIONS AND DATA COLLECTION

- Qtrly Groundwater Monitoring & Long Term Plan
- IRA O&M LOCKHEED
- IRA O&M (CARSWELL)
- IRA Hydraulic Data Collection
- Abandon Wells

CLEAN-UP AND POST CLEAN-UP ACTIVITIES

- Quarterly Groundwater Monitoring
- Groundwater Treatment System O&M
- RD/RA At 9 Sites
- Groundwater Treatment System Design

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ADMINISTRATIVE RECORD

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