000035886

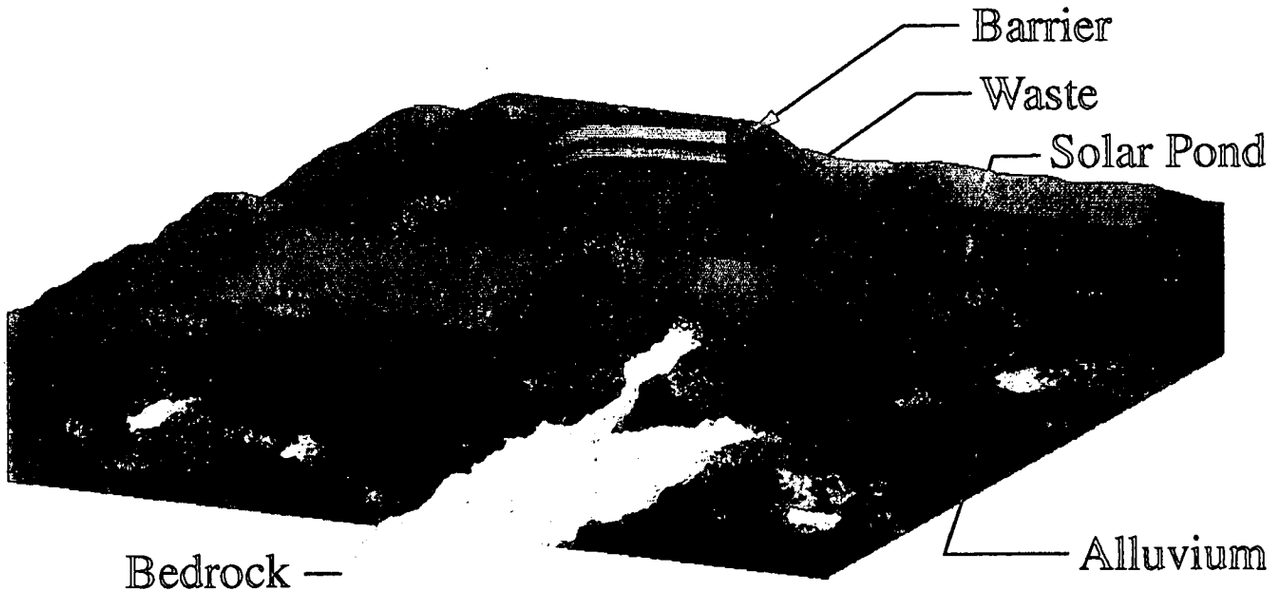
OU4 Solar Evaporation Ponds Interim Measure/Interim Remedial Action Environmental Assessment Decision Document

U.S. Department of Energy
Rocky Flats Plant
Golden, Colorado

May 1994

Revision: Draft Proposed

Parts IV and V Drawings



ADMIN RECORD

DOCUMENT CLASSIFICATION
REVIEW WAIVER PER
CLASSIFICATION OFFICE

A-OU04-000278

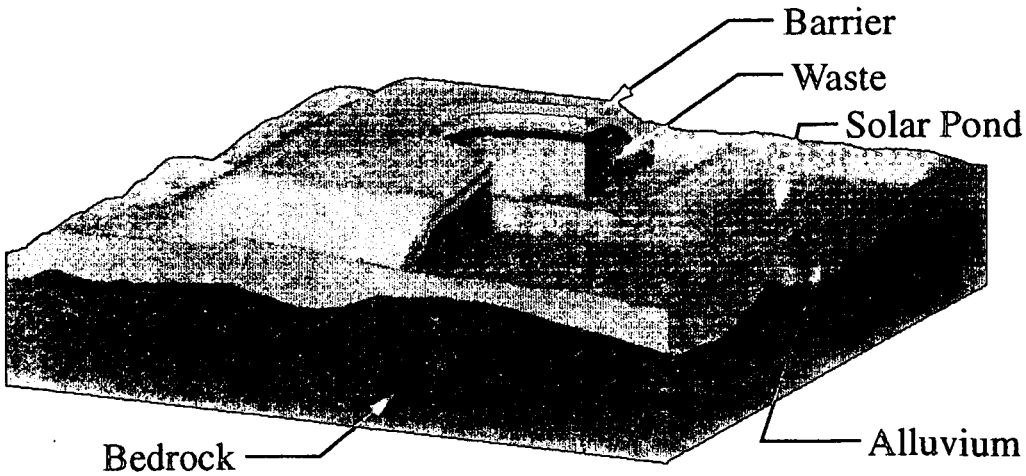
OU4 Solar Evaporation Ponds
Interim Measure/Interim Remedial Action
Environmental Assessment
Decision Document

U.S. Department of Energy
Rocky Flats Plant
Golden, Colorado

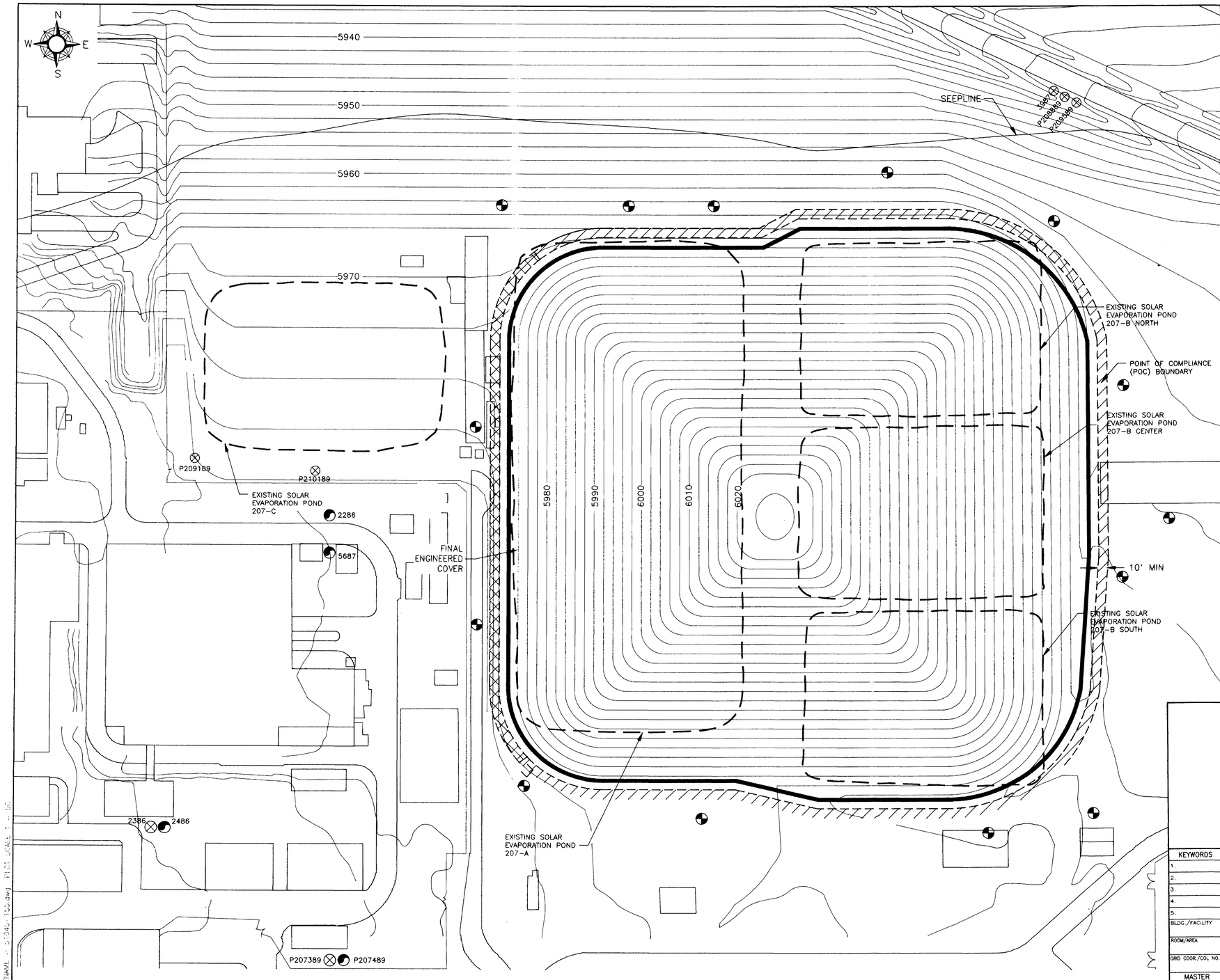
May 1994

Revision: Draft Proposed

Parts IV and V Drawings



DOCUMENT CLASSIFICATION
REVIEW WAIVER PER
CLASSIFICATION OFFICE



PART	QUAN.	DESCRIPTION	MATERIAL

LEGEND:

- UPGRADIENT PORTION OF POINT OF COMPLIANCE(POC)
- DOWNGRADIENT PORTION OF POINT OF COMPLIANCE(POC)
- PROPOSED LOCATION FOR NEW MONITORING WELL SCREENED IN UPPER HYDROSTRATIGRAPHIC UNIT.
- LOCATION OF EXISTING WELL SCREENED IN UNCONSOLIDATED MATERIALS (ALLUVIUM, COLLUVIUM, FILL)
- LOCATION OF EXISTING WELL SCREENED IN THE WEATHERED BEDROCK

PROPOSED POST-CLOSURE MONITORING WELL LOCATIONS

NOTE: EXISTING WELLS LOCATED ADJACENT TO THE FINAL ENGINEERED COVER FOOTPRINT ARE ASSUMED TO BE DESTROYED DURING CONSTRUCTION.

KEYWORDS	A	ORIGINAL ISSUE					
1.	ISSUE	DESCRIPTION	DATE	RFP	DOE	CLASS	JOB NO.
2.							
3.							
4.							
5.							
BLDG./FACILITY							
ROOM/AREA							
GRID COOR./COL. NO.							

DESIGNED		
DRAWN	LENNIE	
CHECKED		
APPROVED		
SUBMITTED		
APPROVED RFP		
APPROVED DOE		

U.S. DEPARTMENT OF ENERGY
ROCKY FLATS AREA OFFICE GOLDEN, COLORADO

EG&G ROCKY FLATS
ROCKY FLATS PLANT
GOLDEN, CO

SOLAR EVAPORATION PONDS, OPERABLE UNIT NO. 4 IM/IRA-EA DD

PROPOSED AND EXISTING POST-CLOSURE GROUNDWATER MONITORING SYSTEM

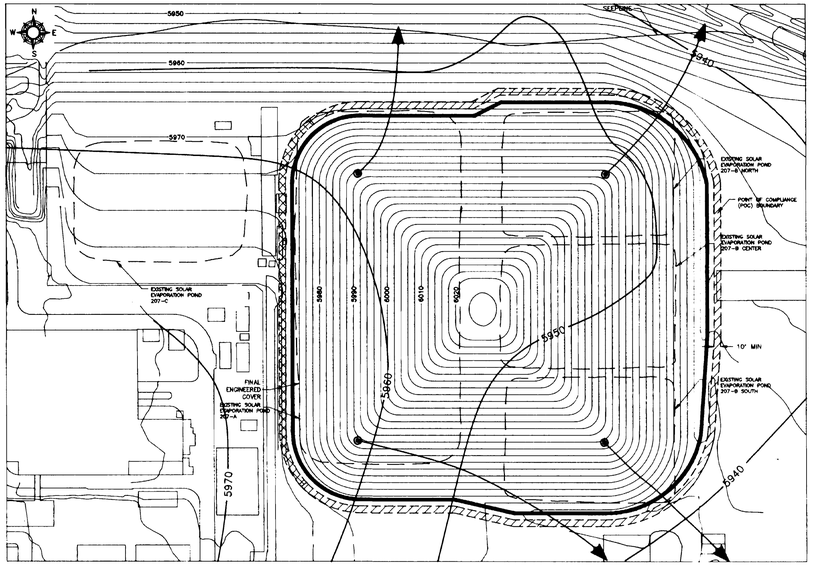
MASTER YES ☐ NO ☒ SCALE: AS NOTED

SIZE	DRAWING NUMBER	ISSUE	SHEET
D	39150-155	A	OF

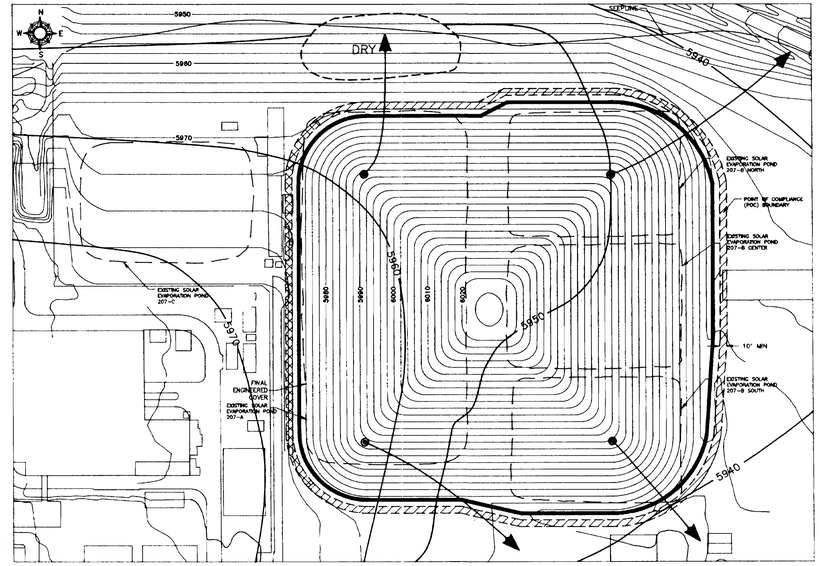
ou04-A-200278

"COMPUTER-GENERATED; NO MANUAL CHANGES ALLOWED"

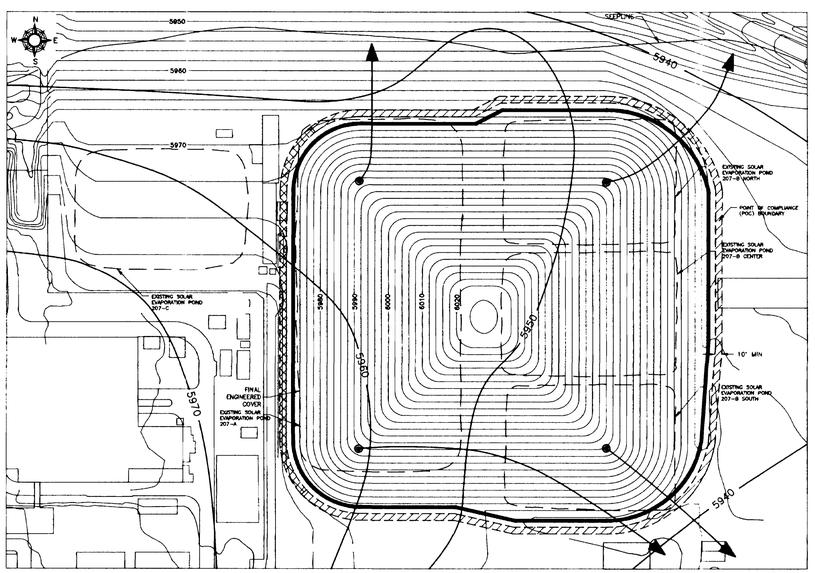
FILENAME = 39150-155.DWG PLOT SCALE 1 = 50



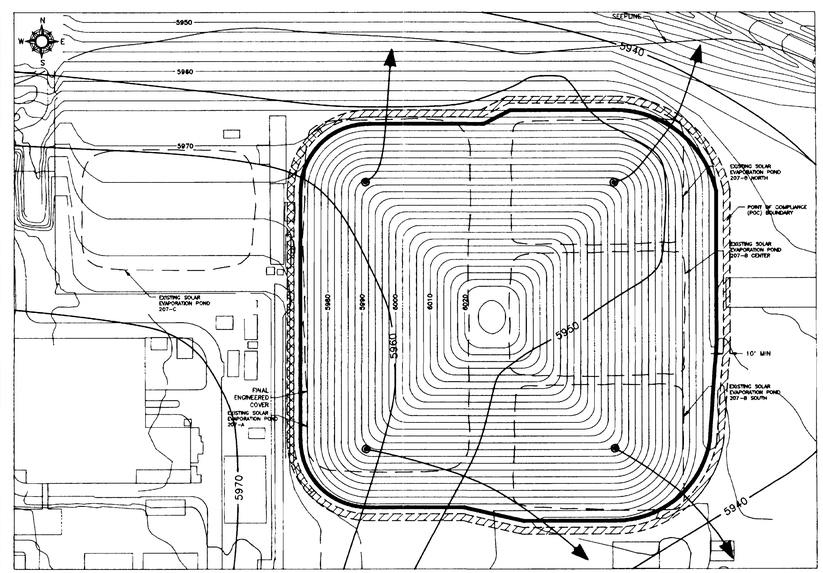
WEATHERED BEDROCK 1st QUARTER JANUARY 1992 *



WEATHERED BEDROCK 2nd QUARTER APRIL 1992 *



WEATHERED BEDROCK 3rd QUARTER JULY 1992 *



WEATHERED BEDROCK 4th QUARTER OCTOBER 1992 *

PART	QUAN.	DESCRIPTION	MATERIAL

LEGEND:

- UPGRADIENT PORTION OF POINT OF COMPLIANCE(POC)
- DOWNGRADIENT PORTION OF POINT OF COMPLIANCE(POC)
- 5940 — EQUIPOTENTIAL LINE (FEET ABOVE MEAN SEA LEVEL)
- GROUND WATER FLOW VECTOR
- ESTIMATED CORNER OF WASTE

NOTES:

1) * MODIFIED FROM THE 1992 ANNUAL RCRA GROUNDWATER MONITORING REPORT.

100' 50' 0 100' 200'

KEYWORDS	A	ORIGINAL ISSUE
1.	ISSUE	DESCRIPTION
2.		
3.		
4.		
5.		
BLDG./FACILITY		
ROOM/AREA		
GRID COOR./COL NO.		
MASTER YES ☐ NO ☒	SCALE: AS NOTED	

			SAL			
DATE	RFP		DOE	CLASS	JOB NO.	

U.S. DEPARTMENT OF ENERGY
ROCKY FLATS AREA OFFICE GOLDEN,COLORADO

EG&G ROCKY FLATS
ROCKY FLATS PLANT
GOLDEN, CO

DESIGNED	
DRAWN	LENNIE
CHECKED	
APPROVED	
SUBMITTED	
APPROVED RFP	
APPROVED DOE	

SOLAR EVAPORATION PONDS, OPERABLE UNIT NO. 4 IM/IRA-EA DO

POTENTIOMETRIC SURFACE AND GROUNDWATER FLOW VECTORS FOR WEATHERED BEDROCK

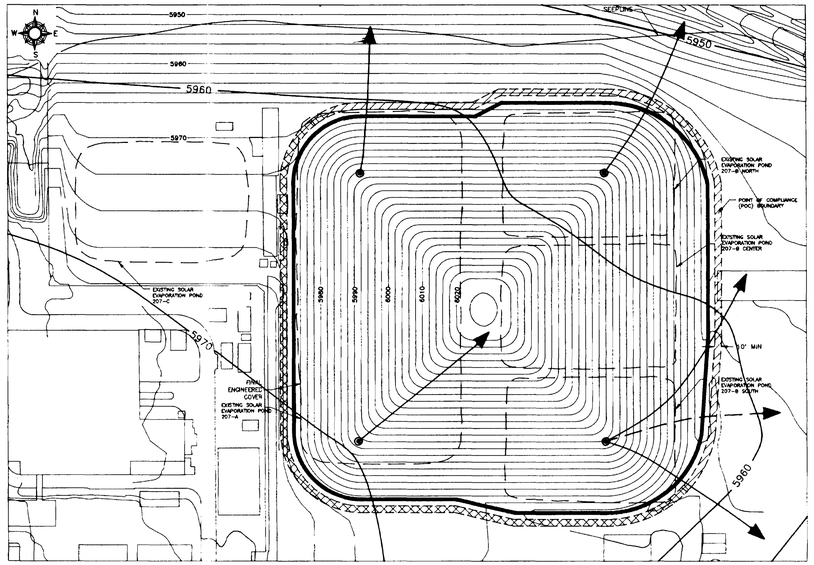
SIZE	DRAWING NUMBER	ISSUE	SHEET
D	51045-154	A	OF

OU04-2-000278

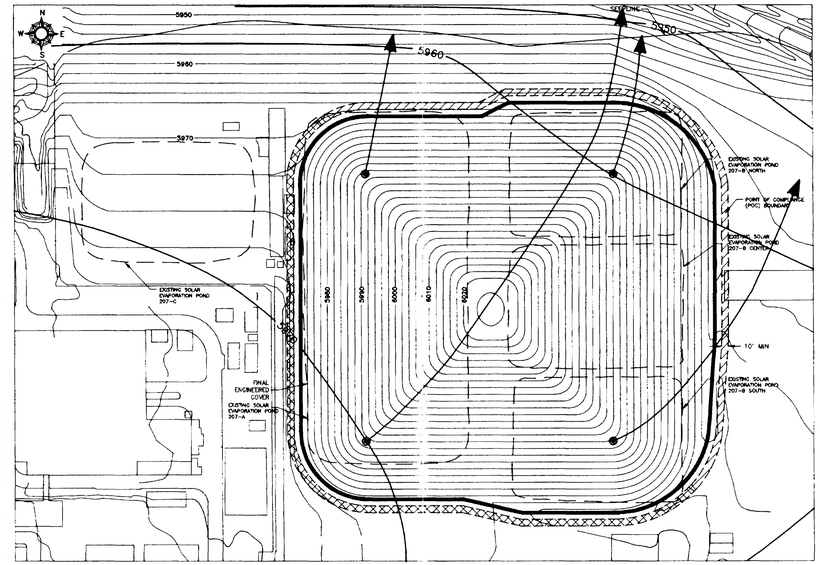
"COMPUTER—GENERATED; NO MANUAL CHANGES ALLOWED"

FILENAME = 51045-154.dwg PLOT SCALE 1 = 100

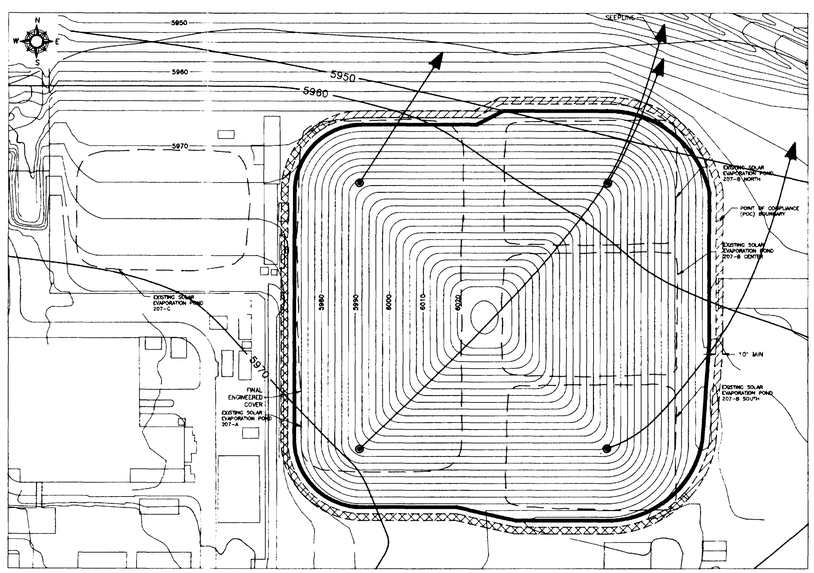
BLDG/FAC.
ROOM/AREA
M Mtg-Vers
A Arch
G GL Box
E Elec
D Detections
M Mech
I Inst
B Buildings
Title
C Civil
U Utilities
P Piping
Fire Prot
L Layouts
F Flow Diags
S Side
X Alarms



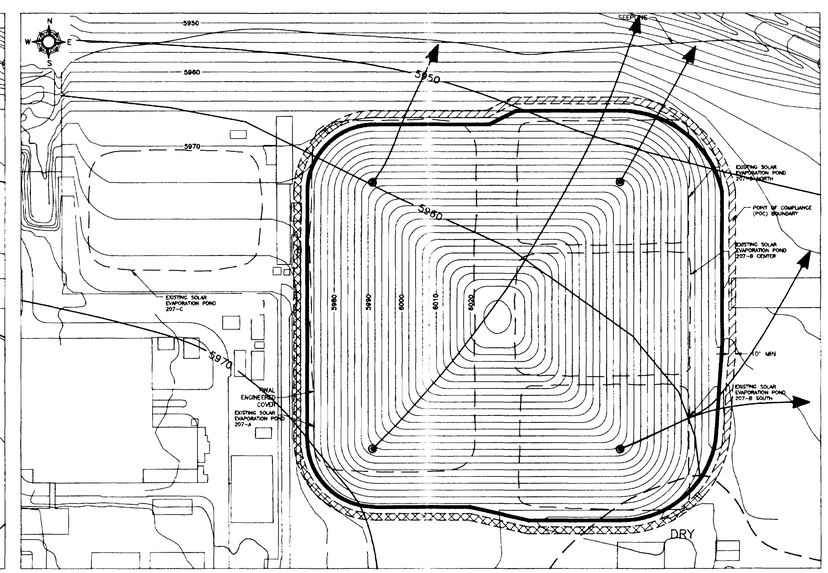
ALLUVIUM/COLLUVIUM 1st QUARTER JANUARY 1992 *



ALLUVIUM/COLLUVIUM 2nd QUARTER APRIL 1992 *



ALLUVIUM/COLLUVIUM 3rd QUARTER JULY 1992 *



ALLUVIUM/COLLUVIUM 4th QUARTER OCTOBER 1992 *

PART	QUAN.	DESCRIPTION	MATERIAL

LEGEND:

- UPGRADIENT PORTION OF POINT OF COMPLIANCE(POC)
- DOWNGRADIENT PORTION OF POINT OF COMPLIANCE(POC)
- 5940 — EQUIPOTENTIAL LINE (FEET ABOVE MEAN SEA LEVEL)
- GROUND WATER FLOW VECTOR
- ESTIMATED CORNER OF WASTE

NOTES:

1) * MODIFIED FROM THE 1992 ANNUAL RCRA GROUNDWATER MONITORING REPORT.

100' 50' 0 100' 200'

FILENAME = 51045153.dwg PLOT SCALE 1 = 100

KEYWORDS	A	ORIGINAL ISSUE					
1.	ISSUE	DESCRIPTION	DATE	RFP	DOE	CLASS	JOB NO.
2.							
3.							
4.							
5.							
BLDG./FACILITY							
ROOM/AREA							
GRID COOR./COL. NO.							
MASTER YES ☐ NO ☒	SCALE: AS NOTED						

DESIGNED
DRAWN LENNIE
CHECKED
APPROVED
SUBMITTED
APPROVED RFP
APPROVED DOE

U.S. DEPARTMENT OF ENERGY
ROCKY FLATS AREA OFFICE GOLDEN, COLORADO

EG&G ROCKY FLATS
ROCKY FLATS PLANT
GOLDEN, CO

SOLAR EVAPORATIONS PONDS, OPERABLE UNIT NO. 4 IM/IRA-EA DD

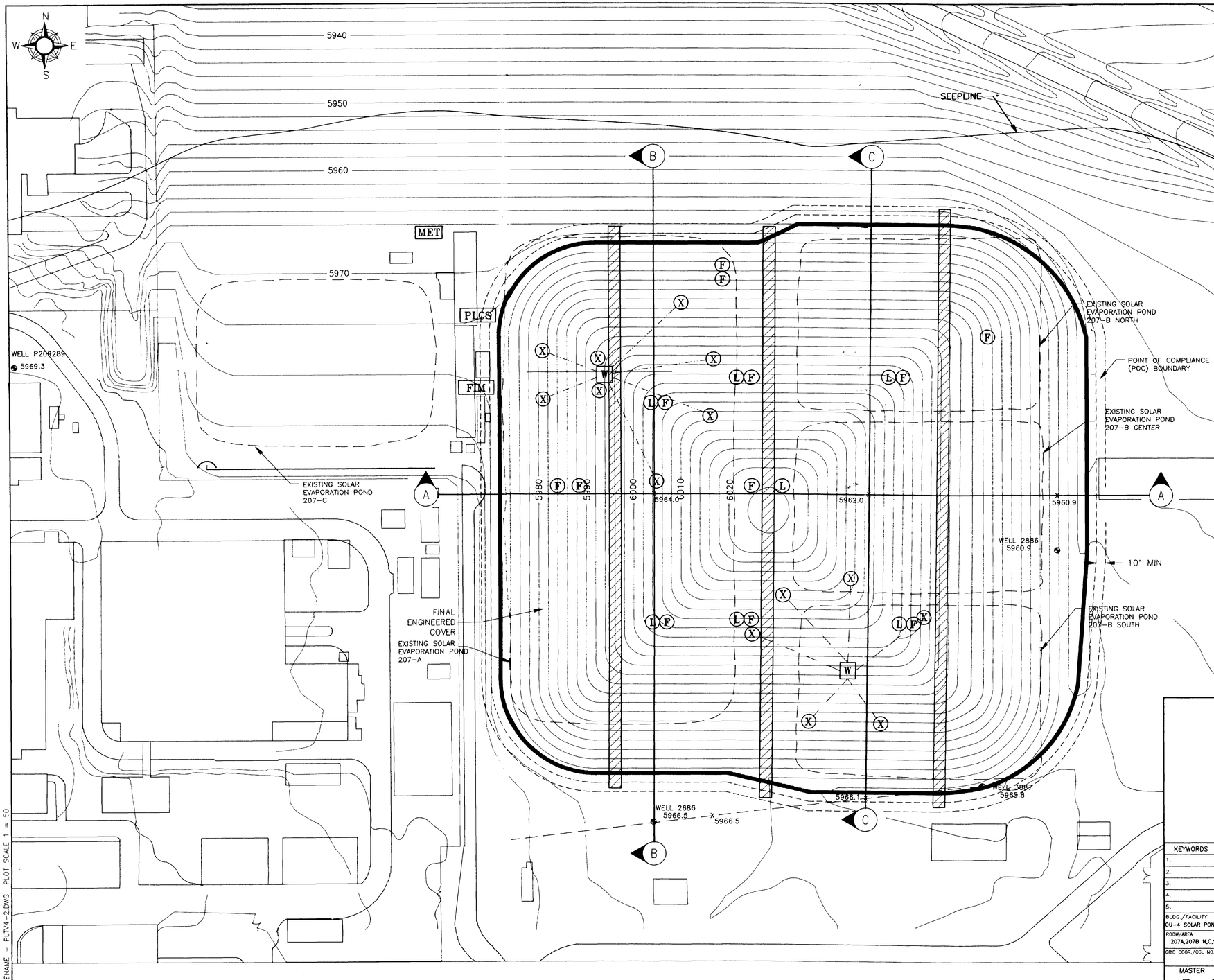
POTENTIOMETRIC SURFACE AND GROUNDWATER FLOW VECTORS FOR ALLUVIUM/COLLUVIUM

SIZE	DRAWING NUMBER	ISSUE	SHEET
D	51045-153	A	OF

01-04-H-000278

BLDG/FAC.
ROOM/AREA
H Htg-Vent.
A Arch.
G Gg. Bas.
E Elec.
D Detection
M Mech.
Inst.
B Building
T Title
C Civil
U Utilities
P Piping
F Fire Prot.
L Landuse
Flow Diag.
S Stds.
K Karma

"COMPUTER-GENERATED; NO MANUAL CHANGES ALLOWED"



PART	QUAN.	DESCRIPTION	MATERIAL

LEGEND:

- ELECTRICAL LINE BETWEEN SENSORS AND DATA COLLECTOR
- NPAT = NEUTRON PROBE ACCESS TUBE
- W — WIM = WAVEFORM INTERPRETATION MODULE
- F — FDC SENSOR (ARRAY)
- L — PRESSURE VACUUM LYSIMETER
- X — TDR SENSOR ARRAY (X, X, X = RELATIVE POSITIONING)
- MET — METEOROLOGICAL MONITORING STATION
- PLCS — PORE LIQUID COLLECTION STATION
- FIM — FREQUENCY INTERPRETATION MODULE

NOTES:

1) SENSORS AND NPAT'S NOT SHOWN TO SCALE.

KEYWORDS	ISSUE	DESCRIPTION	DATE	RFP	DOE	CLASS	JOB NO
1.	A	ORIGINAL ISSUE					
2.							
3.							
4.							
5.							

BLDG./FACILITY: OU-4 SOLAR PONDS
ROOM/AREA: 207A,207B N,C,S
GRID COOR./COL. NO.:

MASTER: YES ☐ NO ☒

SCALE: AS NOTED

DESIGNED		
DRAWN	LENNIE	
CHECKED		
APPROVED		
SUBMITTED		
APPROVED RFP		
APPROVED DOE		

U.S. DEPARTMENT OF ENERGY
ROCKY FLATS AREA OFFICE GOLDEN, COLORADO

EG&G ROCKY FLATS
ROCKY FLATS PLANT
GOLDEN, CO

SOLAR EVAPORATION PONDS, OPERABLE UNIT NO. 4 IM/IRA-EA DD

PLAN VIEW OF PROPOSED ENGINEERED COVER AND VADOSE ZONE MONITORING SYSTEMS

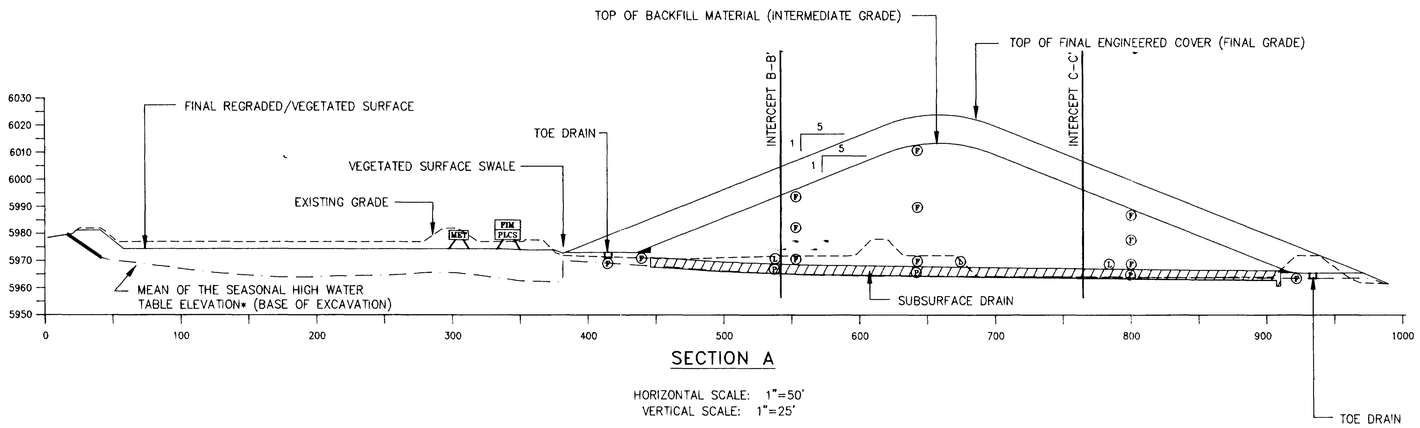
SIZE	DRAWING NUMBER	ISSUE	SHEET
D	51045-152	A	OF

BLDG/FAC
ROOM/AREA
H Htg-Vent
A Arch
C Cu. Box
E Elec
D Detection
M Mech
I Inst
B Building
T Title
C Civil
U Utilities
P Piping
W Fire Prot.
L Layouts
F Flow Diag.
S Stds
X Alarms

FILENAME = PLTV4-2.DWG PLOT SCALE 1 = 50

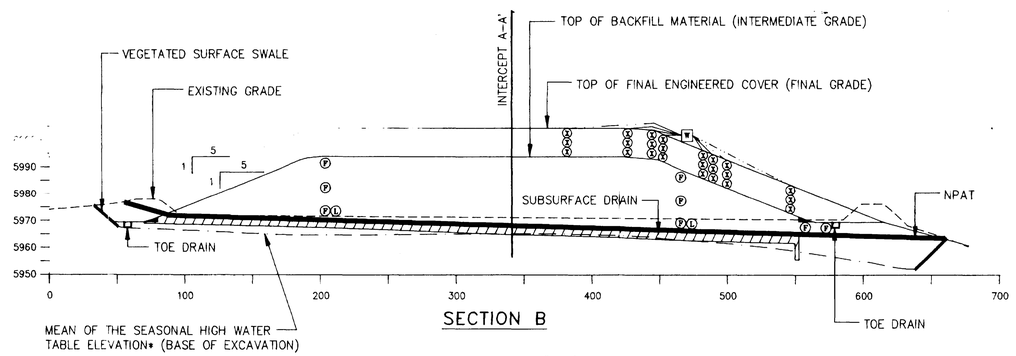
OU04-21-000378

"COMPUTER-GENERATED; NO MANUAL CHANGES ALLOWED"



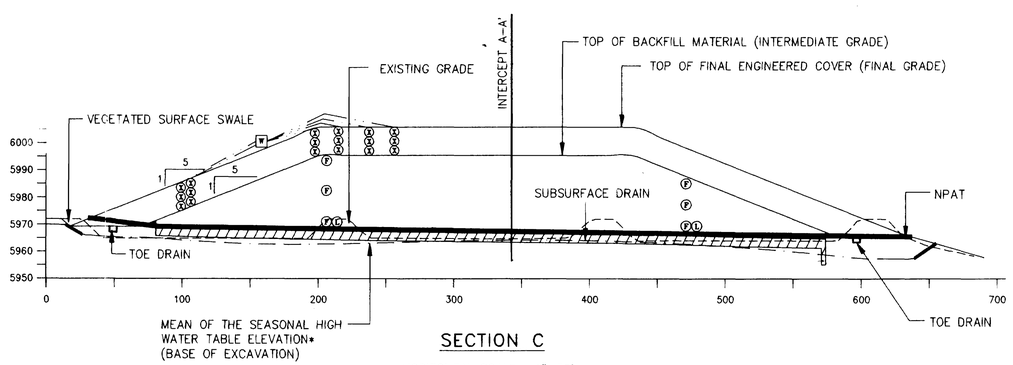
SECTION A

HORIZONTAL SCALE: 1"=50'
VERTICAL SCALE: 1"=25'



SECTION B

HORIZONTAL SCALE: 1"=50'
VERTICAL SCALE: 1"=25'



SECTION C

HORIZONTAL SCALE: 1"=50'
VERTICAL SCALE: 1"=25'

PART	QUAN.	DESCRIPTION	MATERIAL

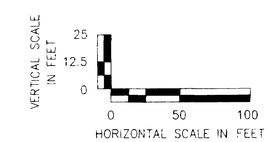
LEGEND:

— · — · —	ELECTRICAL LINE BETWEEN SENSORS AND DATA COLLECTOR
▬▬▬	NPAT = NEUTRON PROBE ACCESS TUBE
W	WIM = WAVEFORM INTERPRETATION MODULE
P	NPAT = NEUTRON PROBE ACCESS TUBE
F	FDC SENSOR (ARRAY)
L	PRESSURE VACUUM LYSIMETER
X	TDR SENSOR ARRAY (X, X, X = RELATIVE POSITIONING)
MET	METEOROLOGICAL MONITORING STATION
PLCS	PORE LIQUID COLLECTION STATION
FIM	FREQUENCY INTERPRETATION MODULE

NOTES:

1) SENSORS AND NPAT'S NOT SHOWN TO SCALE.

*) THE MEAN OF THE SEASONAL HIGH GROUND WATER ELEVATIONS FOR THE SEVEN YEAR PERIOD OF RECORD.



KEYWORDS	A	ORIGINAL ISSUE					
1.	ISSUE	DESCRIPTION		DATE	RFP	DOE	CLASS	JOB NO.
2.							
3.							
4.							
5.							
BLDG./FACILITY							
ROOM/AREA							
GRID COOR./COL. NO.							
MASTER YES ☐ NO ☒	SCALE: AS NOTED						

DESIGNED
DRAWN LENNIE
CHECKED
APPROVED
SUBMITTED
APPROVED RFP
APPROVED DOE

U.S. DEPARTMENT OF ENERGY
ROCKY FLATS AREA OFFICE GOLDEN, COLORADO

EG&G ROCKY FLATS
ROCKY FLATS PLANT
GOLDEN, CO

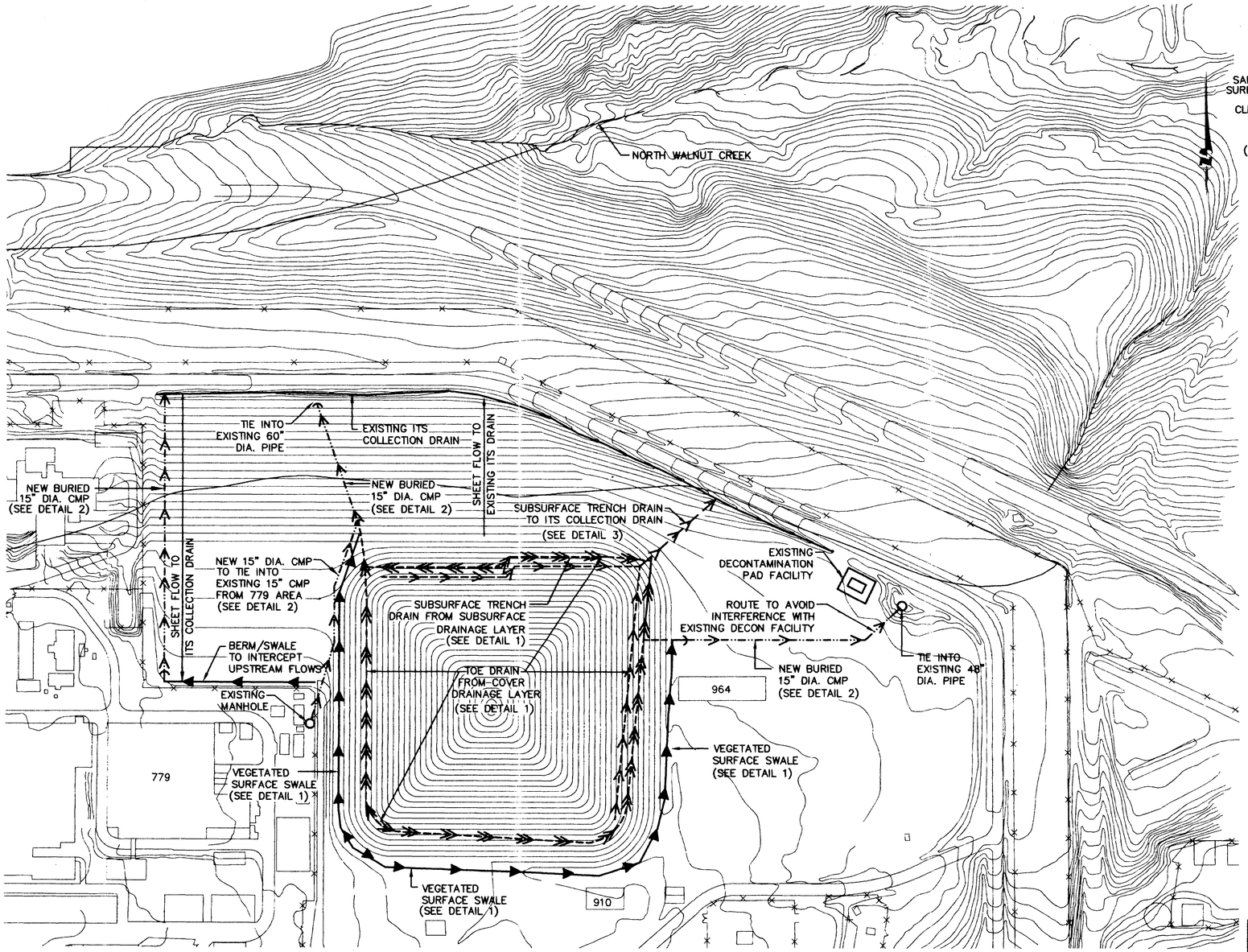
SOLAR EVAPORATION PONDS, OPERABLE UNIT NO. 4 IM/IRA-EA DD

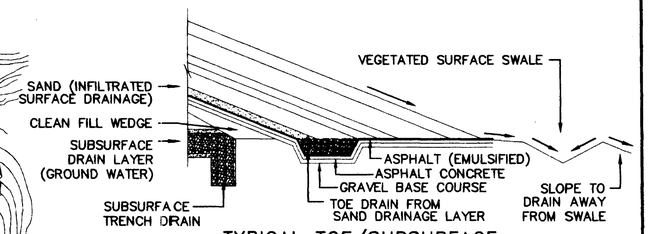
PROFILE OF PROPOSED FINAL ENGINEERED COVER, AND VADOSE ZONE MONITORING SYSTEMS, AND MAXIMUM GROUNDWATER ELEVATIONS

SIZE	DRAWING NUMBER	ISSUE	SHEET
D	51045-151	A	OF

FILENAME = 51045151.dwg PLOT SCALE 1 = 50

"COMPUTER-GENERATED; NO MANUAL CHANGES ALLOWED" 00104-A-000378

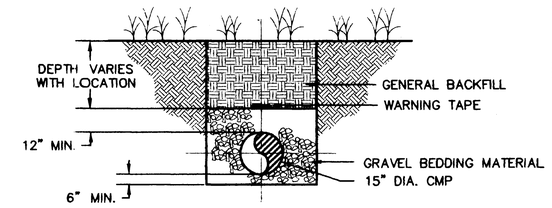




TYPICAL TOE/SUBSURFACE DRAIN DETAIL

1 — 51045-122

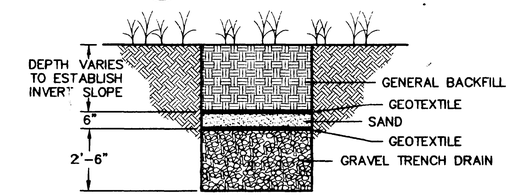
SCALE: NTS



TYPICAL CMP TRENCH DETAIL

2

SCALE: NTS



TYPICAL SUBSURFACE DRAIN TRENCH DETAIL

3

SCALE: NTS

NOTES:

1. DETAIL 1 – SEE DRAWING 15045-123 FOR ENGINEERED COVER DETAILS.
2. DETAIL 1 – DIMENSIONS DETERMINED DURING TITLE DESIGN.

LEGEND

- BURIED CMP
- SURFACE DRAINAGE
- SUBSURFACE TRENCH DRAIN
- SUBSURFACE TOE DRAIN
- STREAM
- FENCE
- DROP INLET STRUCTURE FROM SURFACE SWALES TO BURIED PIPE

PRELIMINARY
NOT FOR CONSTRUCTION

0 50 100 200
FEET

ENGINEERING-SCIENCE, INC.

ISSUE	DESCRIPTION	DATE	RFP	DOE	CLASS	JOB NO.
A	CONCEPTUAL DESIGN					989617

KEYWORDS

MASTER

TOLERANCES: FRACT. ± ; ANGLE ± ; DEC. ± ; UNLESS NOTED OTHERWISE ; REMOVE BURRS AND SHARP EDGES ; NEXT ASSEMBLY

SCALE: 1"=100'

	BY	DATE
DESIGNED	SES	2/10/94
DRAWN	SES	2/17/94
CHECKED	REL	2/23/94
APPROVED		
SUBMITTED		
APPROVED RFP		
APPROVED DOE		

U.S. DEPARTMENT OF ENERGY
ROCKY FLATS OFFICE GOLDEN, COLORADO

ROCKY FLATS PLANT
GOLDEN, COLORADO 80402

OU4 SOLAR EVAPORATION PONDS IM/IRA

DRAINAGE PLAN AND DETAILS

SIZE	DRAWING NUMBER	ISSUE	SHEET
D	51045-130	A	1 OF 1

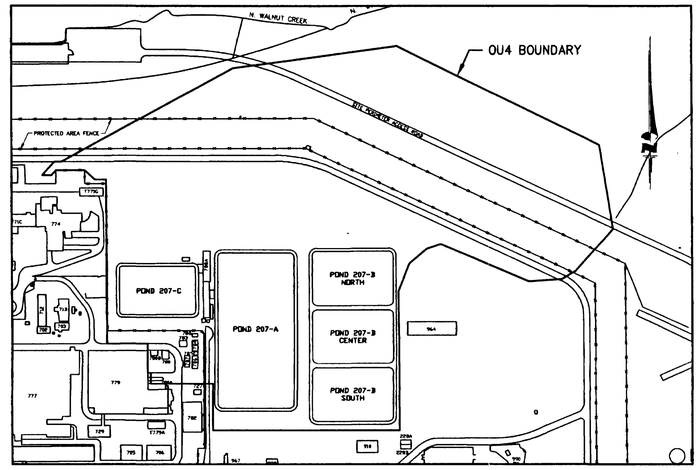
OU04-A-000273

93DN1463, 5/11/94 at 14:35

COMPUTER GENERATED DRAWING NO MANUAL CHANGES ALLOWED

U.S. DEPARTMENT OF ENERGY

ROCKY FLATS PLANT



FACILITIES ENGINEERING
GOLDEN, CO. 80402-0464

PRELIMINARY
NOT FOR CONSTRUCTION

ENGINEERING-SCIENCE, INC.

ISSUE	DESCRIPTION	DATE	RFP	DOE	CLASS	JOB NO.
A	CONCEPTUAL DESIGN					989617

	BY	DATE
DESIGNED	HAH	2/23/94
DRAWN	MW	2/23/94
CHECKED	PAN	2/23/94
APPROVED		
SUBMITTED		
APPROVED RFP		
APPROVED DOE		

KEYWORDS

MASTER

TOLERANCES FRACT. ± ANGLE ± DEC. ± UNLESS NOTED OTHERWISE
REMOVE BURRS AND SHARP EDGES
NEXT ASSEMBLY

SCALE: NONE

U.S. DEPARTMENT OF ENERGY
ROCKY FLATS OFFICE GOLDEN, COLORADO

ROCKY FLATS PLANT
GOLDEN, COLORADO 80402

OU4 SOLAR EVAPORATION PONDS IM/IRA
COVER SHEET

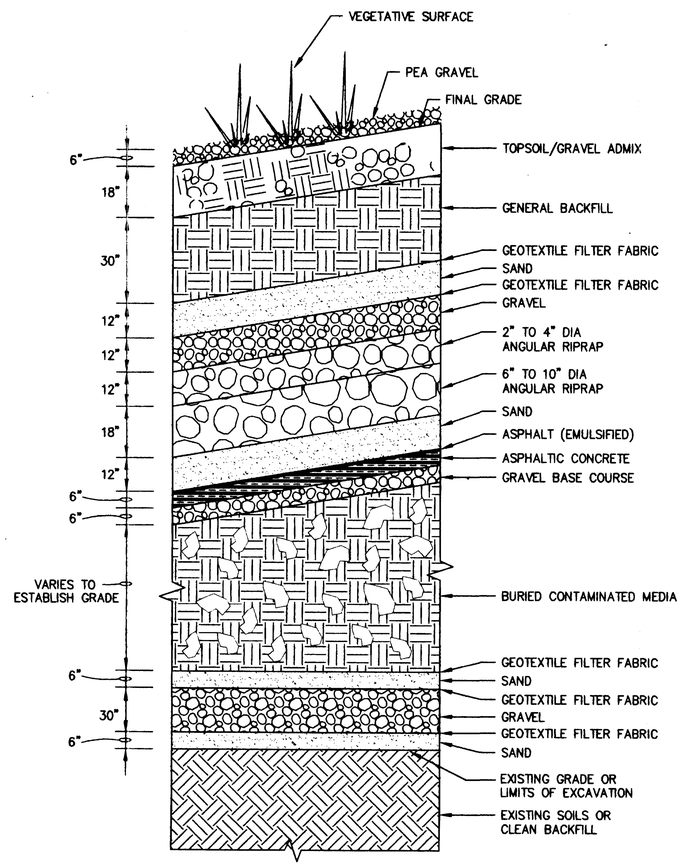
SIZE	DRAWING NUMBER	ISSUE	SHEET
D	51045-100	A	1 OF 1

BLDG/FAC.
ROOM/AREA
H Htg-Vent
A Arch
C Q. Bee
E Elec
D Detection
M Mech
I Inst
S Sp-Cons
C Civil
U Utilities
P Piping
W Fire Prot
L Layouts
F Flow Diag
S Sids
X Anyone

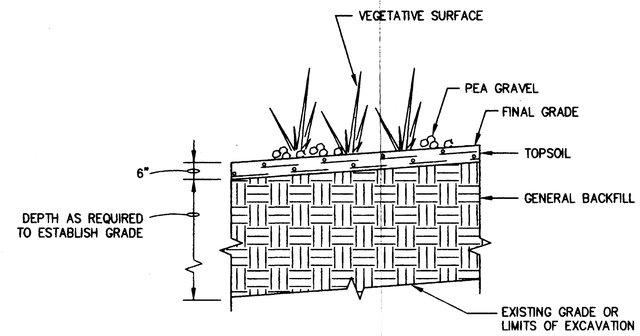
94DN0074, 2/25/94 at 21:00

COMPUTER GENERATED DRAWING NO MANUAL CHANGES ALLOWED

OU04-A-000278



FINAL ENGINEERED COVER SECTION



ENGINEERED COVER FOR RECLAIMED AREAS

PRELIMINARY
NOT FOR CONSTRUCTION

ENGINEERING-SCIENCE, INC.

ISSUE	DESCRIPTION	DATE	RFP	DOE	CLASS	JOB NO.
A	CONCEPTUAL DESIGN					989617

KEYWORDS

TOLERANCES: FRACT. ±, ANGLE ±, DEC. ± UNLESS NOTED OTHERWISE; REMOVE BURRS AND SHARP EDGES; NEXT ASSEMBLY

	BY	DATE
DESIGNED	SES	5/5/94
DRAWN	SES	5/5/94
CHECKED	REL/DNC	5/6/94
APPROVED		
SUBMITTED		
APPROVED RFP		
APPROVED DOE		

MASTER

SCALE: NONE

U.S. DEPARTMENT OF ENERGY
ROCKY FLATS OFFICE GOLDEN, COLORADO

ROCKY FLATS PLANT
GOLDEN, COLORADO 80402

OU4 SOLAR EVAPORATION PONDS IM/IRA
ENGINEERED COVER SECTIONS AND DETAILS

SIZE	DRAWING NUMBER	ISSUE	SHEET
D	51045-123	A	1 OF 1

94DN0060, 5/12/94 at 16:50

COMPUTER GENERATED DRAWING NO MANUAL CHANGES ALLOWED

OU04-A-000278

Item No.	Line Designation	Service	Origin	Destination	Location (N&E Coord) Measured	Status Active or Inactive	Action	Depth	Reference Number(s)	Drawing Number(s) Reference	Remarks	Approximate Length (ft)
1	1-1/2" PW-SST (PVC) 1-1/2" PWR-SST (PVC)	Process Waste	Bldg. 771	Pond 207A [1]	N38072, E21082 SE to N38032, E21146 E, SE to N38014, E21530 East to N38014, E21730 S, SE to N37950, E21734	Inactive [2]	Remove	4' to 8'	30,59,78, 115,196, 224,227	15501-14-M 15501-13-M	P-26 (OU9)	600
2	3"-LD-STL	Laundry Discharge	Tank 207 (N. Valve Pit)	Pond 207C	N37798, E21082 East to N37798, E21225	Inactive (AIP)	Remove to Fence	4' to 8'	35,60	15501-13-M	P-35 (OU9)	60
3	3"-LD-STL	Laundry Discharge	Tank 207 (N. Valve Pit)	Pond 207C	N37797, E21082 East to N37797, E21225	Inactive (AIP)	Remove to Fence	4' to 8'	36,61	15501-13-M	P-35 (OU9)	60
4	3"-PW-STL	Process Waste	Tank 207 (N. Valve Pit)	Pond 207C	N37796, E21082 East to N37796, E21225	Inactive (AIP)	Remove to Fence	4' to 8'	37,62	15501-13-M		60
5	10"-DCW-CI	Domestic Cold Water	Plantwide	Plantwide	N38200, E21172 South to N37699, E21172	Inactive [2]	Leave in Place	5' to 8'	29,31,32, 34,41	15501-13-M	Cont to Item 12	N/A
6	4"-PW-VCP	Process Waste	Tank 207	Valve Pit	N37786, E21081 East to N37785, E21128	Inactive [2]	Leave in Place	4' to 8'	38	15501-13-M		N/A
7	6"-RW-CI	Raw Water	Plantwide	Plantwide	N37722, E21100 East to N37722, E21507	Inactive [2]	Leave in Place	4' to 8'	42,63,81 127	15501-13-M 15501-14-M	Cont to Item 13	N/A
8	3"-PW-PVC (SST)	Process Waste	Tank 207	Pond 207A	N37716, E21100 East to N37716, E21537	Inactive [2]	Remove	4' to 8'	43,64,83, 128	15501-13-M 15501-14-M	P-37 (OU9)	40
9	3"-PW-PVC (STL)	Process Waste	Tank 207	Pond 207A	N37715, E21100 East to N37715, E21537	Inactive [2]	Remove	4' to 8'	44,65,84, 129	15501-13-M 15501-14-M	P-36 (OU9)	40
10	10"-PW-PVC (VCP)	Process Waste	Junction Box @ N37785, E21134	Bldg 995	N37785, E21134 SE to N37713, E21205 East to N37713, E21470 (Manhole) South to N37590, E21470 (Manhole)	Inactive [2]	Remove North & West to Fence	4' to 8'	46,66,85, 130,131, 155,169	15501-13-M 15501-14-M 15501-22-M	P-38 (OU9)	440
11	2400V-E	Power	Plantwide	Plantwide	N38223, E21158 South to N37701, E21158 East to N37702, E21358 North to N37736, E21358 East to N37734, E21472 South to N37607, E21472 E, SE to N37598, E21508 South to N37452, E21508	Inactive [2]	Leave in Place	Overhead	N.A.	15501-13-M 15501-14-M 15501-22-M		N/A
12	10"-DCW-CI	Domestic Cold Water (and fire hydrant)	Plantwide	Plantwide	N37699, E21172 East to N37699, E21379 SE to N37651, E21416 South to N37566, E21416 East to N37566, E21481 South to N37349, E21481	Inactive [2]	Leave in Place	4' to 8'	132,152, 164	15501-13-M 15501-14-M 15501-22-M	Cont from Item 5	N/A
13	6"-RW-CI 8"-RW-CI	Raw Water	Plantwide	Plantwide	N37722, E21507 South to N37400, E21507	Inactive [2]	Leave in Place	4' to 8'	200,201, 202	15501-13-M 15501-14-M 15501-22-M	Cont from Item 7, Cont to Item 15. Item 15 Ties in @ N37463, E21507	N/A
14	3"-PW-SST 3"-PW-STL	Process Waste	Bldg 910	Pond 207A (Via Item No 16 and 22)	N37449, E21789 3" PW-STW N37449, E21808 3" PW-SST West to N37449, E21497 North to N37693, E21497 (tie into Items 16 and 22)	Inactive [2]	Remove	4' to 8'	153,207, 226,255, 296,154, 208,227, 256,297	15501-14-M 15501-22-M 27452-209	P-37 (OU9) 3"-PW-STL Ties into item 22 (3"-PW-PVC) @ N37449, E21789 3"-PW-SST Ties into Item 16 @ N37449, E21808 Check exist valve pit @ N37698, E21497 abandoned?	570
15	6"-RW-CI	Raw Water	Plantwide (valve @ N37463, E21507)	Bldg 910	N37463, E21507 East to N37463, E21806 South to N37362, E21806 East to N37362, E21922 South to N37347, E21922	Inactive [2]	Partial Remove Verify With Bldg 910 Use - Reroute	4' to 8'	206,225, 254,295	15501-22-M 27452-209	Cont from Item 13	550

Item No.	Line Designation	Service	Origin	Destination	Location (N&E Coord) Measured	Status Active or Inactive	Action	Depth	Reference Number(s)	Drawing Number(s) Reference	Remarks	Approximate Length (ft)
16	3"-SROB-CAP	Secondary Reverse Osmosis Brine	Bldg 910	Pond 207C (Via Item NO. 14 and Valve Pit @ N37800, E21480	N37347, E21929 North to N37364, E21929 West to N37364, E21808 North to N37449, E21808 (ties into 3"-PW-SST)continues @ N37693, E21497 East to N37693, E21503 North to N37737, E21503 N.W. to N37752, E21489 North to N37744, E21489 (thu pit) West to N37794, E21460 (Pond 207C)	Inactive [2]	Remove	4' to 8'	294	15501-14-M 27452-209 15501-22-M	P-47 (OU9) Ties into Item 14 (3"-PW-SST) @ N37449, E21808, then continues N37693, E21497 (Valve Pit) and ties back into 3"SROB-CAP to Pond 207C	310
17	8"PWF-CI	Process Waste Flow	Bldg 788A	Pond 207C	N37930, E21483 West to N37932, E21443	Inactive [2]	Remove	Above Grade (Verify)	120	15501-14-M	P-49 (OU9)	40
18	8"PW-CI	Process Waste	Pond 207A	Bldg 788A	N37926, E21537 West to N37928, E21508	Inactive [2]	Remove	4' to 8'	197	15501-14-M	P-49 (OU9)	50
19	440V-E	Power	N38033, E21517 (Power pole)	Pond 207C	N38033, E21517 South to N37903, E21517 S.W. to N37887, E21469 (Underground)	Inactive [2]	Remove	Overhead and Under ground		15501-14-M	Runs below Bldg 788. Need to Identify use	130 A/G 50 U/G
20	440-V-E	Power	Plantwide	Plantwide	N38033, E21517 East to N38033, E22133	Inactive [2]	Remove	Overhead		15501-14-M 15501-15-M	P-48 (OU9)	620
21	15"-SD-CMP	Storm Drain	Bldg 782 2 lines (2" & 6") converge	Daylights North of Bldg 788A	N37560, E21458 NE to N37595, E21477 North to N37684, E21477 N, NE to N37820, E21498 North to N38029, E21498 NW to N38060, E21454	Inactive [2]	Remove	4' to 8'	117,118, 121	15501-14-M 15501-22-M	P-48 (OU9)	520
22	3"-PW-PVC	Process Waste	207B (N) East Side Item 43 ties in @ N37880, E22137	207C Southeast Corner (Via 3"-PW-STL Item 14)	N37860, E21097 Pond 207B East to N37880, E22137 South to N37392, E22137 West to N37392, E21789 North to N37449, E21789 (tie into Item 14) West to N37449, E21497 North to N37693, E21497 (Item 14 tie into 3" PVC) West to N37693, E21481 North to N37771, E21481 NW to N37810, E21442	Inactive [2]	Leave	4' to 8'	124,298	27452-209	Ties into Item 14 (3"-PW-STL) @ N37449, E21789, and ties back into 3"-PW-PVC @ N37693, E21498 then continues to Pond 207C. Check existing valve pit @ N37698, E21497 Abandoned?	N/A
23	3"-PW-(STL)	Process Waste	Bldg 788 (So Side)	207A (via 3"-PW-SST, Item 8)	N37784, E21492 South to N37716, E21492	Inactive [2]	Remove	4' to 8'		15501-14-M 27452-209	May run below Bldg 788	100
24	2 1/2"-E-SST	Power	Pole 8	Bldg 788	N38000, E21300	Inactive [2]	Leave	4' to 8'	79	N.A.		N/A
25	6"-PW-	Process Waste Underdrain	Pond 207C	North to Drum w/ Pump	N37800, E21333 North to N37966, E21333	Inactive [2]	Leave	8" below liner to top of pipe	80	19379-1		N/A

NOTE:

1. INFORMATION IS ESTIMATED FROM INCOMPLETE HISTORICAL DRAWINGS AND/OR PROCESS KNOWLEDGE
2. ASSUMED INACTIVE

PRELIMINARY
NOT FOR CONSTRUCTION

ENGINEERING-SCIENCE, INC.

ISSUE	DESCRIPTION	DATE	RFP	DOE	CLASS	JOB NO.
A	CONCEPTUAL DESIGN					989617

KEYWORDS			BY	DATE
	TOLERANCES FRACT. ± ANGLE ± DEC. ± UNLESS NOTED OTHERWISE	DESIGNED	TGE	2/23/94
		DRAWN	JRH	2/23/94
		CHECKED	PRL	2/23/94
		APPROVED		
	REMOVE BURRS AND SHARP EDGES			
	NEXT ASSEMBLY			
		SUBMITTED		
MASTER	SCALE: NONE	APPROVED RFP		
		APPROVED DOE		

U.S. DEPARTMENT OF ENERGY
ROCKY FLATS OFFICE GOLDEN, COLORADO

ROCKY FLATS PLANT
GOLDEN, COLORADO 80402

OU4 SOLAR EVAPORATION PONDS IM/IRA
UTILITIES LIST SHEET 1

SIZE	DRAWING NUMBER	ISSUE	SHEET
D	51045-440	A	1 OF 2

BLDG F.AC.
ROOM AREA
H Hrg-Vent
A Arch
E Ot. Bldg
C Civil
D Detection
M Mech
I Inst.
S Sit-Const
C Civil
U Utilities
P Piping
R Fire Prot
L Layouts
Fire Dtrg
S Site
X Anoma

94DN0022, 2/25/94 at 20:45

COMPUTER GENERATED DRAWING NO MANUAL CHANGES ALLOWED

OU04-A-000278

Item No.	Line Designation	Service	Origin	Destination	Location (N&E Coord) Measured	Status Active or Inactive	Action	Depth	Reference Number(s)	Drawing Number Reference	Remarks	Approximate Length (ft)
26	10"-FD-CAP	Foundation Drain	Bldg 779	Hillside North of Ponds	N38000, E21300	Inactive [2]	Leave	4' to 8'	82,116, 119,122, 126	N.A.		N/A
27	440V-E	Power	Pole @ NW Corner of Bldg 987	North/parallel to West berm 207A to poles SE of Bldg 788	N37452, E21519 North to N37768, E21517	Inactive [2]	Remove/ Relocate	Overhead	N.A.	15501-14-M 15501-22-M		600
28	T	Telephone	Plantwide	Bldg 788	N37443, E21522 NW to N37457, E21508 N NW to N37784, E21500	Inactive [2]	Remove/ Relocate	4' to 8'	N.A.	15501-14-M 15501-22-M		500
29	6"-PW-VCP	Process Waste	Plantwide N37335, E22652	Intercept 10"-PW-VCP @ N37400, E21492 (manhole)	N37400, E22205 East to N37400, E21492	Inactive [2]	Leave	4' to 8'	182	15501-22-M 15501-23-M	P-39 (OU9)	N/A
30	6"-ROPW-PVC	Reverse Osmosis Product Water	Valved Conn. @ 6"SE-CAP (N37396, E22075)	Storage Tank 215D	N37396, E22075 West to N37396, E21711 South to N37320, E20711 East to N37320, E21736	Inactive [2]	Leave	4' to 8'	N.A.	15501-22-M		N/A
31	6"-ROPW-PVC	Reverse Osmosis Product Water	Bldg 910	Ties into East-West 6" Item 30 ROPW-PVC @ N37390, 21907	N37347, E21907 (North side Bldg 910) North to N37396, E21907	Inactive [2]	Remove	4' to 8'	N.A.	15501-22-M		350
32	8"-ROF-PVC	Reverse Osmosis Feed	Storage Tank 215D	Bldg 910 & continues east as 6"-SE-CAP	N37390, E21709 East to N37390, E21977 South to N37347, E21977	Inactive [2]	Leave	4' to 8'	N.A.	15501-22-M		N/A
33	6"-ROPW-PVC	Reverse Osmosis Product Water	Bldg 910	6"-PW-VCP	N37347, E21902 North to N37365, E21902 West to N37365, E21809 North to N37400, E21809	Inactive [2]	Leave	4' to 8'	N.A.	15501-22-M		N/A
34	3"-SROB-CAP	Secondary Reverse Osmosis Brine	Bldg 910	Pond 207B South	N37347, E21919 North to N37432, E21919 Pond 207B Daylights over south berm	Inactive [2]	Remove	8'	320	15501-22-M 28103-201		90
35	3/4" E-PVC	Liquid Level Sensor Cables	Bldg 910	Pond 207B South	N37347, E21917 North to N37432, E21919 Pond 207B	Inactive [2]	Remove	4' to 8'	N.A.	15501-22-M		90
36	8"-PW-CAP	Process Waste	Bldg 910	Pond 207A	N37347, E21905 North to N37389, E21905 West to N37389, E21818 North to N37952, E21818 West to N37952, E21768 Pond 207A (N.E. Corner)	Inactive [2]	Remove	8'	251,227, 278,280	15501-14-M 15501-22-M		600
37	8"-RW-CAP	Raw water	8"-ROF-PVC	Pond 207A	N37390, E21821 North to N37717, E21821 West to N37717, E21768 Pond 207A	Inactive [2]	Leave	4' to 8'	252,292, 286	15501-14-M 15501-22-M		N/A
38	12"-OS-CMP	Outfall Sewer	Pumphouse	Daylights on North Side of Ponds 207A and 207B	N37976, E21814 North to N38018, E21814	Inactive [2]	Remove	4' to 8'	273,274, 247	15501-14-M		50
39	1-1/2"-DCW-STL	Domestic Cold Water	3"-DCW-STL @ N37245, E21813 (Plantwide)	(2) valve boxes between pond 207A & 207B South	N37245, E21813 North to N37502, E21813 1st Valve Box North to N37560, E21813 2nd Valve Box	Inactive [2]	Remove/ Relocate or Cap	4' to 8'	289,299	27452-209		200

Item No.	Line Designation	Service	Origin	Destination	Location (N&E Coord) Measured	Status Active or Inactive	Action	Depth	Reference Number(s)	Drawing Number Reference	Remarks	Approximate Length (ft)
40	3"-SROB-CAP 3"-ROPW-CAP 3"-SROP-CAP 6"-SE-CAP	Secondary Reverse Osmosis Brine Reverse Osmosis Product Water Secondary Reverse Osmosis Product Solar Evap ?	Bldg 910	S.E. Corner Pond 207A	N37347, E21900 North to N37364, E21900 West to N37486, E21805 North to N37486, E21805 West to Pond 207A N37486, E21785	Inactive [2]	Leave	4' to 8'	253,294, 290	27452-209 27452-210		N/A
41	8"-ROF-CAP	Reverse Osmosis Feed	Bldg 910	Pond 207B Center and Pond 207B South (Via valve boxes between Ponds)	N37347, E21967 North to N37400, E21967 West to N37400, E21810 North to N37616, E21810 East to N37616, E21880 North to Pond 207B Center N37646, E21880 & South to Pond 207B South N37584, E21880	Inactive [2]	Leave	4' to 8'	288,293	27452-209 15501-14-M 15501-22-M	27452-209 15501-14-M 15501-22-M	N/A
42	3"-PW-PVC	Process Waste	Riser (18" A.G.) at east side Pond 207B (North)	Daylights Towards Walnut Creek	N37900, E22136 North to N38099, E22137 N.W. to N38226, E21945 N.N.E. to N38644, E22140 North to N38740, E22140	Inactive [2]	Leave in Place	4' to 8'	327,348, 355,371	27452-209 15501-14-M 15501-15-M 15501-6-M 15501-7-M	Runs parallel to Item 43	N/A
43	3"-PW-PVC	Process Waste	East of Pond 207B (North)	To sump, overflow to daylight towards Walnut Creek	N37380, E22137 North to N38099, E22137 N.W. to N38226, E21946 N.N.E. to N38646, E21246 (sump) North to N38714, E22144 (daylights)	Inactive [2]	Leave in Place	4' to 8'	347,354, 365,377, 373	15501-14-M 15501-15-M 15501-6-M 15501-7-M 27452-209	Ties into Item 22 @N37880, E22137	N/A
44	6"-Tile Drain	Ground Water Runoff	Manway at S.E. Corner of Pond 207B South	Daylights N.E. of 207B North to Road Ditch	N37423, E22122 North to N38055, E22144	Inactive [2]	Remove	4' to 8'	N.A.	16887-1		370
45	8"-PW-CI	Process Waste	Pond 207B North	Pump House	N37971, E21834 West to N37971, E21816 (Pump House)	Inactive [2]	Remove	4' to 8'	275	15501-14-M	P-50 (OU9)	20
46	8"-PW-CI (8"-PCWF-CI)	Process Waste	Pump House	Pond 207A	N37961, E21806 (Pump House) South to N37956, E21806 W.S.W. to N37954, E21767 Pond 207A	Inactive [2]	Remove	4' to 8'	276	15501-14-M	P-50 (OU9)	50
47	3" Above Ground Transfer Line	ITS Transfer Line	Valve Pit Between 207A & 207B South	Bldg 374		Active	Relocate	N/A	N/A	N/A		650

NOTE:

1. INFORMATION IS ESTIMATED FROM INCOMPLETE HISTORICAL DRAWINGS AND/OR PROCESS KNOWLEDGE
2. ASSUMED INACTIVE

PRELIMINARY
NOT FOR CONSTRUCTION

ENGINEERING-SCIENCE, INC.

ISSUE	DESCRIPTION	DATE	RFP	DOE	CLASS	JOB NO.
A	CONCEPTUAL DESIGN					989617

KEYWORDS			BY	DATE
	TOLERANCES FRACT. ± ANGLE ± DEC. ± UNLESS NOTED OTHERWISE REMOVE BURRS AND SHARP EDGES NEXT ASSEMBLY	DESIGNED	SRH	5/9/94
		DRAWN	JRH	5/9/94
		CHECKED	HAH	5/9/94
		APPROVED		
		SUBMITTED		
MASTER	SCALE: NONE	APPROVED RFP		
		APPROVED DOE		

U.S. DEPARTMENT OF ENERGY
ROCKY FLATS OFFICE GOLDEN, COLORADO

ROCKY FLATS PLANT
GOLDEN, COLORADO 80402

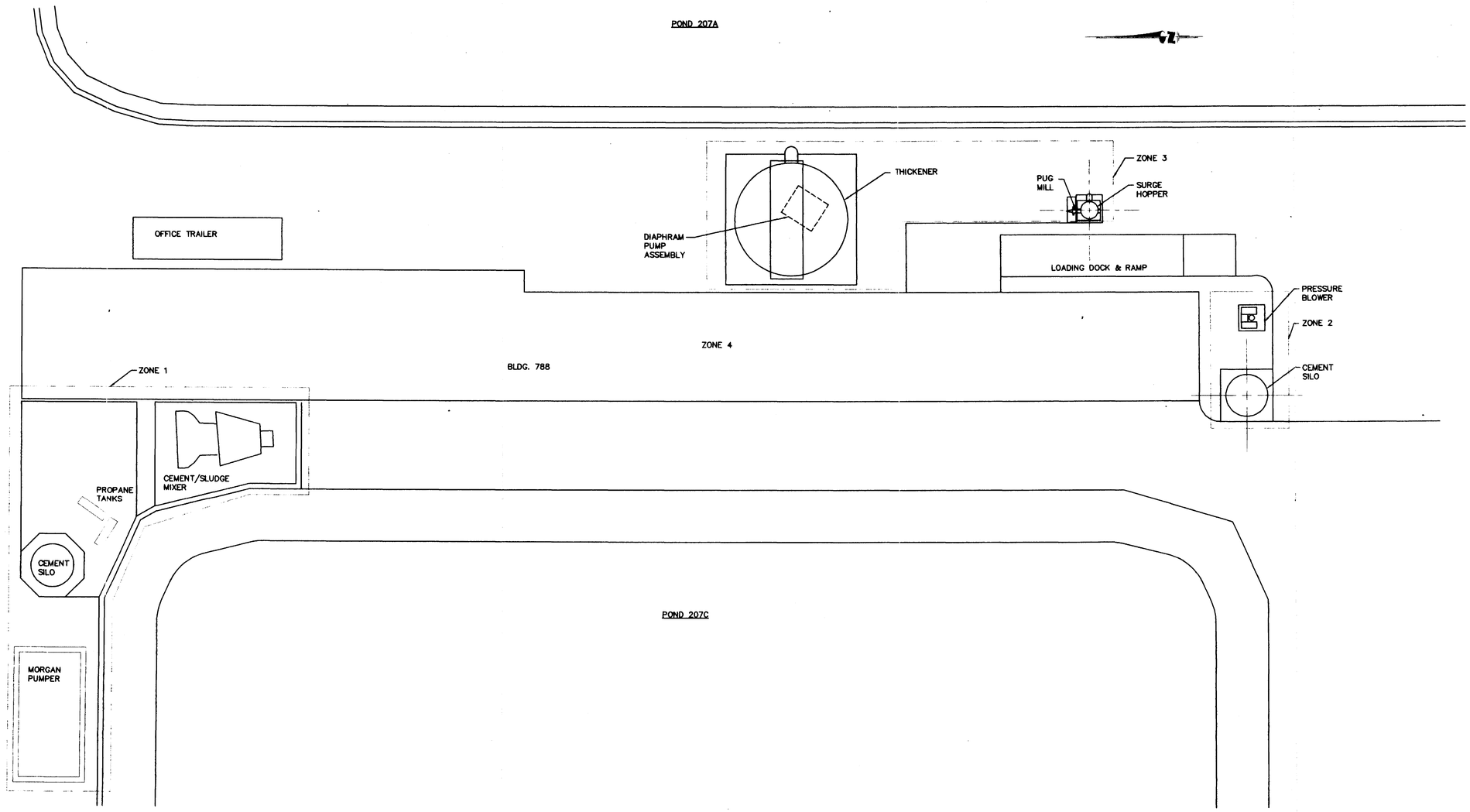
OU4 SOLAR EVAPORATION PONDS IM/IRA
UTILITIES LIST SHEET 2

SIZE	DRAWING NUMBER	ISSUE	SHEET
D	51045-440	A	2 OF 2

RLO2-A-000378

94DN0023, 5/9/94 at 10:15

COMPUTER GENERATED DRAWING NO MANUAL CHANGES ALLOWED



ISSUE	DESCRIPTION	DATE	RFP	DOE	CLASS	JOB NO.
A	ORIGINAL ISSUE					722446

KEYWORDS

TOLERANCES FRACT. ± ANGLE ± DEC. ± UNLESS NOTED OTHERWISE
REMOVE BURRS AND SHARP EDGES
NEXT ASSEMBLY

	BY	DATE
DESIGNED	WPE	3/31/94
DRAWN	MKB	3/31/94
CHECKED	SRH	3/31/94
APPROVED		
SUBMITTED		
APPROVED RFP		
APPROVED DOE		

MASTER

SCALE: 1"=10'

ENGINEERING-SCIENCE, INC.

U.S. DEPARTMENT OF ENERGY
ROCKY FLATS OFFICE GOLDEN, COLORADO

ROCKY FLATS PLANT
GOLDEN, COLORADO 80402

BUILDING 788 AND EQUIPMENT DEMOLITION PLAN

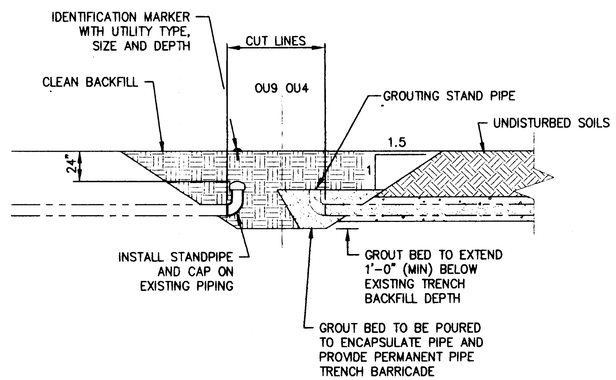
SIZE	DRAWING NUMBER	ISSUE	SHEET
D	51045-432	A	1 OF 1

94DN0317, 5/9/94 at 10:30

COMPUTER GENERATED DRAWING

0109-11-000278

NO MANUAL CHANGES ALLOWED



UTILITY PIPING POND INTRUSION GROUTING DETAIL

SCALE: NONE

LEGEND:

- GROUTING AREA
- BACKFILL AREA
- UNDISTURBED SOIL AREA

NOTES:

1. WHERE EXCAVATION ACCESS IS LIMITED, SHORING MAY BE USED IN LIEU OF SLOPING.
2. ALL EXCAVATIONS SHALL COMPLY WITH ALL APPLICABLE OSHA REGULATIONS.

PRELIMINARY
NOT FOR CONSTRUCTION

ENGINEERING-SCIENCE, INC.

ISSUE	DESCRIPTION	DATE	RFP	DOE	CLASS	JOB NO.
A	CONCEPTUAL DESIGN					989617

	BY	DATE
DESIGNED	SRH	2/25/94
DRAWN	MKB	2/25/94
CHECKED	HAH	2/25/94
APPROVED		
SUBMITTED		
APPROVED RFP		
APPROVED DOE		

KEYWORDS

TOLERANCES FRACT. ± ANGLE ± DEC. ± UNLESS NOTED OTHERWISE
REMOVE BURRS AND SHARP EDGES
NEXT ASSEMBLY

MASTER

SCALE: NONE

U.S. DEPARTMENT OF ENERGY
ROCKY FLATS OFFICE GOLDEN, COLORADO

ROCKY FLATS PLANT
GOLDEN, COLORADO 80402

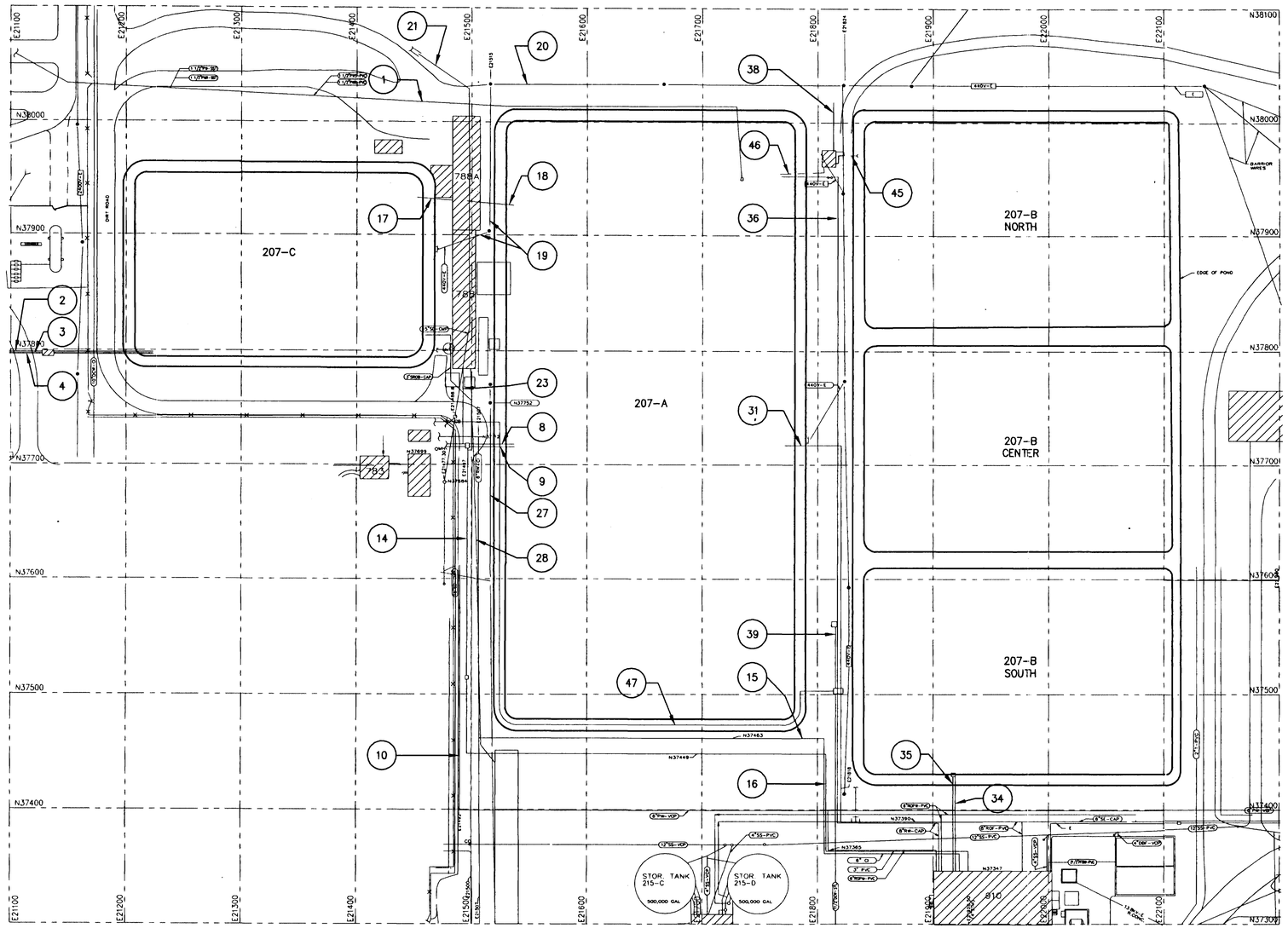
OU4 SOLAR EVAPORATION PONDS IM/IRA
UTILITIES REMOVAL DETAILS

SIZE	DRAWING NUMBER	ISSUE	SHEET
D	51045-431	A	1 OF 1

94DN0018, 5/9/94 at 10:145

COMPUTER GENERATED DRAWING NO MANUAL CHANGES ALLOWED

OU04-A-000078



LEGEND:

BUILDING

FENCE

ABBREVIATIONS:

CAP	CEMENT–ASBESTOS PIPE
CI	CAST IRON
CMP	CORRUGATED METAL PIPE
CO	CLEAN OUT
DBF	DRYING BED FEED
DCW	DOMESTIC COLD WATER
E	ELECTRICAL
FD	FOUNDATION DRAIN
KV	KILOVOLT
LD	LAUNDRY DISCHARGE
MH	MANHOLE
OS	OUTFALL SEWER
PVC	POLYVINYL CHLORIDE
PW	PROCESS WASTE
ROF	REVERSE OSMOSIS FEED
ROPW	REVERSE OSMOSIS PRODUCT WATER
RW	RAW WATER
SD	STORM DRAIN
SE	SEWAGE EFFLUENT
SROB	SECONDARY REVERSE OSMOSIS BRINE
SROP	SECONDARY REVERSE OSMOSIS PRODUCT
SS	SANITARY SEWER
SST	STAINLESS STEEL
STL	STEEL
T	TELEPHONE
VCP	VITRIFIED CLAY PIPE

SYMBOLS:

UTILITY BELOW GRADE

UTILITY ABOVE GRADE

UTILITY IDENTIFICATION

SIZE OF PIPE OR CONDUIT

TYPE OF UTILITY

MATERIAL OF PIPE OR CONDUIT

NOTES:

1. SEE DRAWING 51045–440 FOR A DESCRIPTION OF THE NUMBERED UTILITY.
2. OF THE 47 UTILITIES IDENTIFIED ON DRAWING 51405–440, ONLY THOSE SHOWN ON THIS DRAWING REQUIRE REMOVAL OR GROUTING AS CALLED FOR ON DRAWING 51045–440.

PRELIMINARY
NOT FOR CONSTRUCTION

0 50 100
FEET

ENGINEERING-SCIENCE, INC.

ISSUE	DESCRIPTION	DATE	RFP	DOE	CLASS	JOB NO.
A	CONCEPTUAL DESIGN					989617

	BY	DATE
DESIGNED	SRH	2/23/94
DRAWN	MW	2/23/94
CHECKED	TGE	2/23/94
APPROVED		
SUBMITTED		
APPROVED RFP		
APPROVED DOE		

KEYWORDS

MASTER

TOLERANCES: FRACT. ± ; ANGLE ± ; DEC. ± UNLESS NOTED OTHERWISE

REMOVE BURRS AND SHARP EDGES

NEXT ASSEMBLY

SCALE: 1"=50'

U.S. DEPARTMENT OF ENERGY
ROCKY FLATS OFFICE GOLDEN, COLORADO

ROCKY FLATS PLANT
GOLDEN, COLORADO 80402

OU4 SOLAR EVAPORATION PONDS IM/IRA

UTILITIES REMOVAL SITE MAP

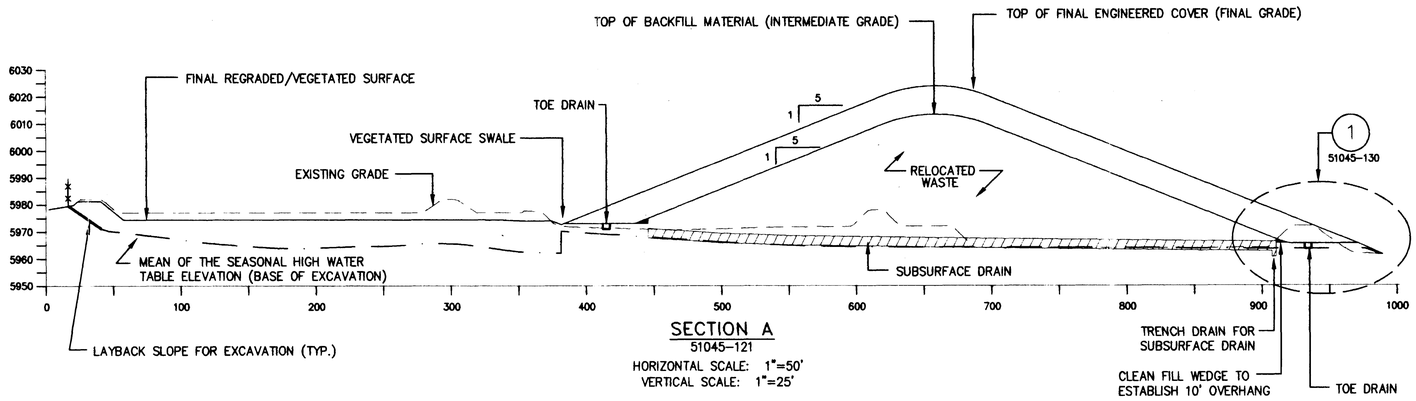
SIZE	DRAWING NUMBER	ISSUE	SHEET
D	51045–430	A	1 OF 1

BLDG/FAC
ROOM/AREA
H Htg–Vent
A Arch
O Ok. Box
E Elec
D Detection
M Mech
I Inst
S Sit–Conc
C Civil
U Utilities
P Piping
W Fire Prot
L Layouts
F Flow Diag
E Sides
X Alarms

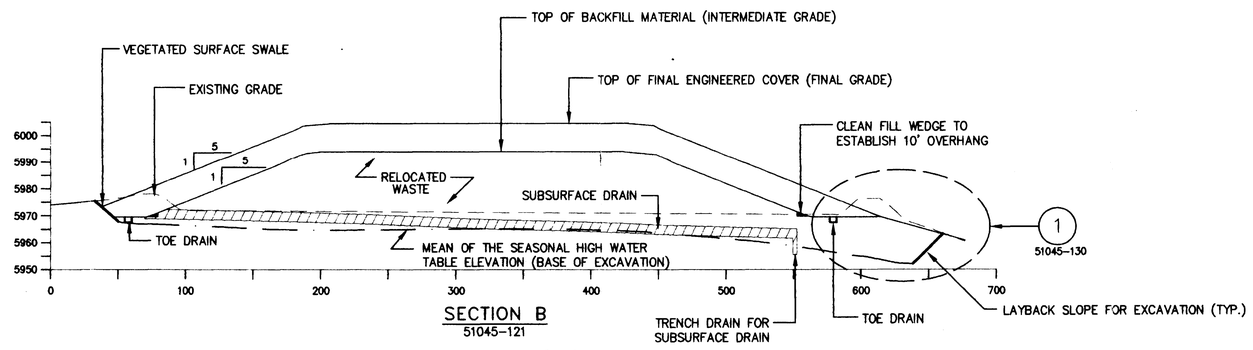
93DN1401, 2/25/94 at 21:40

COMPUTER GENERATED DRAWING NO MANUAL CHANGES ALLOWED

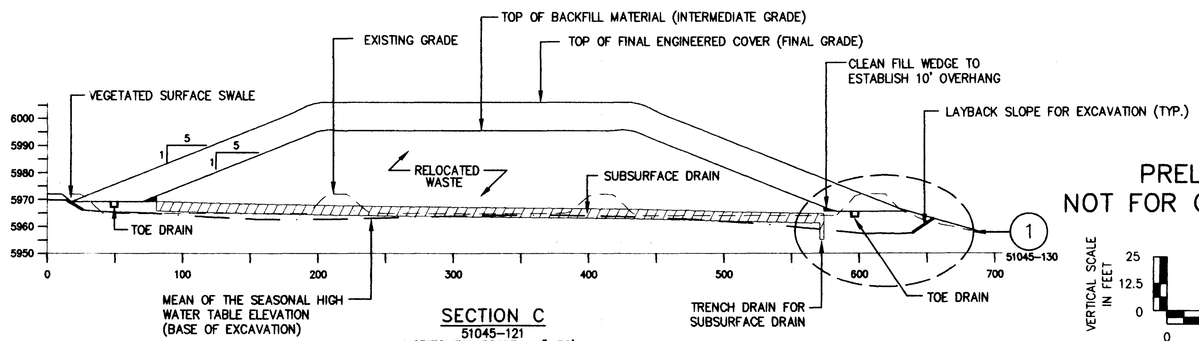
OU04-A-000278



SECTION A
51045-121
HORIZONTAL SCALE: 1"=50'
VERTICAL SCALE: 1"=25'

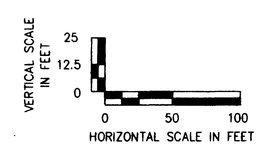


SECTION B
51045-121
HORIZONTAL SCALE: 1"=50'
VERTICAL SCALE: 1"=25'



SECTION C
51045-121
HORIZONTAL SCALE: 1"=50'
VERTICAL SCALE: 1"=25'

PRELIMINARY
NOT FOR CONSTRUCTION



ENGINEERING-SCIENCE, INC.

ISSUE	DESCRIPTION	DATE	RFP	DOE	CLASS	JOB NO.
A	CONCEPTUAL DESIGN					989617

	BY	DATE
DESIGNED	SES	5/5/94
DRAWN	SES	5/5/94
CHECKED	REL/DNC	5/6/94
APPROVED		
SUBMITTED		
APPROVED RFP		
APPROVED DOE		

KEYWORDS

MASTER

TOLERANCES: FRACT. ± ANGLE ± DEC. ± UNLESS NOTED OTHERWISE. REMOVE BURRS AND SHARP EDGES. NEXT ASSEMBLY

SCALE: AS NOTED

U.S. DEPARTMENT OF ENERGY
ROCKY FLATS OFFICE GOLDEN, COLORADO

ROCKY FLATS PLANT
GOLDEN, COLORADO 80402

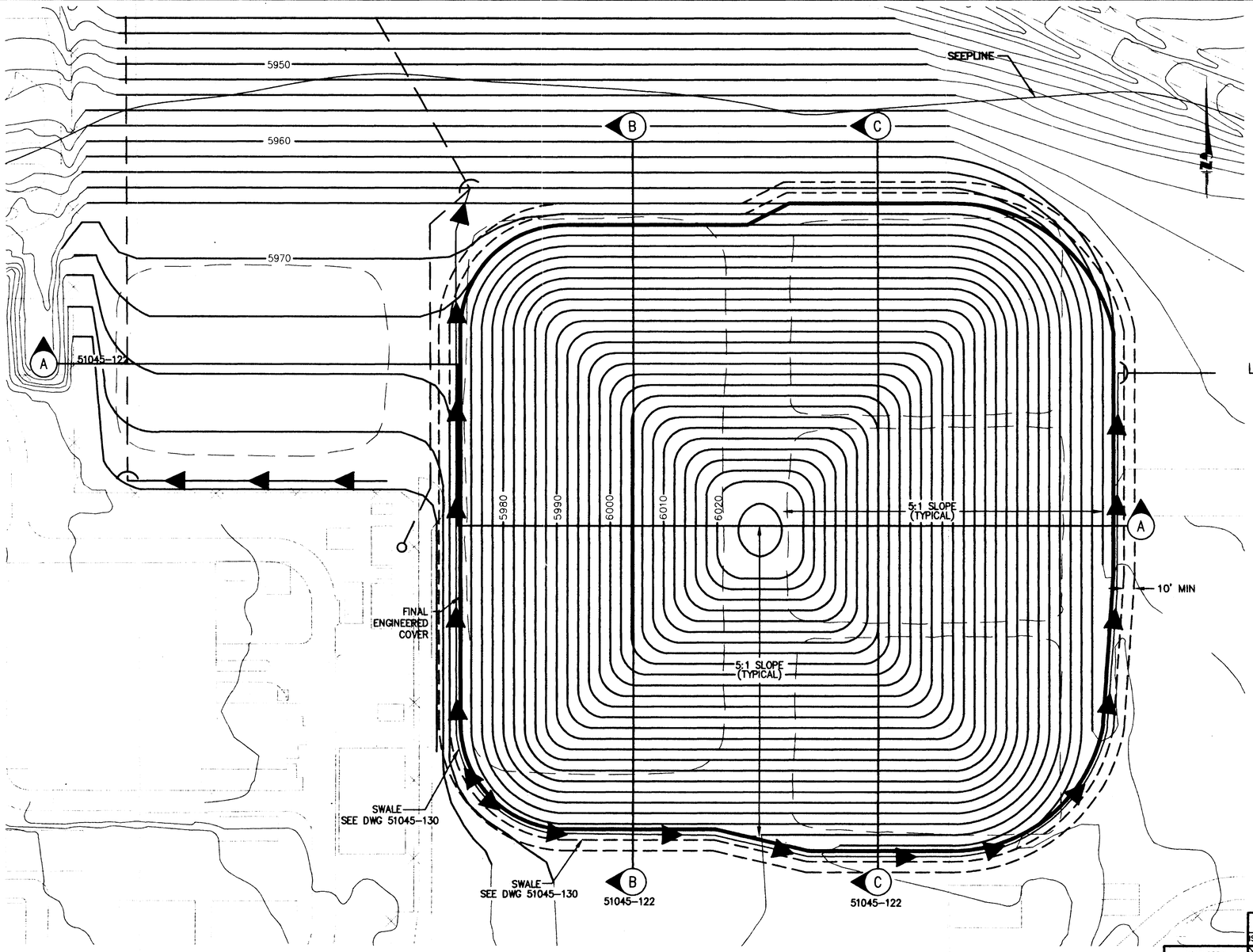
OU4 SOLAR EVAPORATION PONDS IM/IRA
ENGINEERED COVER CROSS-SECTIONS

SIZE	DRAWING NUMBER	ISSUE	SHEET
D	51045-122	A	1 OF 1

OU04-A-000578

93DN1464, 5/12/94 at 16:45

COMPUTER GENERATED DRAWING NO MANUAL CHANGES ALLOWED



LEGEND:

- EXTENT OF THE ENGINEERED COVER
- PROPOSED CONTOUR LINE
- EXISTING CONTOUR LINE
- FOOTPRINT OF EXISTING SOLAR EVAPORATION PONDS
- POINT OF COMPLIANCE (POC) BOUNDARY
- SURFACE SWALE
- DROP INLET STRUCTURE FROM SURFACE SWALES TO BURIED PIPES
- MANHOLE

PRELIMINARY
NOT FOR CONSTRUCTION

0 50 100
FEET

ENGINEERING-SCIENCE, INC.

ISSUE	DESCRIPTION	DATE	RFP	DOE	CLASS	JOB NO.
A	CONCEPTUAL DESIGN					989617

	BY	DATE
DESIGNED	SES	5/5/94
DRAWN	SES	5/5/94
CHECKED	REL/DNC	5/6/94
APPROVED		
SUBMITTED		
APPROVED RFP		
APPROVED DOE		

KEYWORDS

MASTER

TOLERANCES UNLESS NOTED OTHERWISE: FRACT. ± ANGLE ± DEC. ± REMOVE BURRS AND SHARP EDGES NEXT ASSEMBLY

SCALE: 1"=50'

U.S. DEPARTMENT OF ENERGY
ROCKY FLATS OFFICE GOLDEN, COLORADO

ROCKY FLATS PLANT
GOLDEN, COLORADO 80402

OU4 SOLAR EVAPORATION PONDS IM/IRA

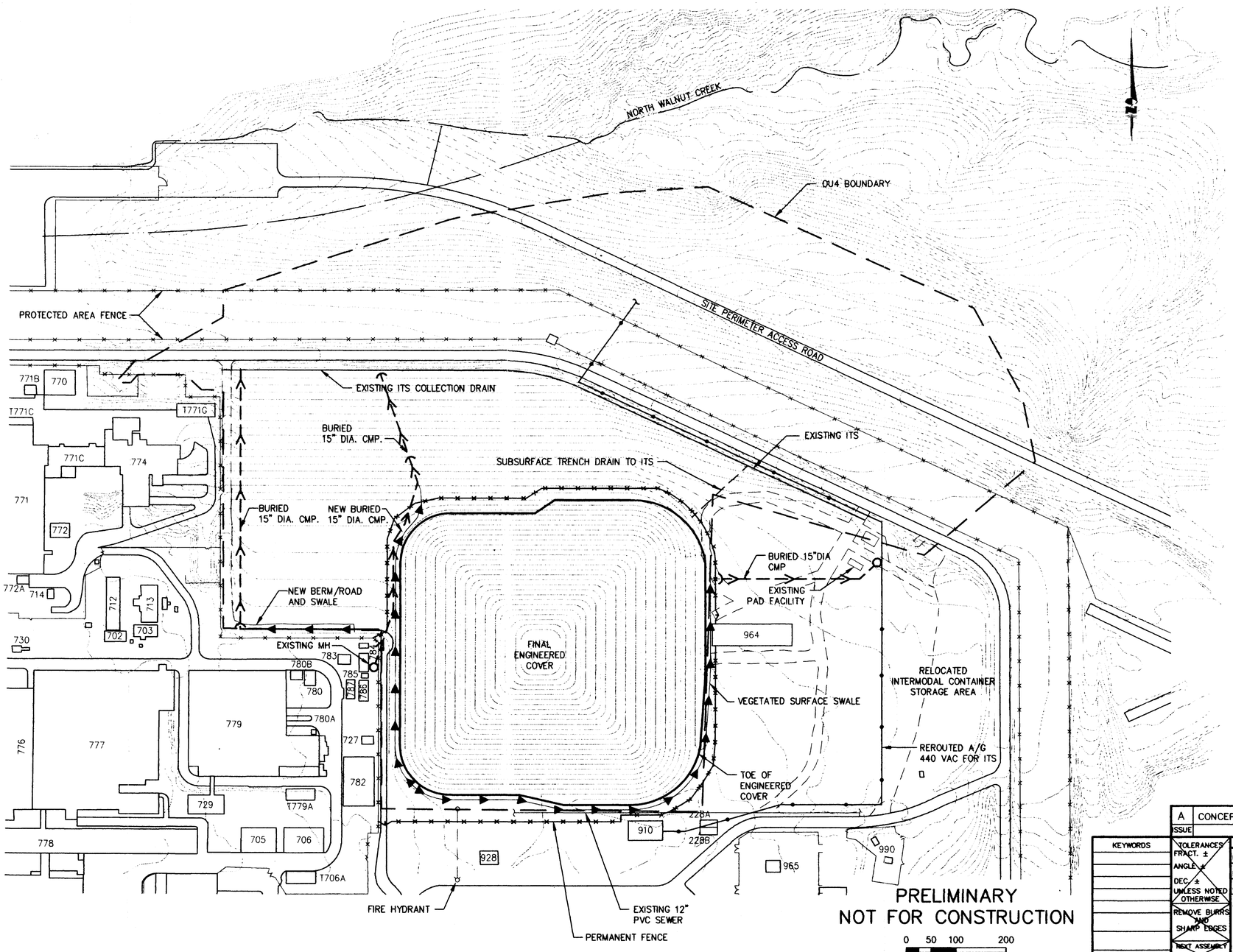
ENGINEERED COVER PLAN

SIZE	DRAWING NUMBER	ISSUE	SHEET
D	51045-121	A	1 OF 1

93DN1462, 5/13/94 at 10:00

COMPUTER GENERATED DRAWING NO MANUAL CHANGES ALLOWED

OU04-A-000078



LEGEND:

- STREAMS
- ROADS
- BUILDINGS
- EXISTING FENCE
- NEW FENCE
- OU4 BOUNDARY
- TEMPORARY BURIED UTILITIES
- EXISTING BURIED UTILITIES
- ABOVE-GROUND ELECTRIC LINES
- BURIED CMP
- MANHOLE
- EXTENT OF ENGINEERED COVER
- SURFACE SWALE
- DROP STRUCTURE FROM SURFACE SWALES TO BURIED PIPE

PRELIMINARY
NOT FOR CONSTRUCTION

0 50 100 200
FEET

ENGINEERING-SCIENCE, INC.

ISSUE	DESCRIPTION	DATE	RFP	DOE	CLASS	JOB NO.
A	CONCEPTUAL DESIGN					989617

KEYWORDS			BY	DATE
	TOLERANCES FRACT. ± ANGLE ± DEC. ± UNLESS NOTED OTHERWISE	DESIGNED	SES	5/5/94
		DRAWN	SES	5/5/94
		CHECKED	REL/DNC	5/6/94
		APPROVED		
	REMOVE BURRS AND SHARP EDGES			
	NEXT ASSEMBLY			
		SUBMITTED		
MASTER	SCALE: 1"=100'	APPROVED RFP		
		APPROVED DOE		

U.S. DEPARTMENT OF ENERGY
ROCKY FLATS OFFICE GOLDEN, COLORADO

ROCKY FLATS PLANT
GOLDEN, COLORADO 80402

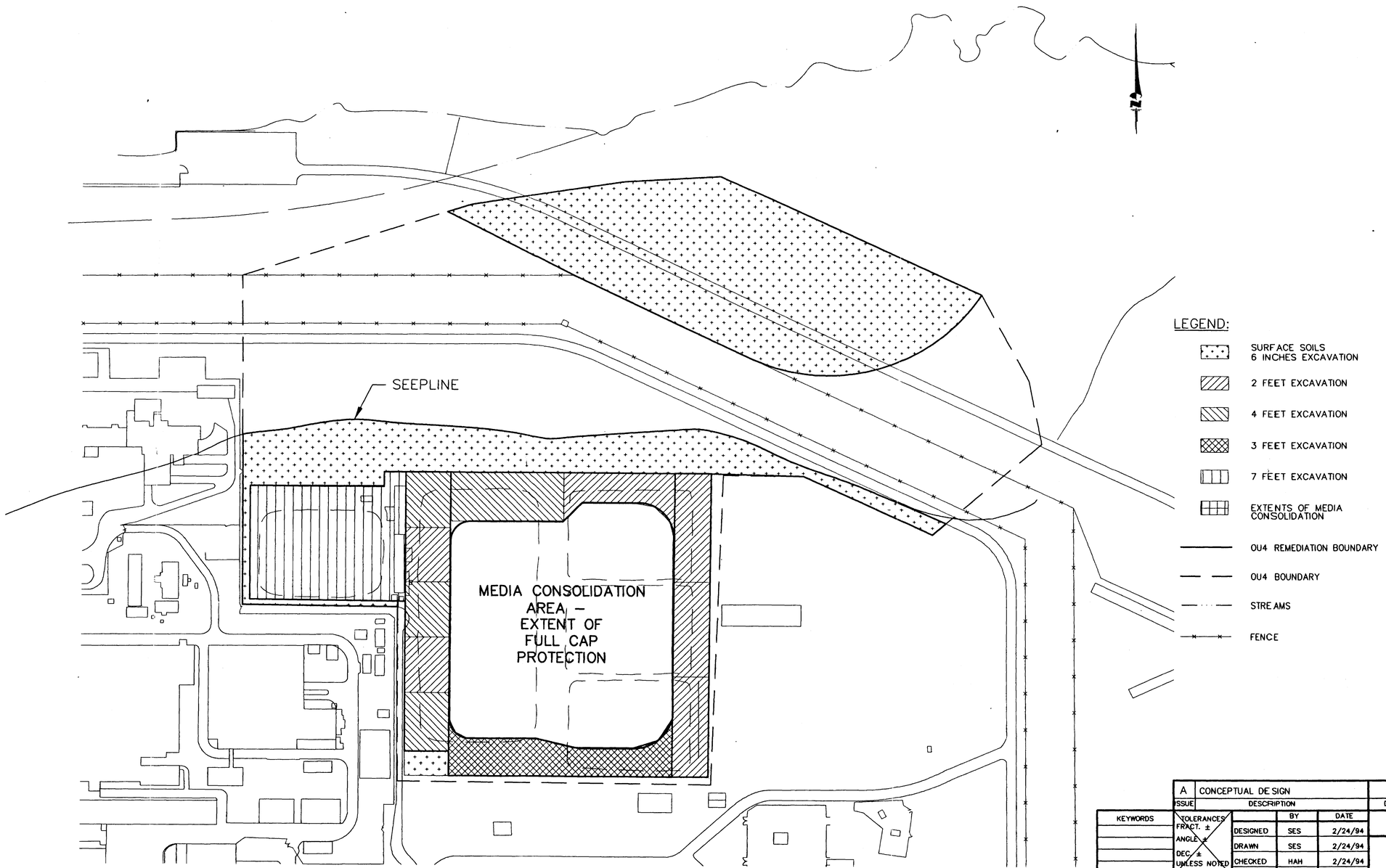
OU4 SOLAR EVAPORATION PONDS IM/IRA
FINAL SITE PLAN

SIZE	DRAWING NUMBER	ISSUE	SHEET
D	51045-112	A	1 OF 1

94DN0192, 5/12/94 at 18:20

OU04-A-000378

COMPUTER GENERATED DRAWING NO MANUAL CHANGES ALLOWED



PRELIMINARY
NOT FOR CONSTRUCTION

ENGINEERING-SCIENCE, INC.

ISSUE	DESCRIPTION	DATE	RFP	DOE	CLASS	JOB NO.
A	CONCEPTUAL DESIGN					989617

		BY	DATE
KEYWORDS	TOLERANCES FRACT. ± ANGLE ± DEC. ± UNLESS NOTED OTHERWISE REMOVE BURRS AND SHARP EDGES NEXT ASSEMBLY		
	DESIGNED	SES	2/24/94
	DRAWN	SES	2/24/94
	CHECKED	HAH	2/24/94
	APPROVED		
	SUBMITTED		
MASTER	SCALE: 1"=100'	APPROVED RFP	
		APPROVED DOE	

U.S. DEPARTMENT OF ENERGY
ROCKY FLATS OFFICE GOLDEN, COLORADO

ROCKY FLATS PLANT
GOLDEN, COLORADO 80402

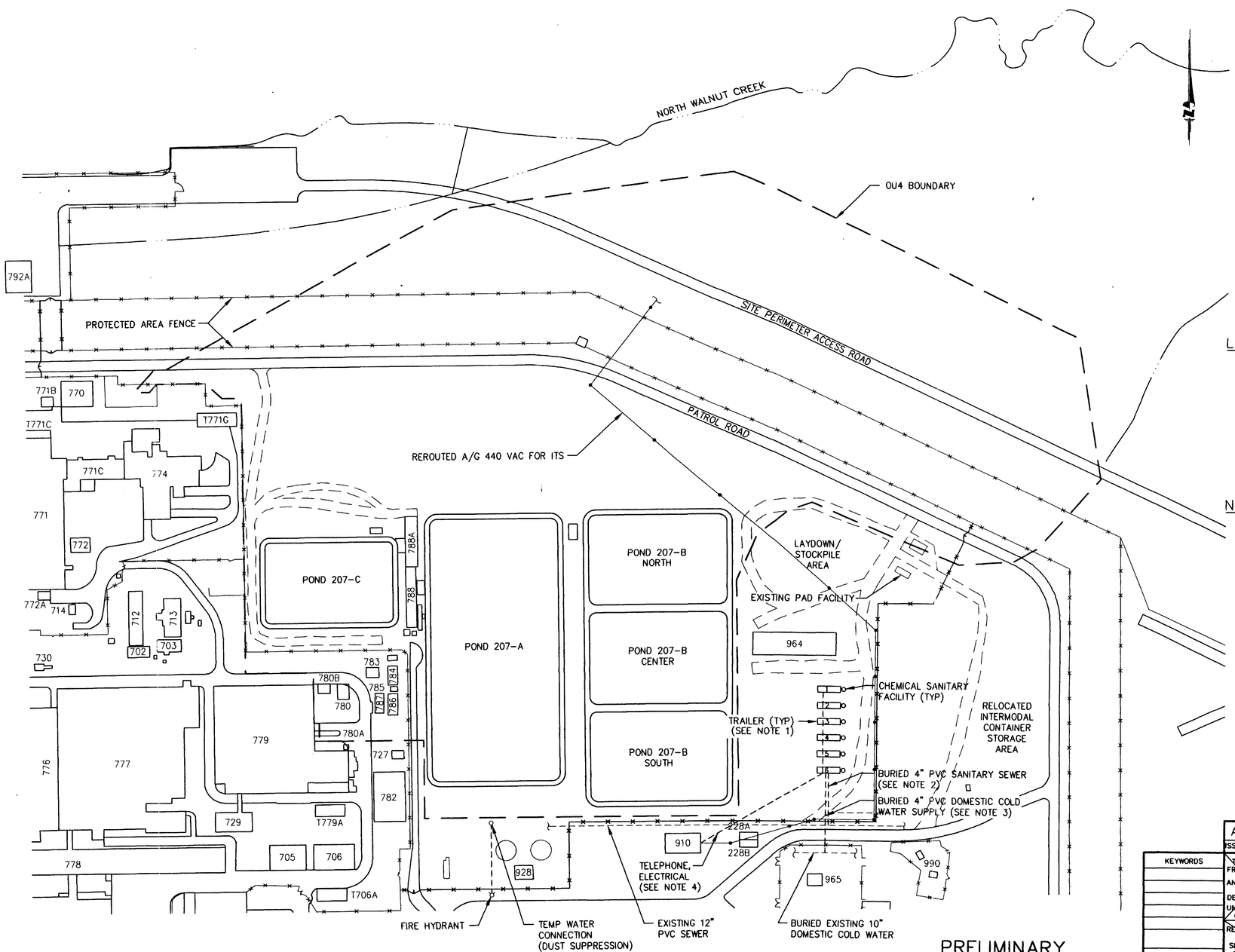
OU4 SOLAR EVAPORATION PONDS IM/IRA
LIMITS OF REMEDIATION

SIZE	DRAWING NUMBER	ISSUE	SHEET
D	51045-111	A	1 OF 1

94DN0189, 2/25/94 at 17:30

COMPUTER GENERATED DRAWING NO MANUAL CHANGES ALLOWED

OU04-A-000278



LEGEND:

- STREAMS
- ROADS
- BUILDINGS
- EXISTING FENCE
- NEW FENCE
- OU4 BOUNDARY
- TEMPORARY BURIED UTILITIES
- EXISTING BURIED UTILITIES
- ABOVE-GROUND ELECTRIC LINES

NOTES:

1. TRAILERS PROVIDED FOR INDICATED BY NUMBER
   1 – PROJECT FIELD OFFICE
   2 – CONTRACTOR FIELD OFFICE
   3 – BREAK TRAILER
   4 – MOBILE LABORATORY
   5 – CHANGE TRAILER
   6 – SHOWER TRAILER
2. SANITARY SEWER LINE FROM SHOWER TRAILER TIED INTO EXISTING BURIED 12" PVC SANITARY SEWER LINE.
3. DOMESTIC COLD WATER SUPPLY TO SHOWER TRAILER TIED INTO EXISTING BURIED 10" DOMESTIC COLD WATER LINE.
4. TELEPHONE AND ELECTRICAL LINES TO TRAILERS TIED INTO BUILDING 910 CONNECTIONS.

PRELIMINARY
NOT FOR CONSTRUCTION

ENGINEERING-SCIENCE, INC.

ISSUE	DESCRIPTION	DATE	RFP	DOE CLASS	JOB NO.
A	CONCEPTUAL DESIGN				989617

	BY	DATE
DESIGNED	PAN	2/23/94
DRAWN	MW	2/23/94
CHECKED	REL	2/23/94
APPROVED		
SUBMITTED		
APPROVED RFP		
APPROVED DOE		

TOLERANCES FRACT. ± ANGLE ± DEC. ± UNLESS NOTED OTHERWISE
REMOVE BURRS AND SHARP EDGES
NEXT ASSEMBLY
SCALE: 1"=100'
KEYWORDS
MASTER

U.S. DEPARTMENT OF ENERGY
ROCKY FLATS OFFICE GOLDEN, COLORADO

ROCKY FLATS PLANT
GOLDEN, COLORADO 80402

OU4 SOLAR EVAPORATION PONDS IM/IRA
SITE PLAN

SIZE	DRAWING NUMBER	ISSUE	SHEET
D	51045-110	A	1 OF 1

94DN0075, 2/25/94 at 16:50

COMPUTER GENERATED DRAWING NO MANUAL CHANGES ALLOWED

OU04-A-000278

INDEX OF DRAWINGS

SHEET NO.	DRAWING NO.	ISSUE	TITLE
1	51045-100	A	COVER SHEET
1	51045-101	A	INDEX OF DRAWINGS
1	51045-110	A	SITE PLAN
1	51045-111	A	LIMITS OF REMEDIATION
1	51045-112	A	FINAL SITE PLAN
1	51045-121	A	ENGINEERED COVER PLAN
1	51045-122	A	ENGINEERED COVER CROSS-SECTIONS
1	51045-123	A	ENGINEERED COVER SECTIONS AND DETAILS
1	51045-130	A	DRAINAGE PLAN AND DETAILS
1	51045-150	A	PROFILE OF PROPOSED FINAL ENGINEERED COVER, AND VADOSE ZONE MONITORING SYSTEMS AND MAXIMUM GROUNDWATER ELEVATIONS
1	51045-151	A	PLAN VIEW OF PROPOSED ENGINEERED COVER AND VADOSE ZONE MONITORING SYSTEMS
1	51045-152	A	POTENTIOMETRIC SURFACE AND GROUNDWATER FLOW VECTORS FOR ALLUVIUM/COLLUVIUM
1	51045-153	A	POTENTIOMETRIC SURFACE AND GROUNDWATER FLOW VECTORS FOR WEATHERED BEDROCK
1	51045-154	A	PROPOSED AND EXISTING POST-CLOSURE GROUNDWATER MONITORING SYSTEM
1	51045-430	A	UTILITIES REMOVAL SITE MAP
1	51045-431	A	UTILITIES REMOVAL DETAILS
1	51045-432	A	DEMOLITION PLAN
1	51045-440	A	UTILITIES LIST SHEET 1
2	51045-440	A	UTILITIES LIST SHEET 2

PRELIMINARY
NOT FOR CONSTRUCTION

ENGINEERING-SCIENCE, INC.

ISSUE	DESCRIPTION	DATE	RFP	DOE	CLASS	JOB NO.
A	CONCEPTUAL DESIGN					989617

KEYWORDS

MASTER

TOLERANCES: FRACT. ± ; ANGLE ± ; DEC. ± UNLESS NOTED OTHERWISE ; REMOVE BURRS AND SHARP EDGES ; NEXT ASSEMBLY

SCALE: NONE

	BY	DATE
DESIGNED	HAH	5/12/94
DRAWN	KEP	5/12/94
CHECKED	PAN	5/12/94
APPROVE D		
SUBMITTE D		
APPROVE RFP D		
APPROVE DOE D		

U.S. DEPARTMENT OF ENERGY
ROCKY FLATS OFFICE GOLDEN, COLORADO

ROCKY FLATS PLANT
GOLDEN, COLORADO 80402

OU4 SOLAR EVAPORATION PONDS IM/IRA
INDEX OF DRAWINGS

SIZE	DRAWING NUMBER	ISSUE	SHEET
D	51045-101	A	1 OF 1

94DN0180, 5/13/94 at 10:10

COMPUTER GENERATED DRAWING NO MANUAL CHANGES ALLOWED

OU04-A-000278