

OU 12

OU 12 is the 400 and 800 Areas, shown in Figure 1. The OU is entirely in the Security Controlled Area, the developed portion of RFP that is occupied by buildings, paved areas, utilities and other features that have significantly disturbed the natural environment. The OU consists of 10 individual hazardous substance sites (IHSSs): 116 1 and 116 2 (multiple solvent spills at the west and south loading dock areas of Building 444), 120 1 and 120 2 (fiberglassing areas north and west of Building 664), 136 1 and 136 2 (backfilled cooling tower ponds southwest, east and northwest of Building 444), 147 2 (process waste leak site northeast of Building 881), 157 2 (an area of radioactive contamination around Building 444), 187 (acid leaks in an area north of Building 444) and 189 (a storage yard in which there were multiple acid spills, northeast of Building 444). Because of their varied histories, field work will be different in each IHSS.

Figures 2 through 11 show the types of field work planned for each IHSS and the locations of each field activity. The maps show that OU 12 field work will include:

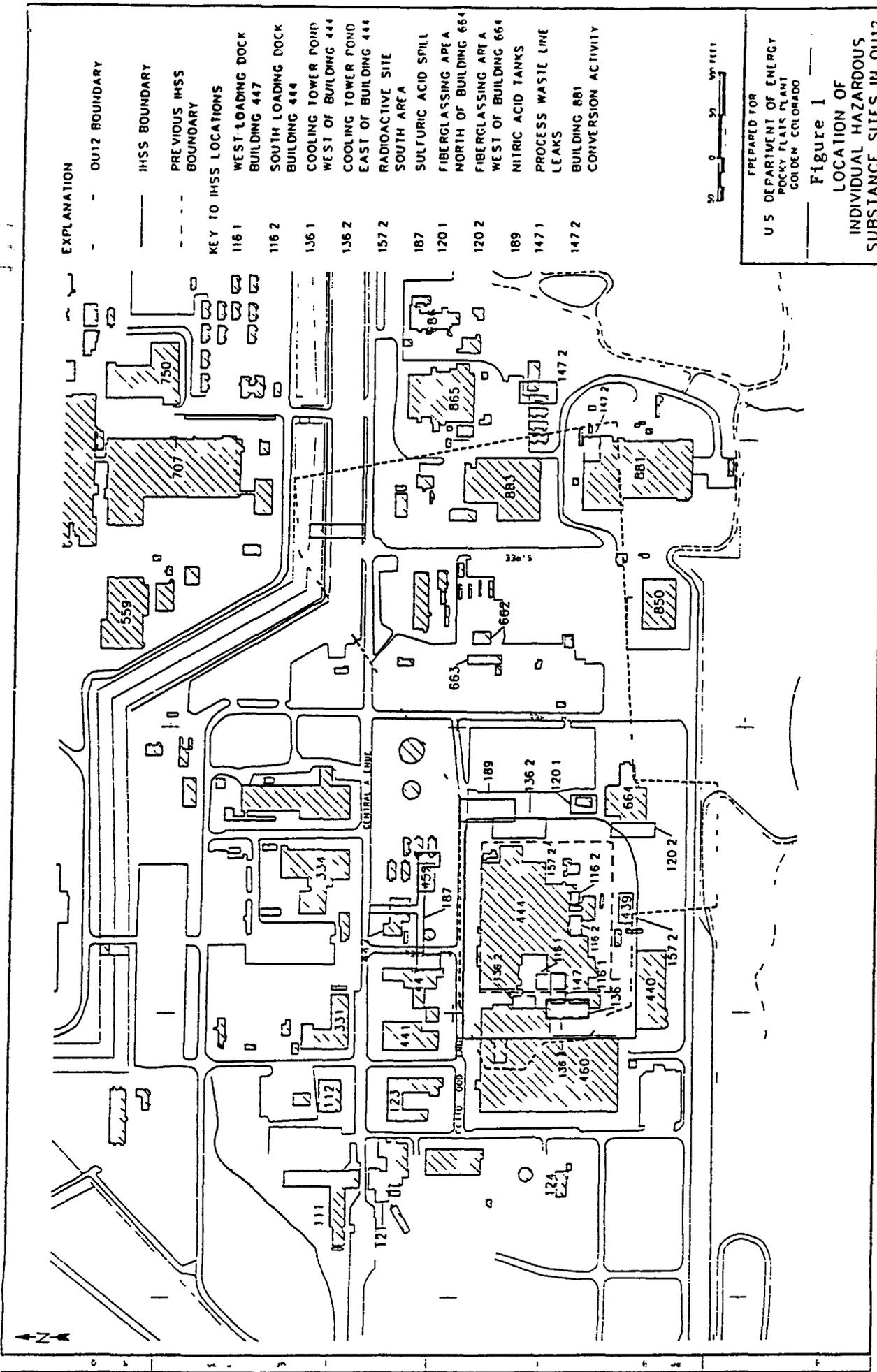
- surficial soil or soil profile samples at 82 locations,
- soil gas surveys at 135 locations,
- soil borings at 20 locations,
- monitoring wells at 3 locations,
- sediment samples at 12 locations,
- hydraulic probes at 25 locations,
- radiological surveys at 43 locations

Each of these types of activities is described in the "Field Sampling Methods" section below. In many instances, more than one type of field work will occur at a single location.

Site characterization activities at OU 12 are expected to start in the fourth quarter of 1992 and continue into the fourth quarter of 1993.

OU 14

OU 14 consists of eight IHSSs (131, 156 1, 160 161, 162, 164 1, 164 2 and 164 3) in the south and west areas of the plant site. Each of the IHSSs is shown in Figure 12. IHSS 131, which is difficult to see on the map, is located in the northwest corner of Building 776 just east of the north end of the long narrow IHSS. Of the eight IHSSs, two are parking lots containing 313,000 square feet, four are paved areas near building including 82,000 square feet, one is a storage pad of 25,000 square feet, and the eighth is a paved road covering 161,000 square feet. Like the OU 12 IHSSs, all of these IHSSs are within the Security Controlled Area.



PREPARED FOR
 U S DEPARTMENT OF ENERGY
 ROCKY FLATS PLANT
 GOLDEN, COLORADO

Figure 1
 LOCATION OF
 INDIVIDUAL HAZARDOUS
 SUBSTANCE SITES IN OUI12

REVISION NO. 0

FILE NAME 40103\01 601 DMC

DATE 5/1/97

DRAWN BY JAA

APPROVED BY

CHECKED BY



460

IHSS 116.1

SHED

457

447

451

EXPLANATION

-  BUILDING
-  PAVEMENT
-  CONCRETE
-  SOIL OR GRAVEL
-  IHSS BOUNDARY
-  OVERHEAD PIPING

-  DRAIN
-  DRAINAGE
-  SURFICIAL SOIL SAMPLING LOCATION
-  SOIL GAS SURVEY LOCATION
-  SOIL BORING LOCATION (TENTATIVE)
-  MONITORING WELL LOCATION (TENTATIVE)

NOTE LOCATION OF PHYSICAL SITE FEATURES ARE APPROXIMATE

PREPARED FOR
 U S DEPARTMENT OF ENERGY
 ROCKY FLATS PLANT
 GOLDEN COLORADO

Figure 2
 FIELD SAMPLING PLAN FOR
 IHSS 116.1 - WEST



REVISION NO 0

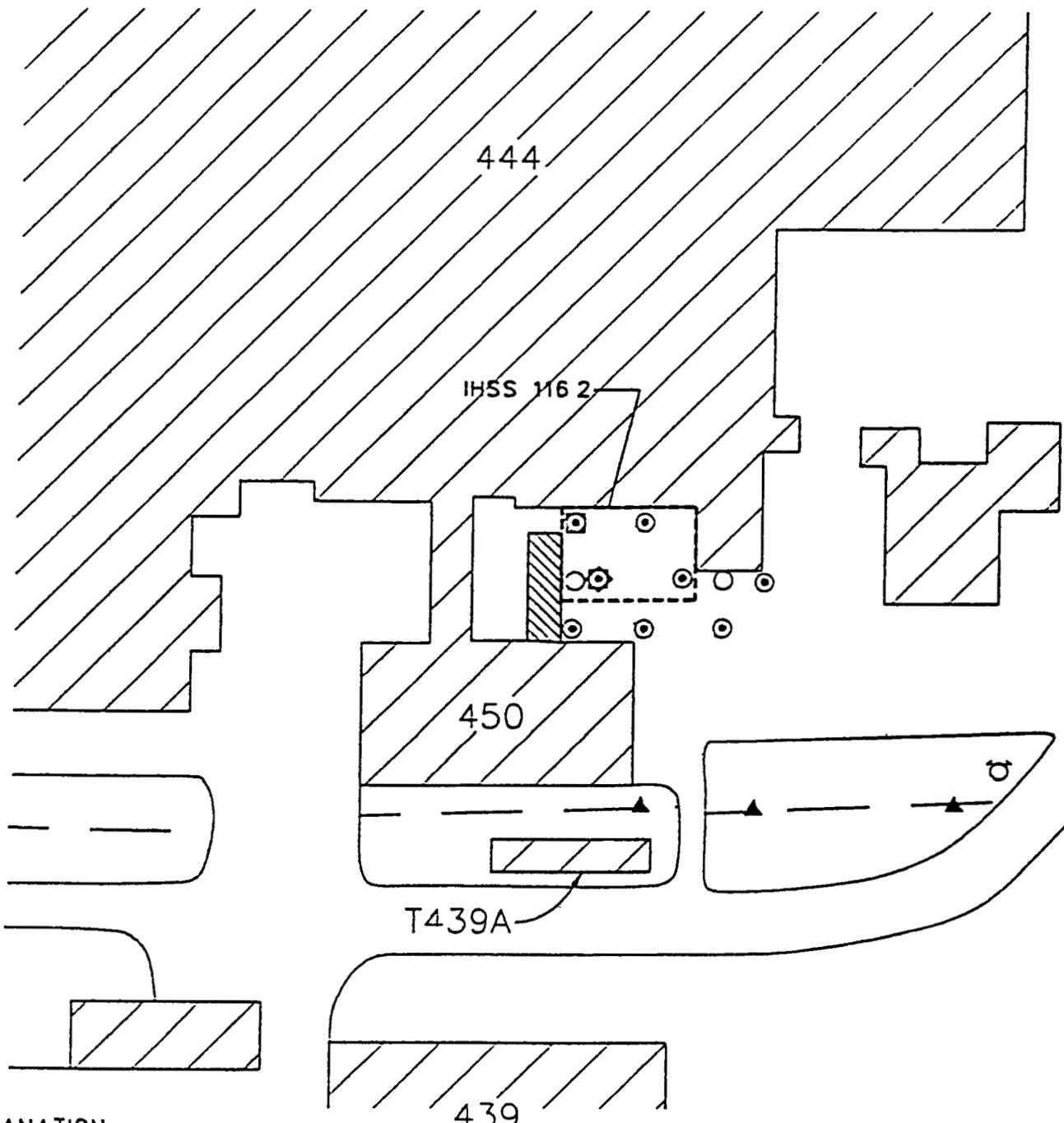
FILE NAME 40103\F01 602.DWC

DATE 5/1/92

DRAWN BY JAA

APPROVED BY

CHECKED BY



EXPLANATION



BUILDING

--- IHSS BOUNDARY

- - - DRAINAGE



PAVEMENT



CONCRETE



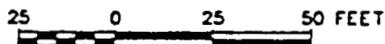
SOIL OR GRAVEL



WATER HYDRANT

- SURFICIAL SOIL SAMPLING LOCATION
- SOIL GAS SURVEY LOCATION
- SOIL BORING LOCATION (TENTATIVE)
- ◇ MONITORING WELL LOCATION (TENTATIVE)
- ▲ SEDIMENT SAMPLE LOCATION

NOTE LOCATION OF PHYSICAL SITE FEATURES ARE APPROXIMATE



PREPARED FOR
 U S DEPARTMENT OF ENERGY
 ROCKY FLATS PLANT
 GOLDEN COLORADO

Figure 3
 FIELD SAMPLING PLAN FOR
 IHSS 116 2 - SOUTH
 LOADING DOCK BUILDING 444

REVISION NO 0

FILE NAME 40103\01 603.DWG

DATE 5/1/92

DRAWN BY JAA

APPROVED BY



460

444

457

447

451

IHSS 1361

EXPLANATION

-  BUILDING
-  PAVEMENT
-  CONCRETE
-  SOIL OR GRAVEL
-  IHSS BOUNDARY
-  OVERHEAD PIPING
-  DRAIN

-  SURFICIAL SOIL SAMPLING LOCATION
-  HYDRAULIC PROBE LOCATION
-  SOIL BORING LOCATION (TENTATIVE)

NOTE LOCATION OF PHYSICAL SITE FEATURES ARE APPROXIMATE

PREPARED FOR
U.S. DEPARTMENT OF ENERGY
ROCKY FLATS PLANT
GOLDEN COLORADO

Figure 4
FIELD SAMPLING PLAN FOR
IHSS 1361 - COOLING TOWER
POND WEST OF BUILDING 444



REVISION NO 0

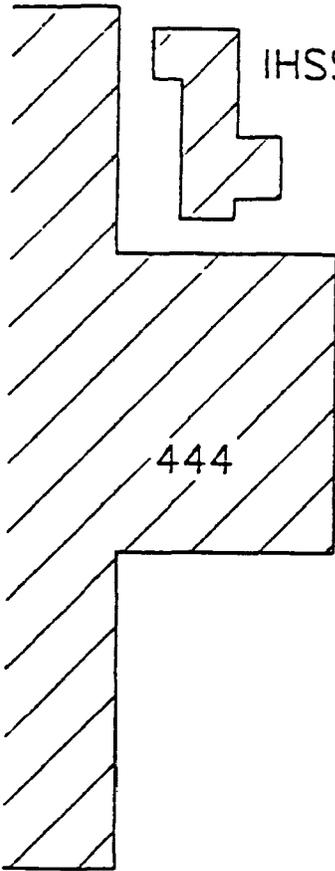
FILE NAME 40101\01 604DWC

DATE 5/1/92

DRAWN BY JAA

APPROVED BY

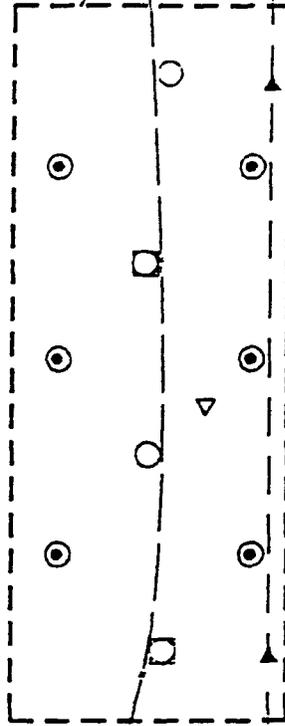
CHECKED BY



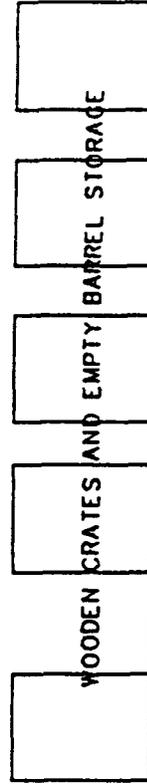
IHSS 136 2

444

SECURED AREA



NITRIC ACID TANKS



EXPLANATION



BUILDING

--- IHSS BOUNDARY

- - - DRAINAGE



PAVEMENT



SOIL OR GRAVEL

— RAILROAD

-x- FENCE

▽ NESTED TENSIOMETER LOCATION (TENTATIVE)

▲ SEDIMENT SAMPLE LOCATION

● SURFICIAL SOIL SAMPLING LOCATION

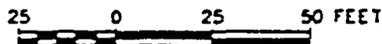
○ HYDRAULIC PROBE LOCATION

□ SOIL BORING LOCATION (TENTATIVE)

NOTE LOCATION OF PHYSICAL SITE FEATURES ARE APPROXIMATE

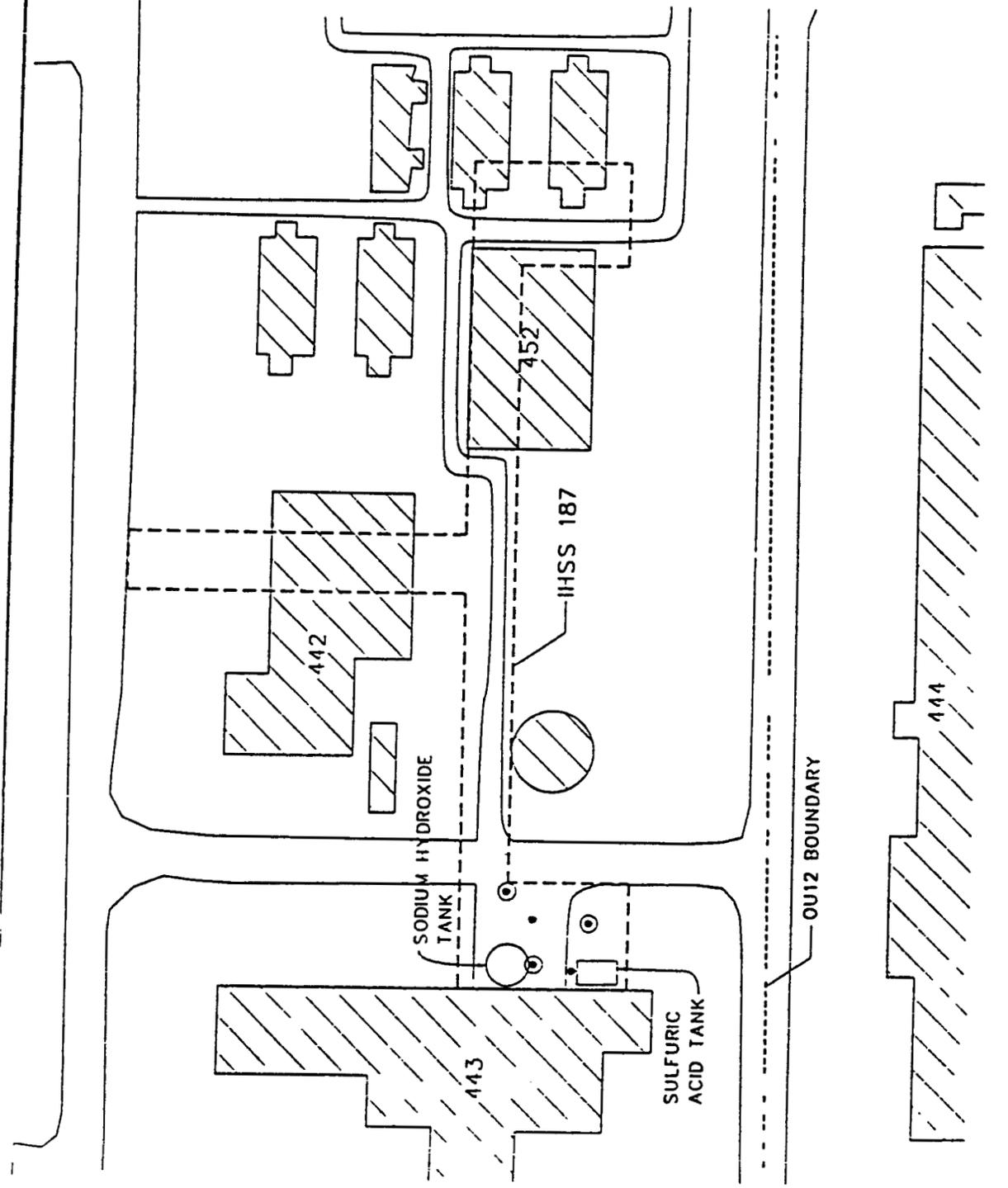
PREPARED FOR
U S DEPARTMENT OF ENERGY
ROCKY FLATS PLANT
GOLDEN COLORADO

Figure 5
FIELD SAMPLING PLAN FOR
IHSS 136 2-COOLING TOWER
POND EAST OF BUILDING 444





0 5m 10m 15m 20m 25m 30m 35m 40m 45m 50m 55m 60m 65m 70m 75m 80m 85m 90m 95m 100m



- EXPLANATION
- BUILDING
 - IHSS BOUNDARY
 - OVERHEAD PIPING
 - PAVEMENT
 - SOIL OR GRAVEL
 - SURFICIAL SOIL SAMPLING LOCATION
 - HYDRAULIC PROBE LOCATION

NOTE LOCATION OF PHYSICAL SITE FEATURES ARE APPROXIMATE



PREPARED FOR
 U.S. DEPARTMENT OF ENERGY
 ROCKY FLATS PLANT
 GOLDEN, COLORADO
 Figure 7
 FIELD SAMPLING PLAN FOR
 IHSS 187
 SULFURIC ACID SPILL

REVISION NO 0

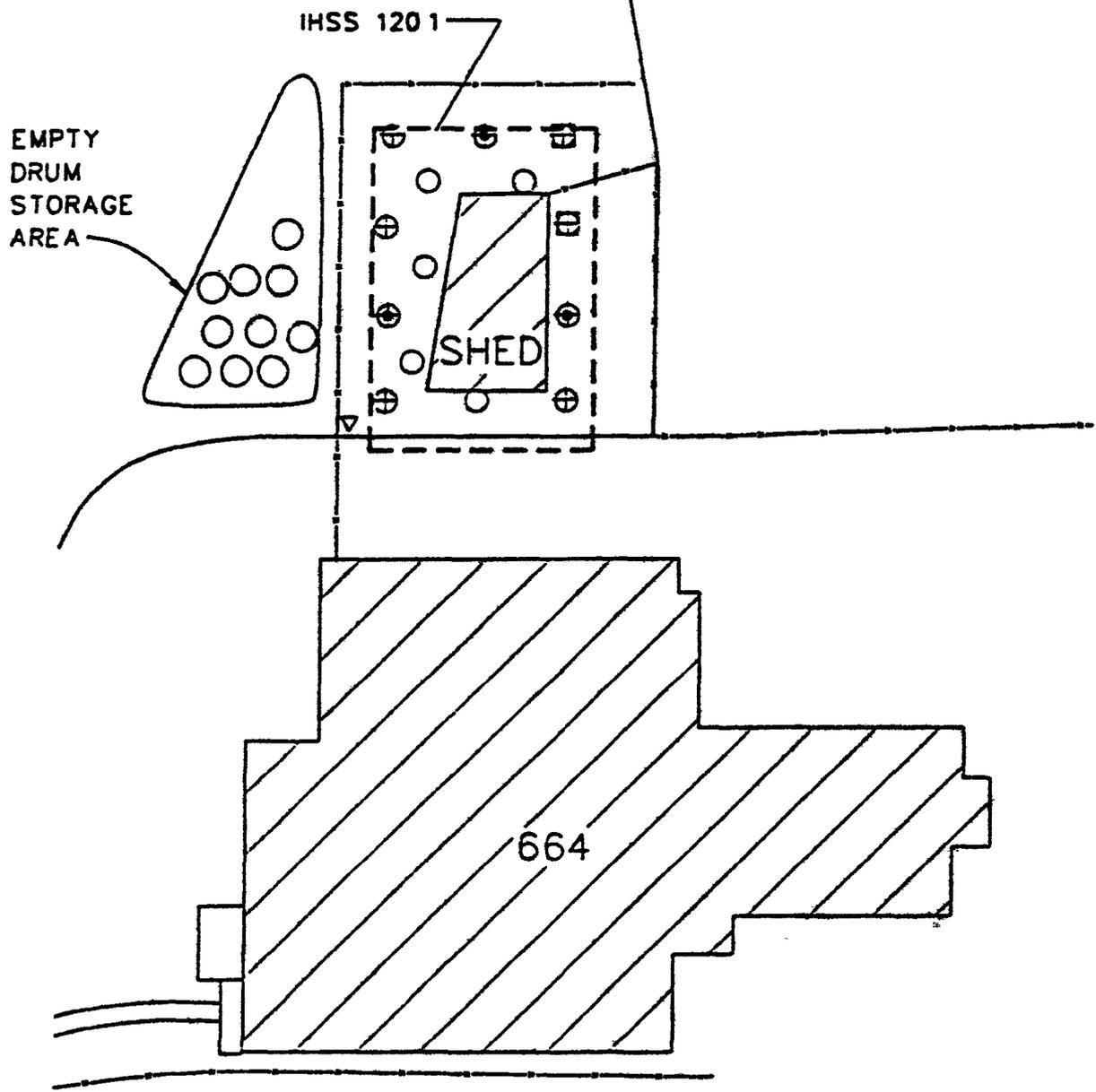
FILE NAME 40101V02607DWC

DATE 5/1/92

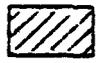
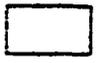
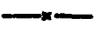
DRAWN BY IAA

APPROVED BY

CHECKED BY



EXPLANATION

-  BUILDING
-  IHSS BOUNDARY
-  PAVEMENT
-  SOIL OR GRAVEL
-  RAILROAD
-  FENCE

-  NESTED TENSIO METER LOCATION(TENTATIVE)
-  SURFICIAL SOIL/DEPTH PROFILE SAMPLING LOCATION
-  SOIL GAS SURVEY LOCATION
-  SOIL BORING LOCATION (TENTATIVE)
-  RADIOLOGICAL SURVEY LOCATION

NOTE LOCATION OF PHYSICAL SITE FEATURES ARE APPROXIMATE



PREPARED FOR
 U S DEPARTMENT OF ENERGY
 ROCKY FLATS PLANT
 GOLDEN COLORADO

Figure 8
 FIELD SAMPLING PLAN FOR
 IHSS 1201-FIBERGLASSING
 AREA NORTH OF BUILDING 664

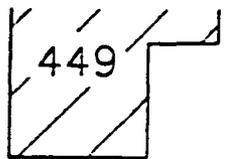
REVISION NO 0

FILE NAME 40103\F01 606.DWG

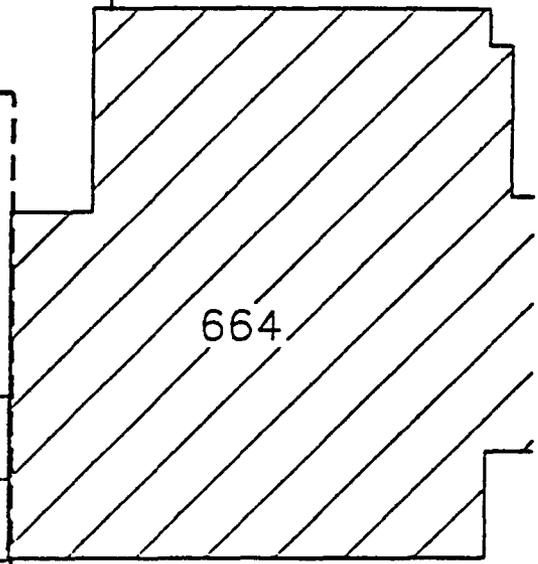
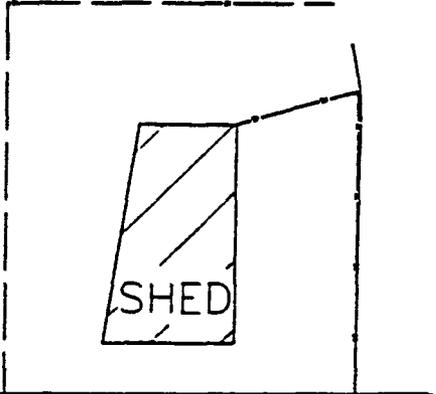
DATE 5/4/97

DRAWN BY JAA

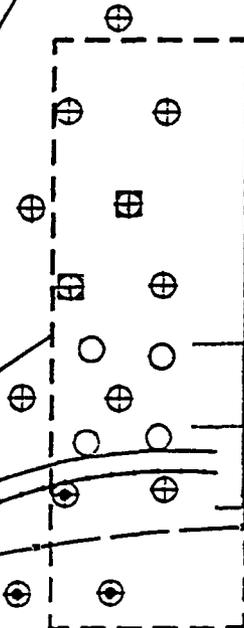
APPROVED BY



SECURED AREA



IHSS 120 2



EXPLANATION

-  BUILDING
-  IHSS BOUNDARY
-  DRAINAGE
-  PAVEMENT
-  SOIL OR GRAVEL
-  RAILROAD
-  FENCE

-  SURFICIAL SOIL/DEPTH PROFILE SAMPLING LOCATION
-  SOIL GAS SURVEY LOCATION
-  SOIL BORING LOCATION (TENTATIVE)
-  RADIOLOGICAL SURVEY LOCATION



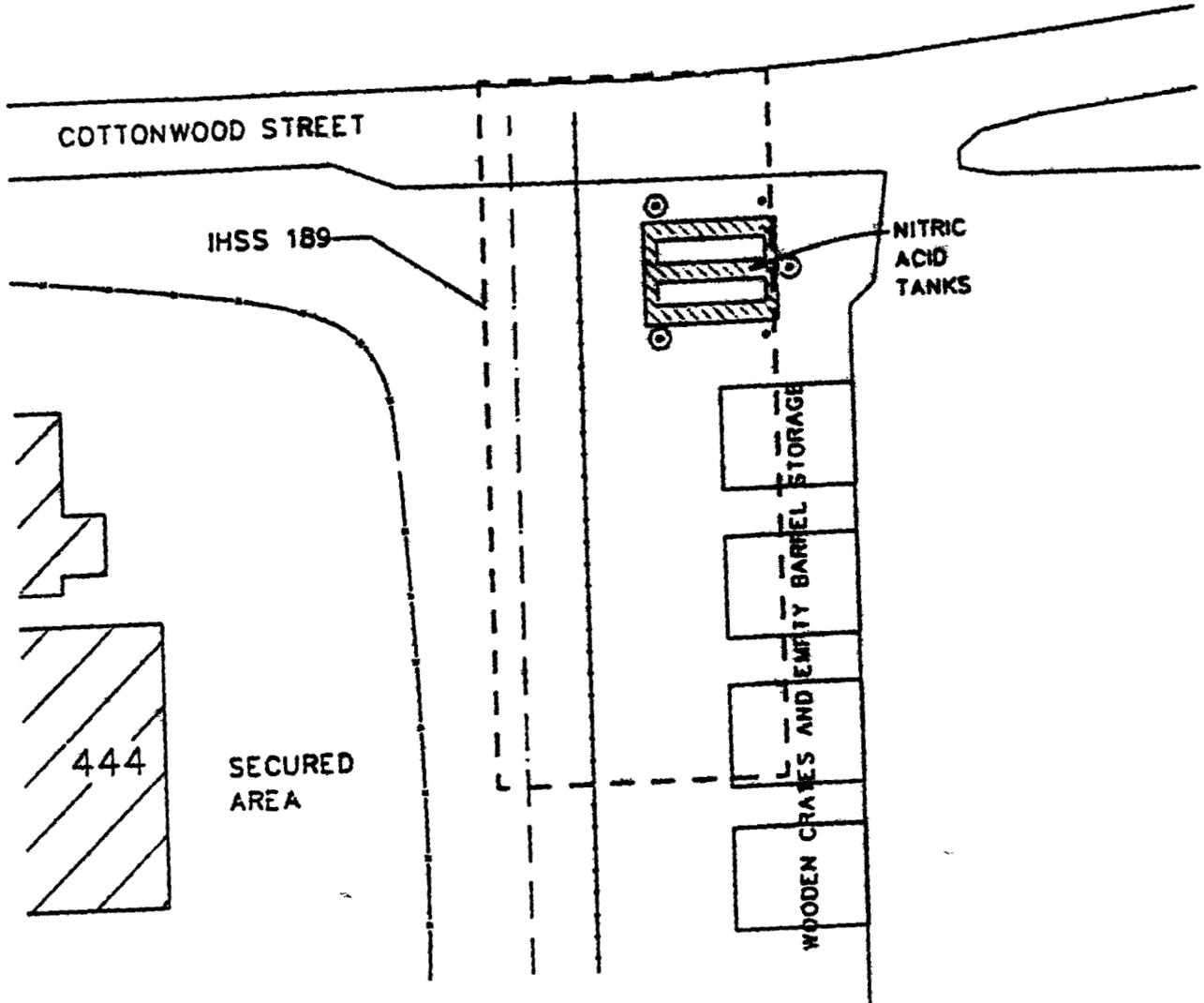
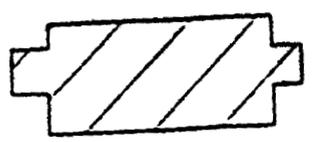
NOTE LOCATION OF PHYSICAL SITE FEATURES ARE APPROXIMATE

PREPARED FOR
U S DEPARTMENT OF ENERGY
ROCKY FLATS PLANT
GOLDEN COLORADO

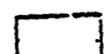
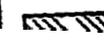
Figure 9
FIELD SAMPLING PLAN FOR
IHSS 120 2-FIBERGLASSING
AREA WEST OF BUILDING 664

CHECKED BY

REVISION NO 0
 FILE NAME: 40103\VD1 609 DWG
 DATE: 5/1/92
 DRAWN BY: JAA
 APPROVED BY:



EXPLANATION

-  BUILDING
-  IHSS BOUNDARY
-  DRAINAGE
-  PAVEMENT
-  SOIL OR GRAVEL
-  RAILROAD
-  FENCE
-  CONCRETE

- SURFICIAL SOIL SAMPLING LOCATION
- HYDRAULIC PROBE LOCATION

NOTE. LOCATION OF PHYSICAL SITE FEATURES ARE APPROXIMATE

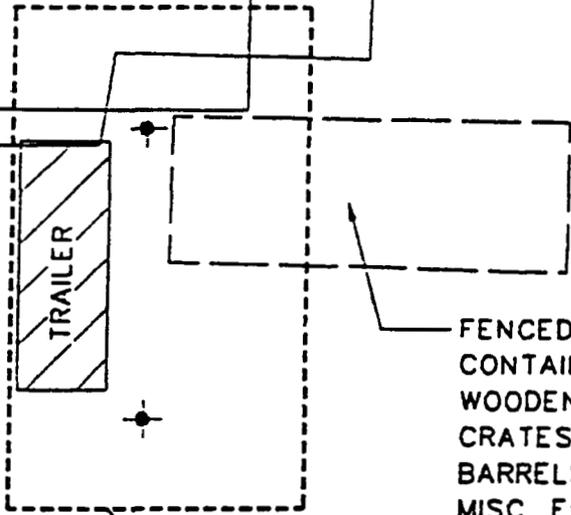
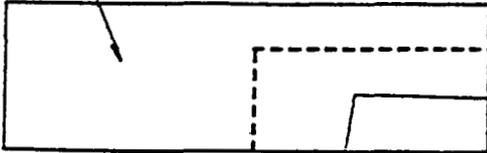
PREPARED FOR
 U.S. DEPARTMENT OF ENERGY
 ROCKY FLATS PLANT
 GOLDEN COLORADO

Figure 10
 FIELD SAMPLING PLAN FOR
 IHSS 189-NITRIC
 ACID TANKS



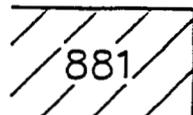
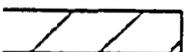


AREA CONTAINING
STEEL BOXES HOLDING
DEPLETED URANIUM

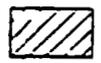


FENCED AREA
CONTAINING
WOODEN PACKING
CRATES EMPTY
BARRELS, AND
MISC EQUIPMENT

IHSS 147 2



EXPLANATION



BUILDING



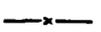
IHSS BOUNDARY



PAVEMENT



SOIL OR GRAVEL



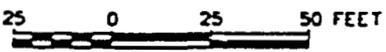
FENCE



SURFICIAL SOIL/DEPTH
PROFILE SAMPLING LOCATION



RADIOLOGICAL SURVEY



NOTE LOCATION OF PHYSICAL SITE
FEATURES ARE APPROXIMATE

PREPARED FOR
U S DEPARTMENT OF ENERGY
ROCKY FLATS PLANT
GOLDEN COLORADO

Figure 11
FIELD SAMPLING PLAN FOR
IHSS 147 2-BUILDING 881
CONVERSION ACTIVITY

REVISION NO 0

FILE NAME 40103\01 611 DWG

DATE 5/4/92

JAA

DRAWN BY

APPROVED BY

CHECKED BY

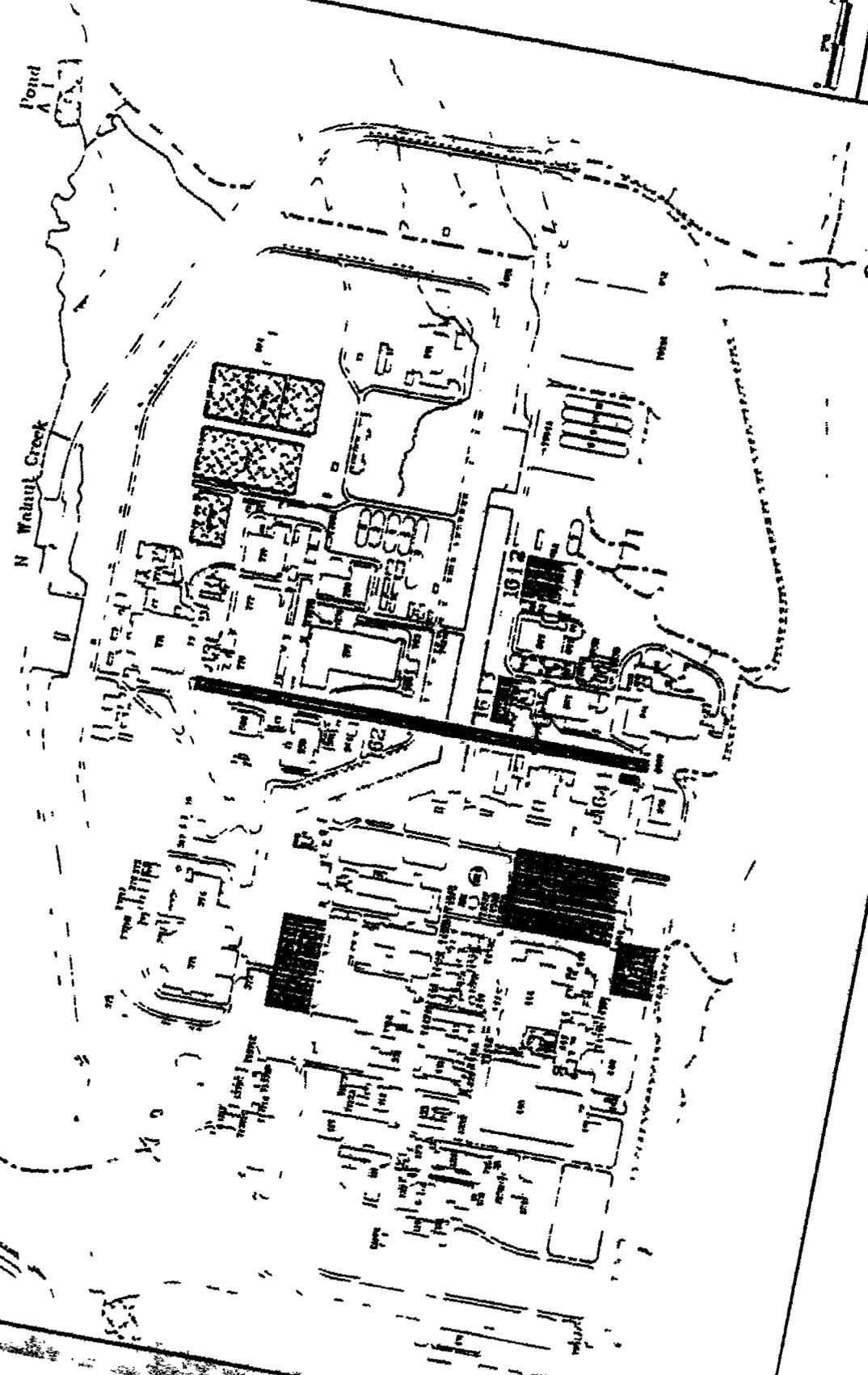
US Dept. of Energy
Rocky Flats Plant

- Point north
- Unimpaired area of
- Stream, ditch, and other drainage features
- Stream flow
- Rock/soil
- Point of view
- Subarea 1 (1985)



PREPARED BY
U.S. DEPARTMENT OF ENERGY
NATIONAL ENVIRONMENTAL
LABORATORY
GOLDEN, COLORADO
FIGURE 17
COMPREHENSIVE OVERVIEW
OF THE OUI4 SITE

Point A
N Walnut Creek



Survey Sample Location

- 2" surface scrapes at 25 ft centers
- 2 soil borings at 25 ft centers

Ground water wells

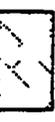
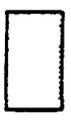
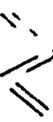
Paved roads

Unimproved dirt roads

Individual hazardous substance sites (IHSS)

Buildings or structures

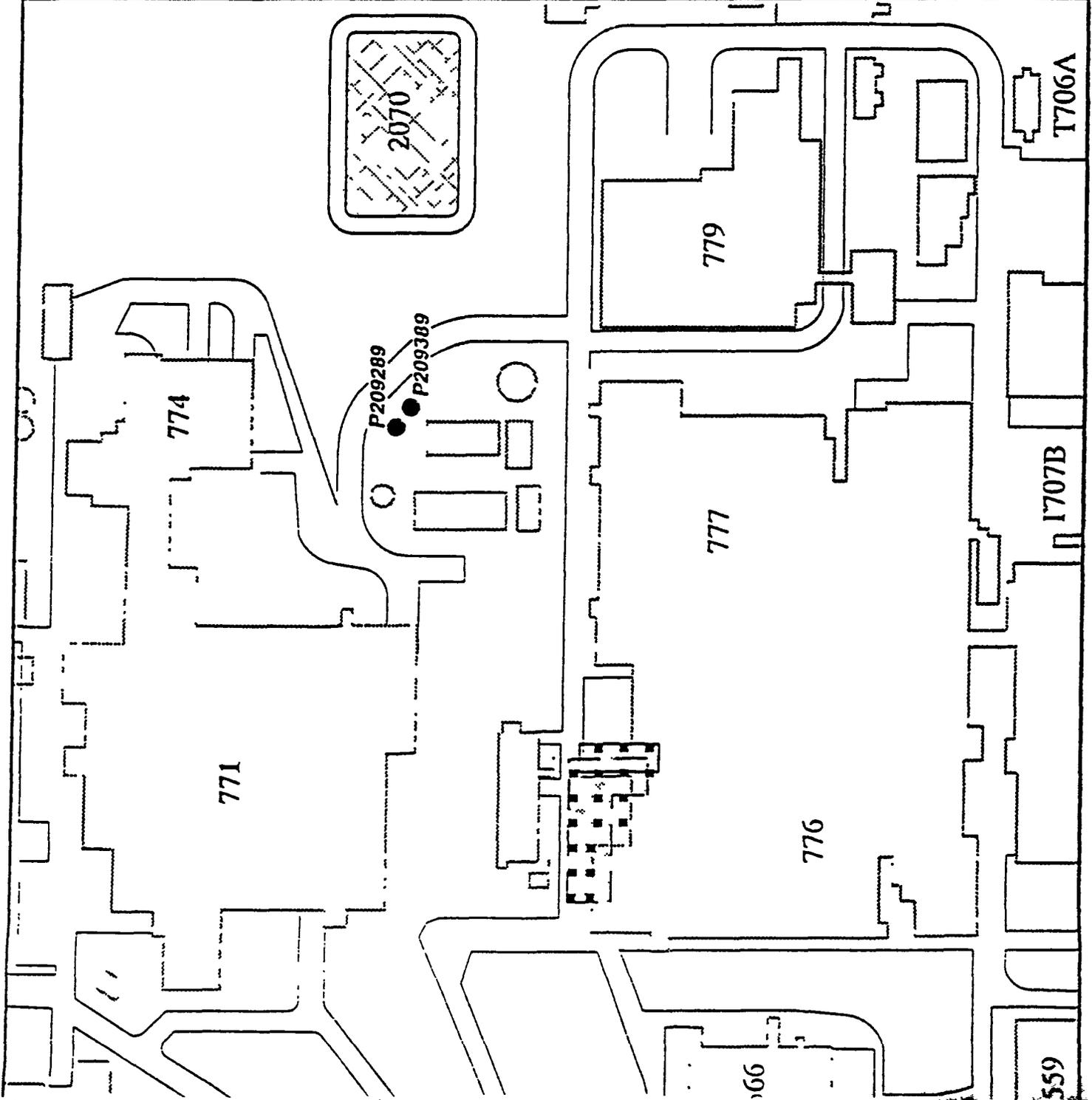
Ponds/lakes



PREPARED FOR
U S DEPARTMENT OF ENERGY
ROCKY FLATS PLANT
GOLDEN COLORADO

Figure 13

SOIL BORING LOCATIONS
IHSS 131



Figures 13 through 20 show the types of field work planned for each IHSS and the locations of each field activity. The maps show that OU 14 field work will include

- surficial soil samples at 355 locations,
- soil gas samples at 125 locations,
- boreholes at 171 locations and
- radiological surveys (including both FIDLER and HPGe surveys) at 530 locations

Each of these types of activities is described in the "Field Sampling Methods" section below. In many instances, more than one type of field work will occur at a single location.

If these tasks identify areas that need further investigation, additional radiological surveys, surficial soil sampling, soil gas sampling or drilling of boreholes/monitoring wells may occur in the locations where contamination was found. The amount of such additional drilling is not expected to be large (i.e., fewer than 20 wells).

Site characterization activities at OU 14 are expected to start in the fourth quarter of 1992 and continue into the first quarter of 1994.

OU 15

The locations of the six IHSSs (178, 179, 180, 204, 211 and 217) comprising OU 15, Inside Building Closures, are shown in Figure 21. IHSS 212, also shown in the Figure, is not scheduled for field work at this time. Each of the IHSSs is entirely within a building and all the field work for OU 15 will take place inside those buildings. IHSS 178 is in room 165 of Building 881, IHSS 179 is in room 145 of Building 865, IHSS 180 is in room 104 of Building 883, IHSS 204 is in room 502 of Building 447, IHSS 211 is in room 266B of Building 881 and IHSS 217 is in room 131C of Building 881. Because of their inside-building locations, no maps of the OU 15 field sampling activities are provided. The buildings provide primary, secondary and, in some cases, tertiary, containment for activities within them.

The OU 15 site characterization program is expected to be wholly non-invasive, consisting solely of visual inspections, surface radiological monitoring and collection of surface wipe and soot samples to be analyzed for radioactivity, VOCs and metals.

In addition, any liquids in certain polyethylene bottles in IHSS 217 will be sampled and analyzed for cyanide. Samples of building materials on which drummed wastes were stored will not be obtained as some of the floors in these areas have been painted to both indicate areas with elevated levels of radionuclides and, since the epoxy paint used effectively seals the radiation, to protect workers. It is expected that all stored drums will have been removed from the OU 15 IHSSs before the site characterization program begins. If, however, drums remain in the IHSSs, their contents will be sampled and analyzed. Any drum sampling will be done in accordance with the appropriate procedure, depending on the type of drum and the nature of its contents.

□ Survey Sample Location
2 surface scrapes at
50 ft centers

■ Survey Sample Location
FIDLER at 25 ft centers
2" surface scrapes at
50 ft centers

● Ground water wells

∩ Paved roads

□ Individual hazardous
substance sites (IHSS)

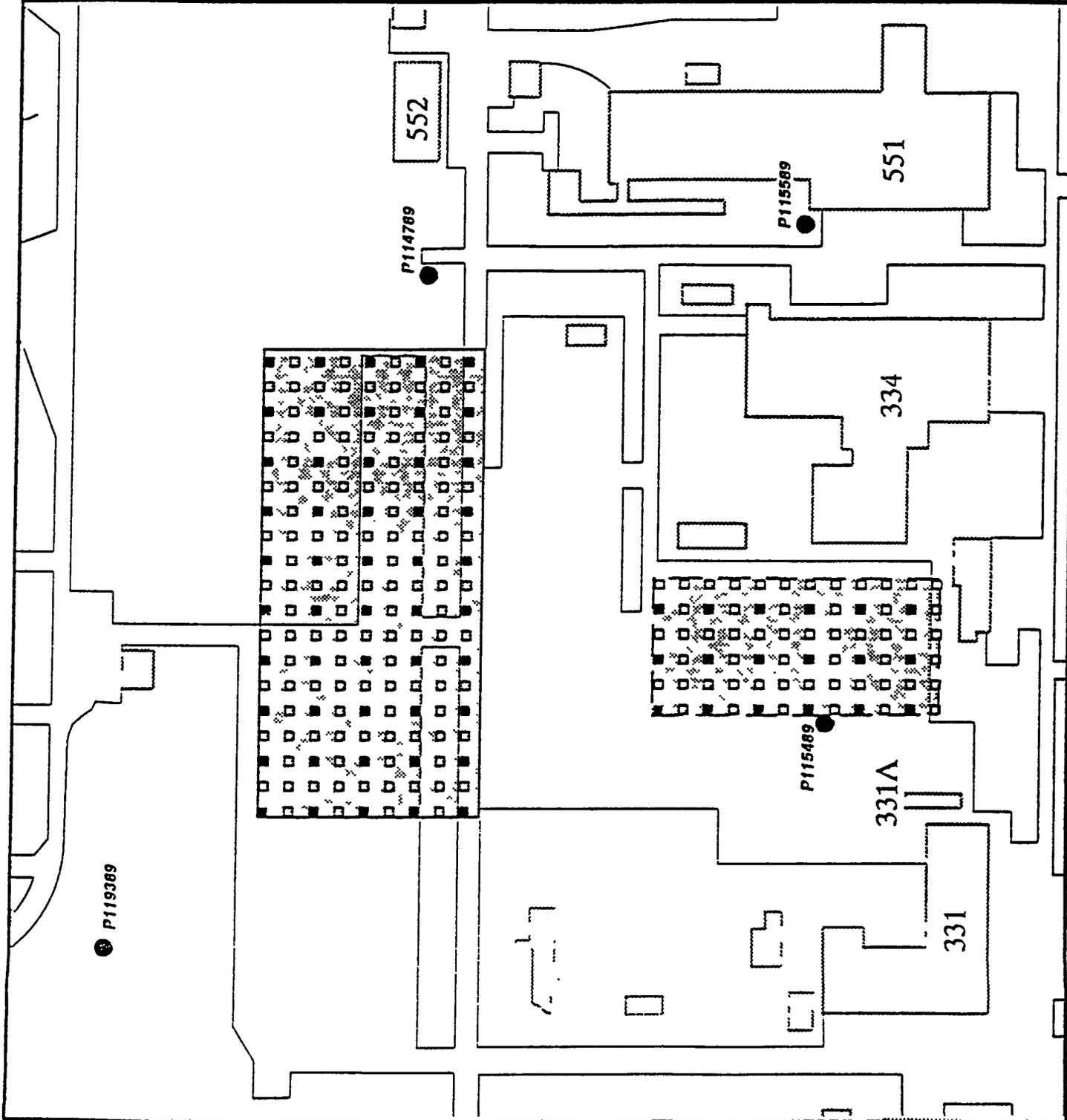
▭ Buildings or structures



PREPARED FOR
U S DEPARTMENT OF ENERGY
ROCKY FLATS PLANT
GOLDEN COLORADO

Figure 14

SOIL BORING LOCATIONS
IHSS 156 1



Legend:

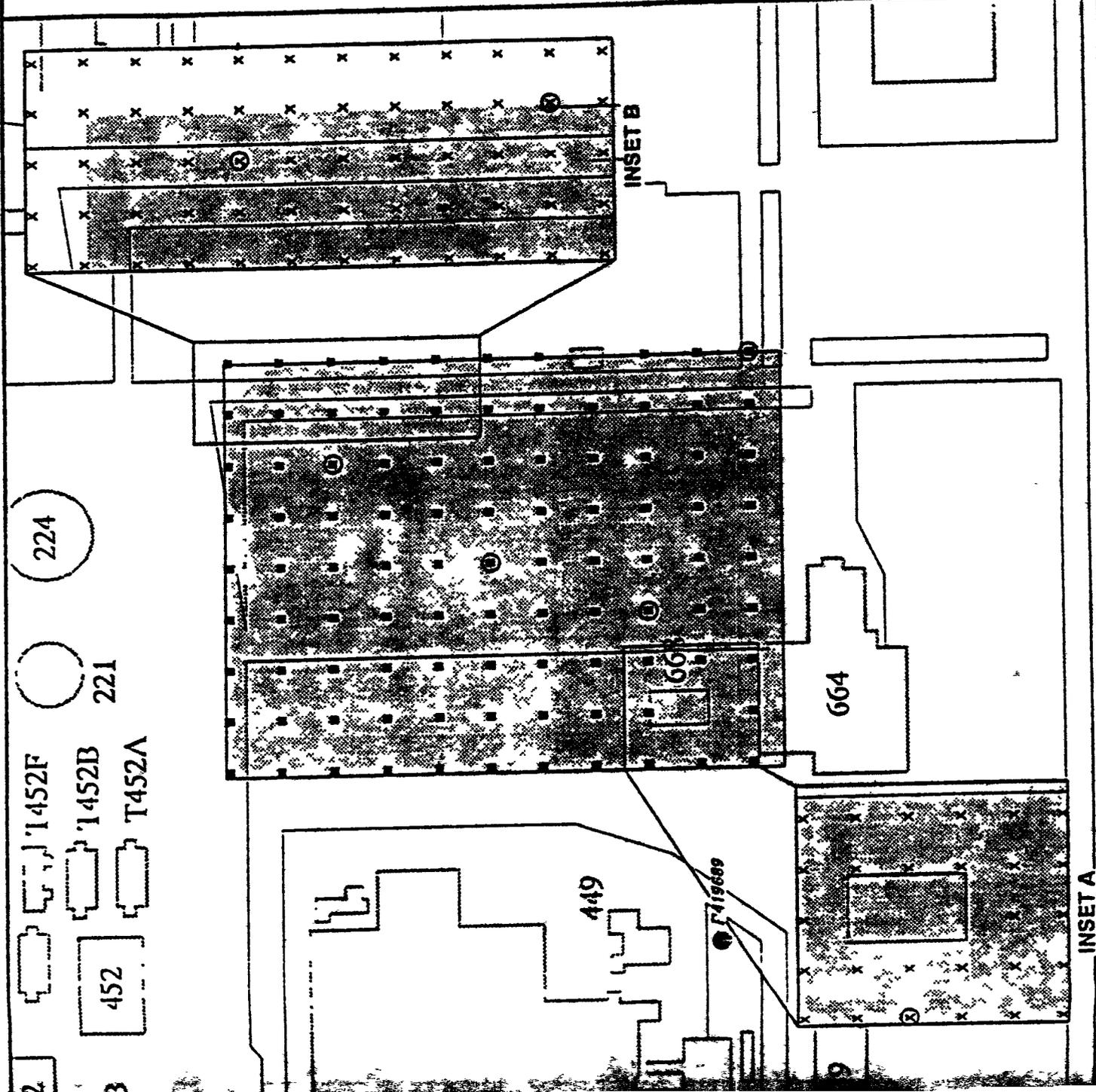
- Survey Sample Location
- Soil Gas Samples at 50 ft centers
- Borehole randomly selected to samples 1 out of every 25 soil gas sample locations
- × 2" surface scrapes at 50 ft centers
- × Concentrated Radiological Survey Sample Area at 25 centers based on Historical Information
- Ground water wells
- ══ Paved roads
- ══ Unimproved dirt roads
- Individual hazardous substance sites (IHSS)
- Buildings or structures

Scale: 0 75 150 300 FEET

PREPARED FOR:
U.S. DEPARTMENT OF ENERGY
 ROCKY FLATS PLANT
 GOLDEN, COLORADO

Figure 15

SOIL GAS AND RADIOLOGICAL SURVEY LOCATIONS IHSS 160



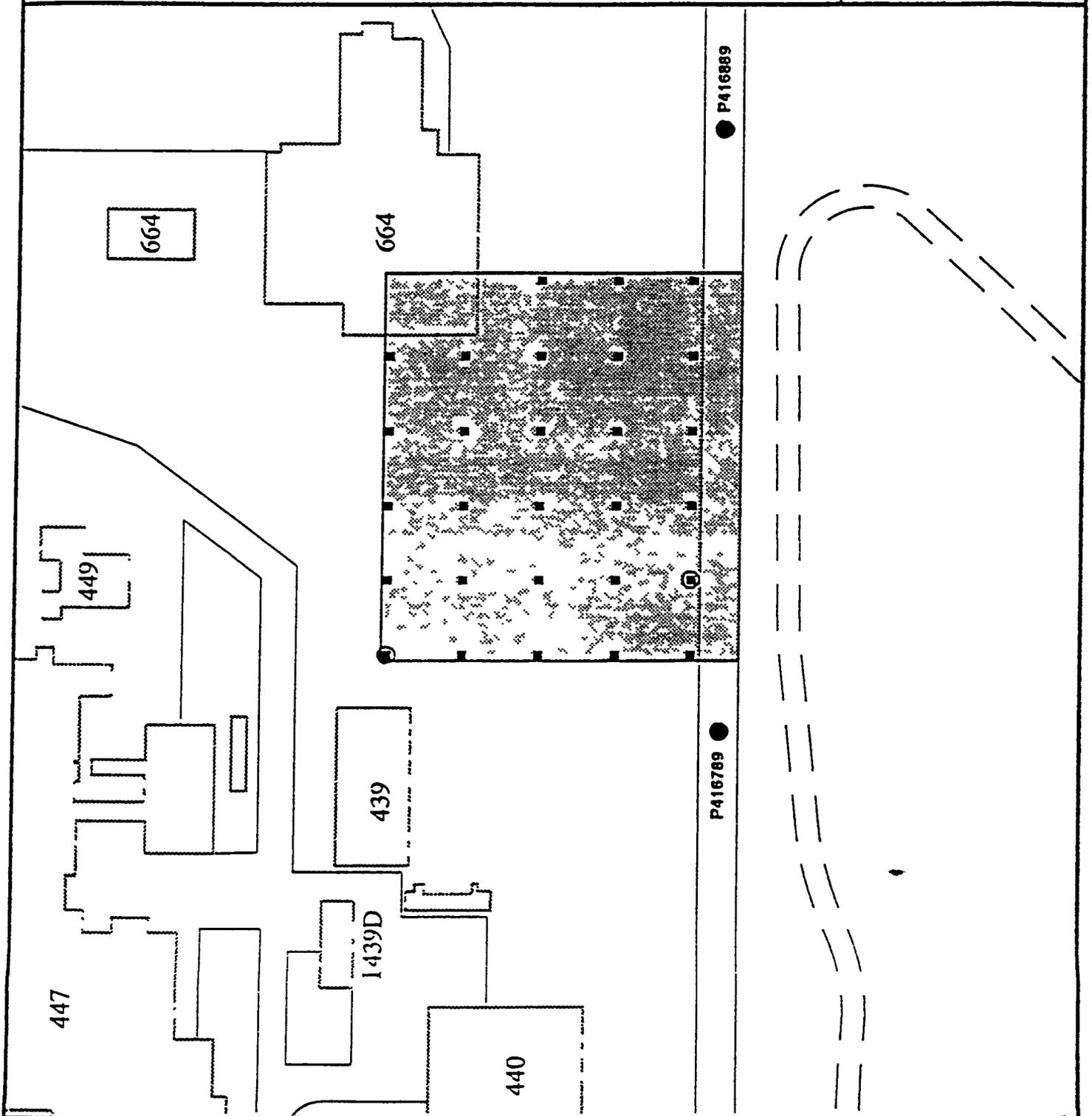
- Survey Sample Location
- Soil Gas Samples at 50 ft centers
- Borehole randomly selected to samples 1 out of every 25 soil gas sample locations
- -2" surface scrapes at 50 ft centers
- Ground water wells
- ══ Paved roads
- ══ Unimproved dirt roads
- Individual hazardous substance sites (IHSS)
- Buildings or structures



PREPARED FOR
U S DEPARTMENT OF ENERGY
 ROCKY FLATS PLANT
 GOLDEN COLORADO

Figure 16

**SOIL GAS AND
 RADIOLOGICAL SURVEY
 LOCATIONS IHSS 161**



Survey Sample Location
 2 surface scrapes at
 100 ft centers
 2 soil borings at
 100 ft centers

Concentrated Survey
 Sample Area at 25
 centers based on
 Historical Information

Ground water wells

Paved roads

Unimproved dirt roads

Individual hazardous
 substance sites (IHSS)

Buildings or structures

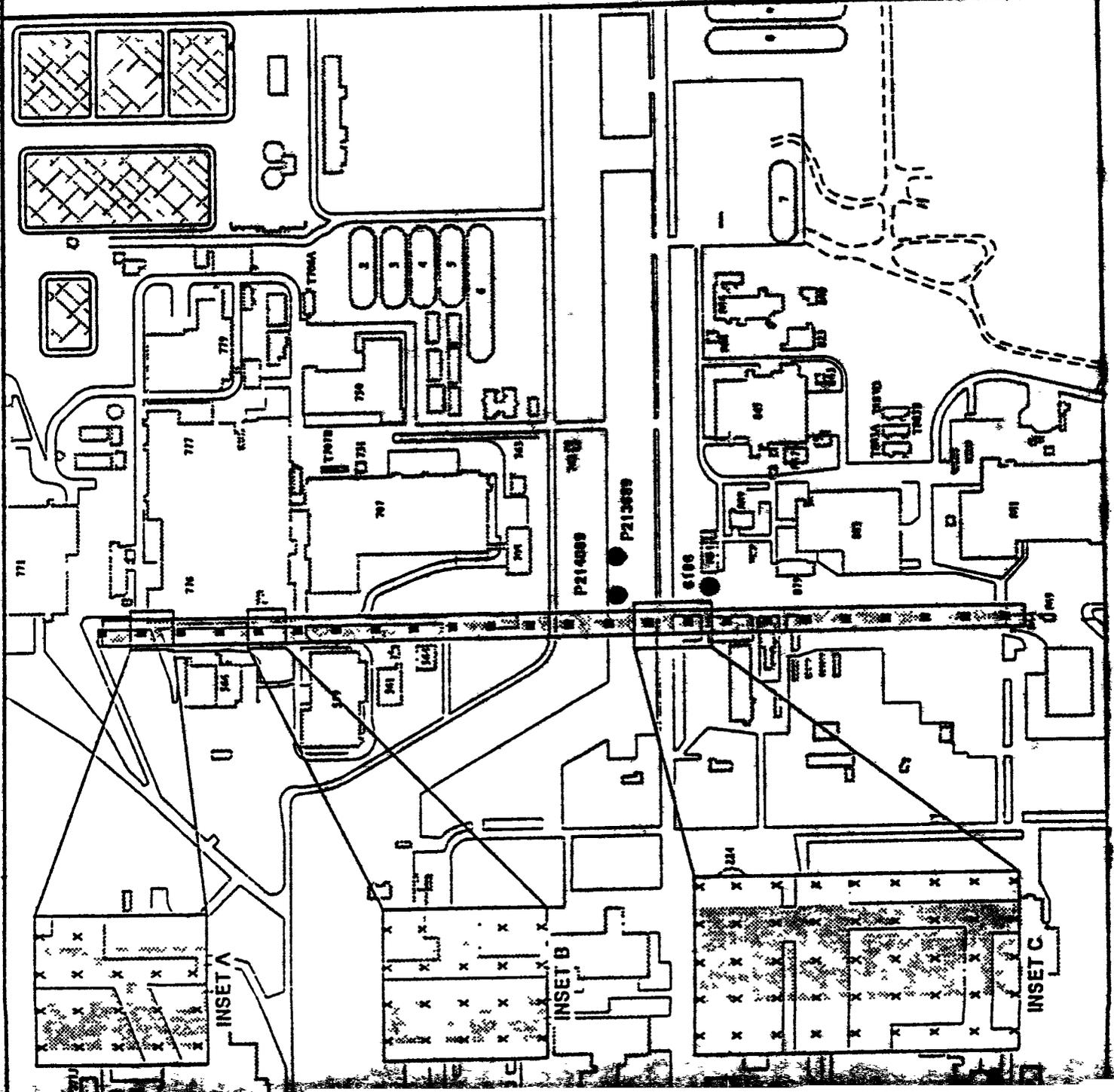
Ponds/lakes



PREPARED FOR
 U S DEPARTMENT OF ENERGY
 ROCKY FLATS PLANT
 GOLDEN, COLORADO

Figure 17

RADIOLOGICAL SURVEY
 LOCATIONS IHSS 162

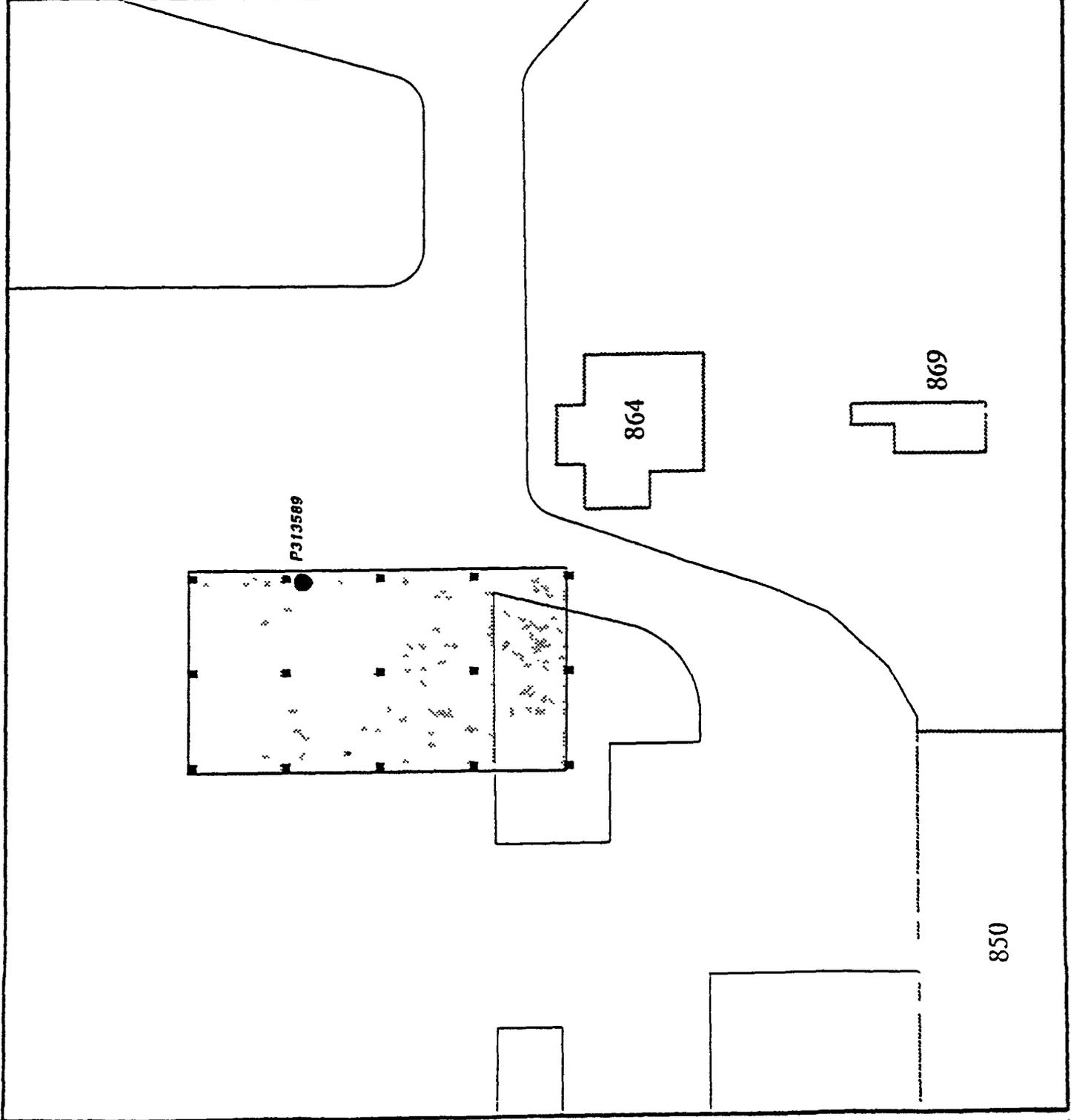


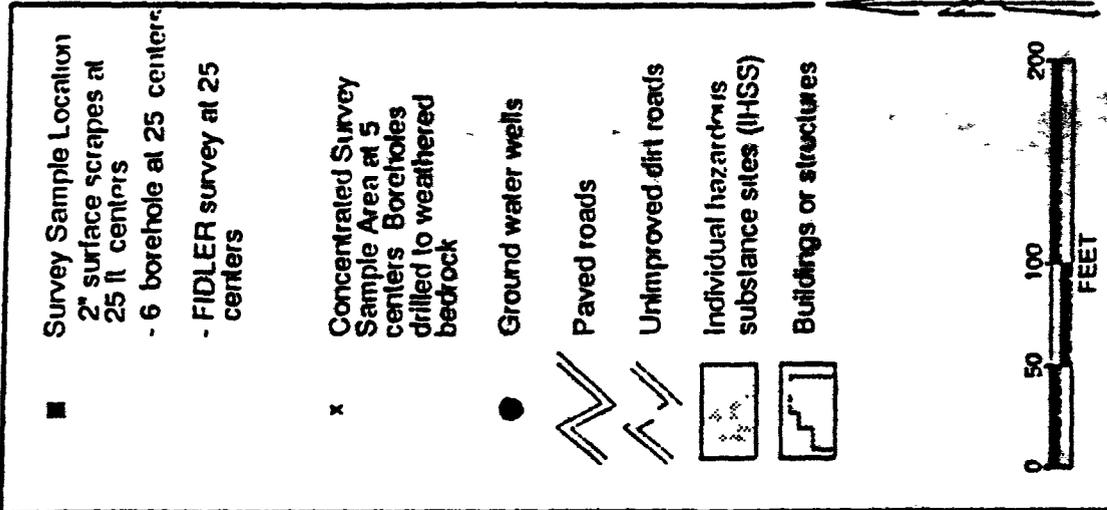
■ Survey Sample Location
 FIDLER at 25 ft centers
 6 borehole at 25 ft centers
 2" surface scrapes at 25 ft centers
 ● Ground water wells
 Paved roads
 Individual hazardous substance sites (IHSS)
 Buildings or structures



PREPARED FOR
 U.S. DEPARTMENT OF ENERGY
 ROCKY FLATS PLANT
 GOLDEN, COLORADO

Figure 18
 RADIOLOGICAL
 SURVEY LOCATIONS
 IHSS 164 1





PREPARED FOR
U S DEPARTMENT OF ENERGY
 ROCKY FLATS PLANT,
 GOLDEN, COLORADO

Figure 19
**RADIOLOGICAL
 SURVEY LOCATIONS**
 IHSS 164 2

■ Survey Sample Location
 2" surface scrapes at
 25 ft centers
 - 6 borehole at 25 centers
 - FIDLER survey at 25
 centers

x Concentrated Survey
 Sample Area at 5
 centers Boreholes
 drilled to weathered
 bedrock

● Ground water wells

══ Paved roads

══ Unimproved dirt roads

▣ Individual hazards
 substance sites (IHSS)

▣ Buildings or structures



INSET A

Approximate location
 of Waste Holding Tank

888

886

Approximate location
 of Waste Holding Tank

828

875

880

865

863

7

■ Survey Sample Location
 2 surface scrapes at
 25 ft centers
 6 borehole at 25 centers
 FIDLER survey at 25
 centers

● Ground water wells

 Paved roads
 Unimproved dirt roads

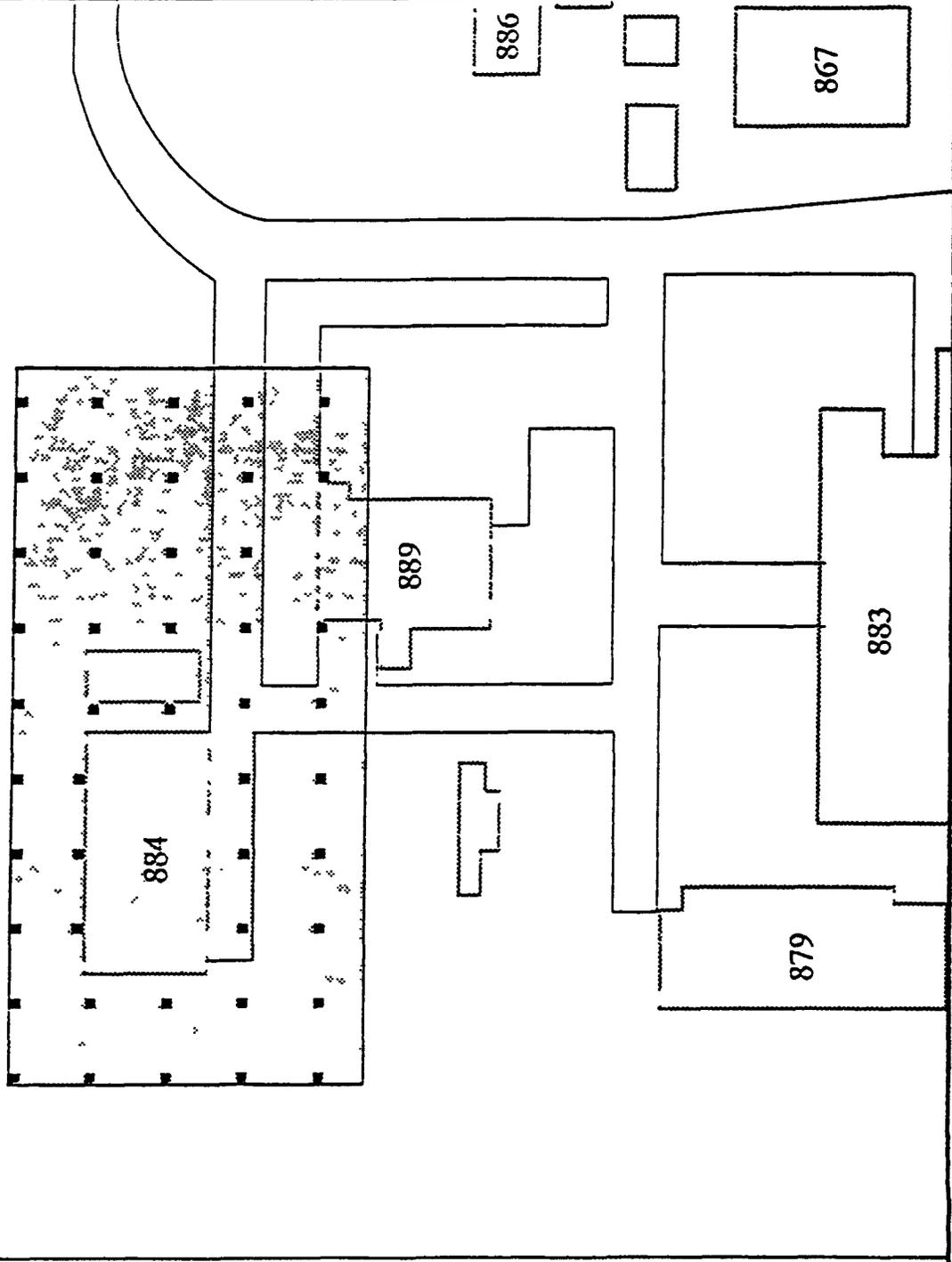
 Individual hazardous
 substance sites (IHSS)

 Buildings or structures



PREPARED FOR
 U S DEPARTMENT OF ENERGY
 ROCKY FLATS PLANT
 GOLDEN COLORADO

Figure 20
 RADIOLOGICAL
 SURVEY LOCATIONS
 IHSS 164 3



US Department of Energy
Rocky Flats Plant

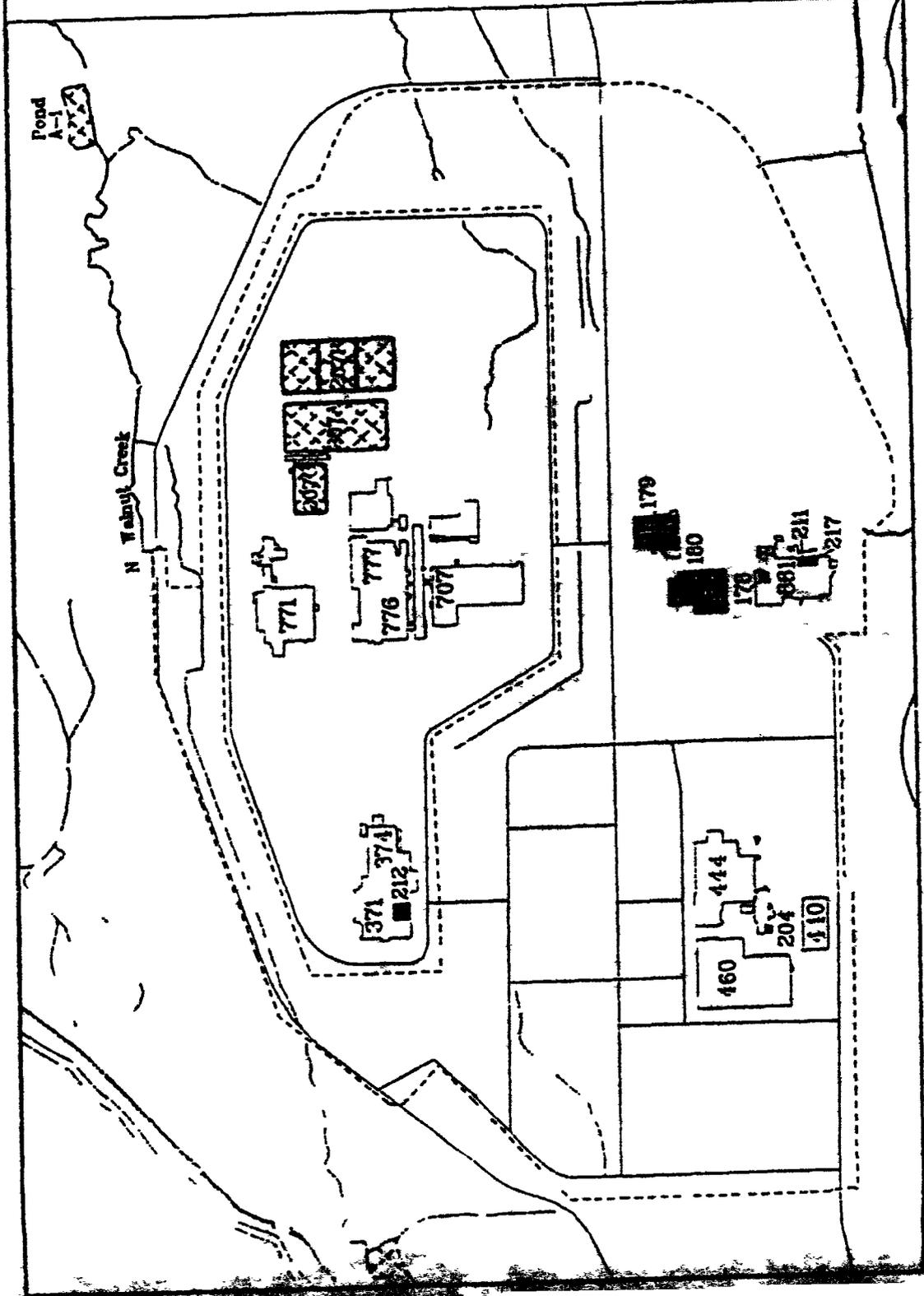
-  Percolate
-  Stream, ditch, and other drainage facilities
-  Security fence
-  Individual hazardous substance area (HSA)
-  Ponds/lakes
-  Buildings or structures



Environment of Restoration
Technical Support Document

Operable Unit 15
Insite Building Complex

Figure 21 B-101 4-20-92



OU 15 field work is expected to start in the second quarter of 1993 and continue through the first quarter of 1994

Field Sampling Methods

Field sampling activities will be conducted using the following methods

Surficial soil sampling using a hand held scoop to collect soil from a depth of two inches on a 50-foot grid

Other soil sampling with a Kansas Soil Sampler This device, which may be used if needed, uses a piston to drive the sampler into the soil to a depth of about one foot When the sampler is removed it brings with it a soil core which will be analyzed for volatile organic compounds (VOCs)

Borehole and well drilling Hollow-stem augers or, if necessary, rotary drills, will be used to drill boreholes while wells will be drilled with conventional augers Boreholes, typically not more than eight inches in diameter, will be drilled to determine the geotechnical characteristics of the soil, to further investigate trends identified in earlier tasks, to collect samples for analysis, and to install monitoring wells Some boreholes drilled to determine geotechnical characteristics of the soil will be drilled to a depth of two feet and will use a split-spoon sampler to obtain either discrete or composite soil samples Other boreholes will be drilled to the water table or three-feet into weathered bedrock, whichever is encountered first All borings not completed as monitoring wells will be grouted and abandoned immediately after drilling to prevent vertical migration of possible contaminants All drill cuttings and soil samples will be surveyed for radionuclides VOCs, metals and other contaminants All such material will be handled in accordance with applicable procedures

Soil gas surveys using a one inch diameter stainless steel probe rod driven into the ground by a hydraulic rig mounted on a vehicle Probes will be driven to a depth of about five feet to collect samples that will be analyzed immediately for VOCs in a mobile lab Soil gas sampling will generally be done on a 50 foot grid

Radiological surveys. FIDLER, sodium iodide or HPGe (high purity germanium) system to identify and quantify all gamma-emitting radionuclides These devices operate non invasively (no drilling or other physical penetration of the ground) by being moved across the surface of the ground while taking remote readings The devices may be between an inch and 25 feet above the ground on a tripod or vehicle Most of the radiological surveying will be done on a 25 foot grid though the size of the grid will be reduced where elevated radiation levels are encountered Surface wipe samples will be obtained by rubbing a moistened filter paper over a specified area of the surface being sampled The filter paper is then sent to a laboratory for analysis

Hydraulic probes are small-diameter (typically 2-inches) vehicle-mounted rods that are forced into the ground under hydraulic pressure similar to the probes used in soil gas surveys. Various measuring devices can be mounted on the probes to measure subsurface conditions. Probe-mounted, vertically-nested tensiometers will be used to measure soil water pressure.

Sediment sampling is done by using a small, hand-held container to remove sediment from the bed of drainages.

B Total Estimated Cost \$3.4 million

		<u>Checklist</u>		
		<u>YES</u>	<u>NO</u>	
VII	Statutes applicable			
	A Will the project require or potentially require an application for permit or permit modification under			
	1 Clean Air Act?	___	<u>X</u>	
	2 Clean Water Act?	___	<u>X</u>	
	B Does the project involve RCRA permitting? (if "no", skip to C)	___	<u>X</u>	
	1 Will a RCRA permit or modification be required?	___	___	
	2 Does the project include a removal?	___	___	
	3 Does project include RCRA closure?	___	___	
	- partial?	___	___	
	- full?	___	___	
	4 Does project include excavation or capping to meet RCRA requirements?	___	___	
	5 Will cost and duration stay within \$2 million and 12 months? (Explain in project description)	___	___	
	C Does the project involve CERCLA? (if "no" skip to D)	___	<u>X</u>	(see Note 1)
	1 Does project include CERCLA removal?	___	___	
	2 Will cost and duration stay within \$2 million and 12 months? (Explain in project description)	___	___	
	D Does the project threaten to violate statutory, regulatory, or permit requirements or DOE Order?	___	<u>X</u>	
	E Will the action be in or near a SWMU?	<u>X</u>	___	(see Note 2)
	F Does the project potentially impact threatened & endangered species or habitat the Migratory Bird Treaty Act or Fish and Wildlife Coordination Act?	___	<u>X</u>	
VIII	Will this project construct or require a new or expanded waste disposal recovery storage or treatment facility?	___	<u>X</u>	

		<u>YES</u>	<u>NO</u>	
IX	Is project needed for IAG AIP FFCA or other federal or state agreement? (Specify and explain any schedule urgency and deadlines in project description)	<u>X</u>	<u> </u>	(see Note 3)
X	Is the project			
	A new process building etc or	<u> </u>	<u>X</u>	
	B a modification to an existing?	<u> </u>	<u>X</u>	
	C capital equipment/machinery installation?	<u> </u>	<u>X</u>	
XI	Location Items			
	A Will the project result in or have the potential to result in long term changes to the environment?	<u> </u>	<u>X</u>	
	B Will the action occur outside the security zone/ protected area (i.e. outside Gate 8 at Post 100 and Gate 10 at Post 900)?	<u> </u>	<u>X</u>	
	C Will the action take place in a wetland or floodplain?	<u> </u>	<u>X</u>	
XII	Will the project result in changes and/or disturbances of the following existing considerations?			
	A noise levels	<u> </u>	<u>X</u>	
	B air emissions	<u> </u>	<u>X</u>	
	C liquid effluents	<u> </u>	<u>X</u>	
	D solid wastes	<u> </u>	<u>X</u>	
	E radioactive wastes (including contaminated soil)	<u>X</u>	<u> </u>	(see Note 4)
	F hazardous waste	<u>X</u>	<u> </u>	(see Note 4)
	G mixed waste (radioactive and hazardous)	<u>X</u>	<u> </u>	(see Note 4)
	H chemical or petroleum product storage	<u> </u>	<u>X</u>	
	I water use (withdrawal of groundwater or diversion or withdrawal of surface water)	<u>X</u>	<u> </u>	(see Note 5)
	J drinking water system	<u> </u>	<u>X</u>	
	K sewage disposal system	<u> </u>	<u>X</u>	
	L soil movement outside facility fences or beyond SWMU boundaries	<u>X</u>	<u> </u>	(see Note 6)
	M site clearing excavation or other physical alterations to grade	<u>X</u>	<u> </u>	(see Note 7)
XIII	Will the project threaten public health or safety?	<u> </u>	<u>X</u>	
XIV	Will the project have possible effects on the environment which are likely to be highly controversial?	<u> </u>	<u>X</u>	
XV	Will the project establish a precedent for future actions that will have significant effects or represent a decision in principle about a future consideration?	<u> </u>	<u>X</u>	
		<u>YES</u>	<u>NO</u>	
XVI	Will the project be substantially related to other actions that have individually insignificant but cumulatively significant impacts?	<u> </u>	<u>X</u>	

XVII Will the project adversely affect federal, state or locally designated natural areas prime agricultural land special water sources or historic archeological or architectural sites?

— X

- Note 1 The site characterization work is to be undertaken pursuant to the provisions of RCRA and CERCLA, as well as DOE's Interagency Agreement with the Environmental Protection Agency and the Colorado Department of Health, to characterize sites which have been identified under CERCLA as having the potential to be sites where radioactive and/or hazardous materials may have been released to the environment.
- Note 2 Virtually all the field work will be in or adjacent to SWMUs since the purpose of the activity is to identify the nature and extent of contamination of certain SWMUs/IHSSs
- Note 3 Each of the three field sampling programs is an integral part of activities that are milestones under the IAG. Each of the field sampling programs is included within the IAG schedules
- Note 4 The soil sampling, sediment sampling and borehole drilling activities could produce samples or spoils that contain hazardous and/or radioactive contaminants. All samples will be sent to laboratories for analysis. Spoils (from drilling activities) will be shoveled into drums and left at the site until they can be characterized and appropriately disposed of
- Note 5 Small amounts of water (quarts) will be withdrawn from the wells that are to be drilled so that their constituents can be analyzed as part of the program to determine the nature and extent of contamination
- Note 6 Soil samples will be sent to off site laboratories for analysis. Drilling spoils will be held for proper disposal, possibly off-site, if they are found to contain contaminants
- Note 7 The only "excavation" associated with these projects are the drilling of boreholes and wells and the taking of soil and sediment samples

EC Prepared by Bill Moore

Date September 9, 1992

Organization END

Bldg 080

Extension 8599