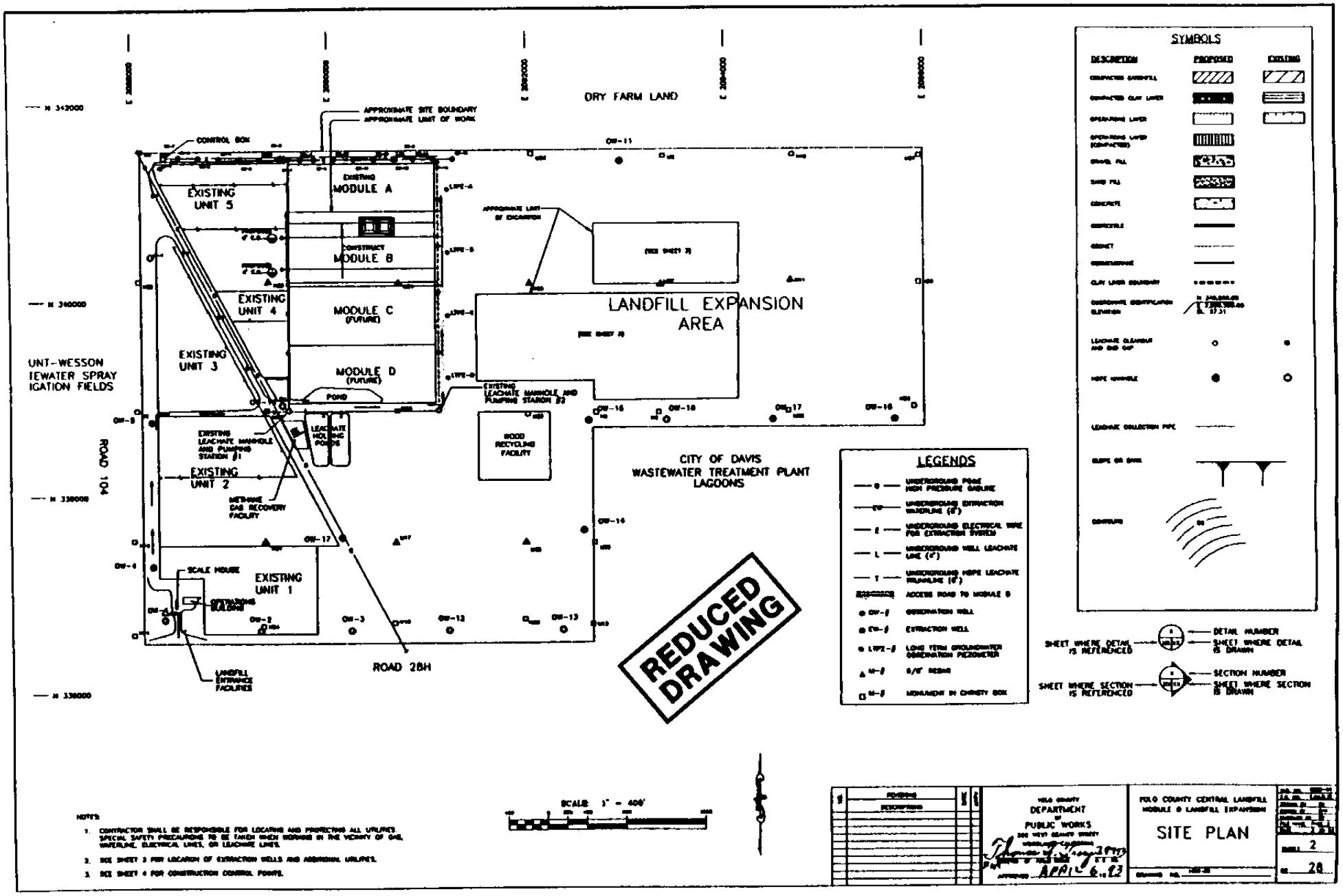
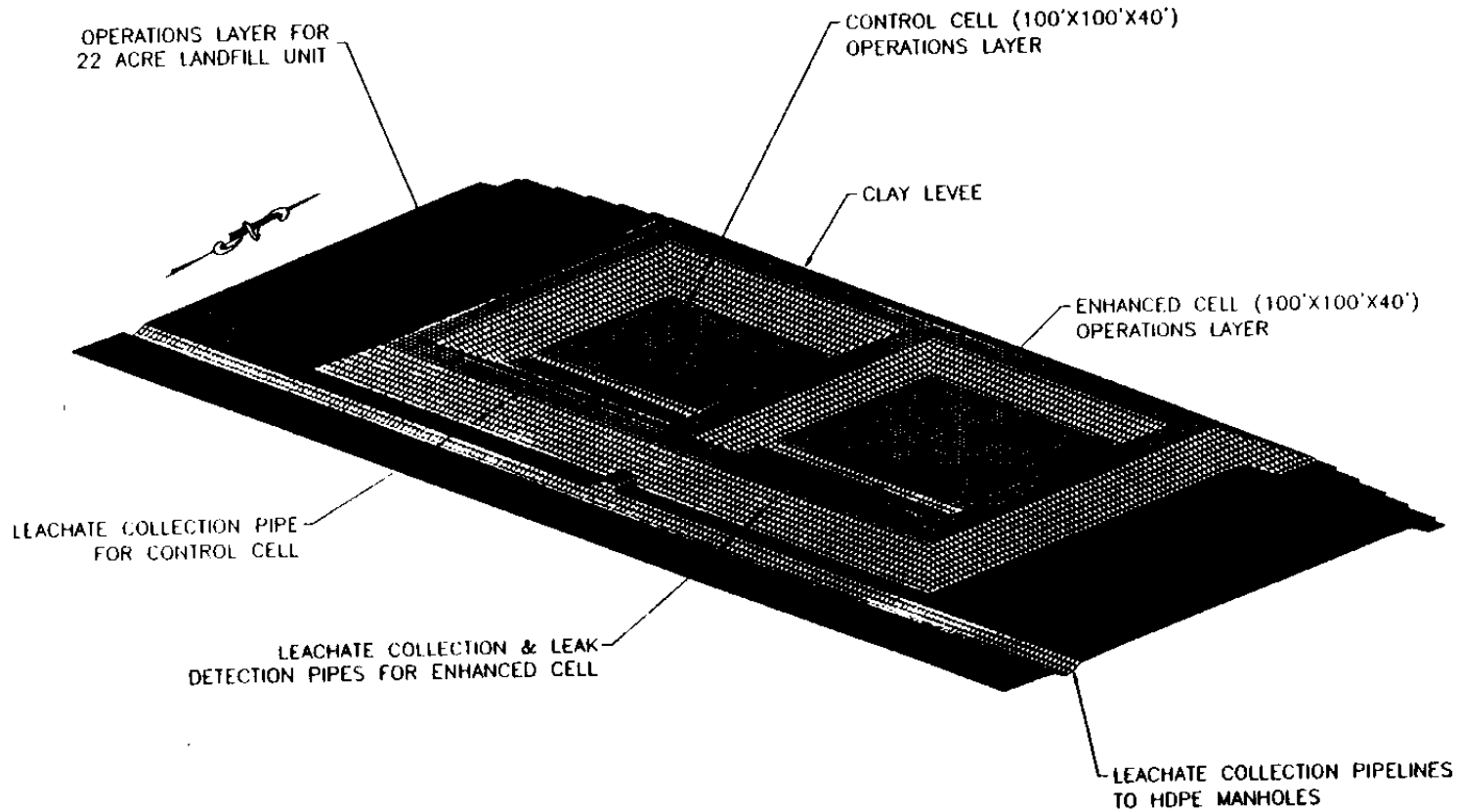
US EPA ARCHIVE DOCUMENT


DRY FARM LAND
APPROXIMATE SITE BOUNDARY
APPROXIMATE LIMIT OF WORK
CONTROL BOX
EXISTING UNIT 5
EXISTING MODULE A
CONSTRUCT MODULE B
EXISTING UNIT 4
MODULE C (FUTURE)
EXISTING UNIT 3
MODULE D (FUTURE)
POND
LANDFILL EXPANSION AREA
EXISTING LEACHATE MANHOLE AND PUMPING STATION #2
WOOD RECYCLING FACILITY
EXISTING LEACHATE MANHOLE AND PUMPING STATION #1
EXISTING UNIT 2
METHANE GAS RECOVERY FACILITY
SCALE HOUSE
EXISTING UNIT 1
LANDFILL ENTRANCE FACILITIES
ROAD 104
ROAD 28H
UNT-WESSON TEWATER SPRAY IGATION FIELDS
CITY OF DAVIS WASTEWATER TREATMENT PLANT LAGOONS
REDUCED DRAWING
SYMBOLS
DESCRIPTION
PROPOSED
EXISTING
LEGENDS
UNDERGROUND PONE HIGH PRESSURE GASLINE
UNDERGROUND EXTRACTION WATERLINE (8")
UNDERGROUND ELECTRICAL WIRE FOR EXTRACTION SYSTEM
UNDERGROUND WELL LEACHATE LINE (4")
UNDERGROUND HDPE LEACHATE PRIMPLINE (8")
ACCESS ROAD TO MODULE B
OBSERVATION WELL
EXTRACTION WELL
LONG TERM GROUNDWATER OBSERVATION PIEZOMETER
5/8" REBAR
MONUMENT IN CHIMNEY BOX
DETAIL NUMBER
SHEET WHERE DETAIL IS DRAWN
SHEET WHERE DETAIL IS REFERENCED
SECTION NUMBER
SHEET WHERE SECTION IS DRAWN
SHEET WHERE SECTION IS REFERENCED
SCALE 1" = 400'
NOTES
1. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING ALL UTILITIES. SPECIAL SAFETY PRECAUTIONS TO BE TAKEN WHEN WORKING IN THE VICINITY OF GAS, WATERLINE, ELECTRICAL LINES, OR LEACHATE LINES.
2. SEE SHEET 3 FOR LOCATION OF EXTRACTION WELLS AND ADDITIONAL UTILITIES.
3. SEE SHEET 4 FOR CONSTRUCTION CONTROL POINTS.
REVISIONS
DEPARTMENT OF PUBLIC WORKS
APPROVED APRIL 6, 1993
YOLO COUNTY CENTRAL LANDFILL
MODULE B LANDFILL EXPANSION
SITE PLAN
SHEET 2
NO. 28

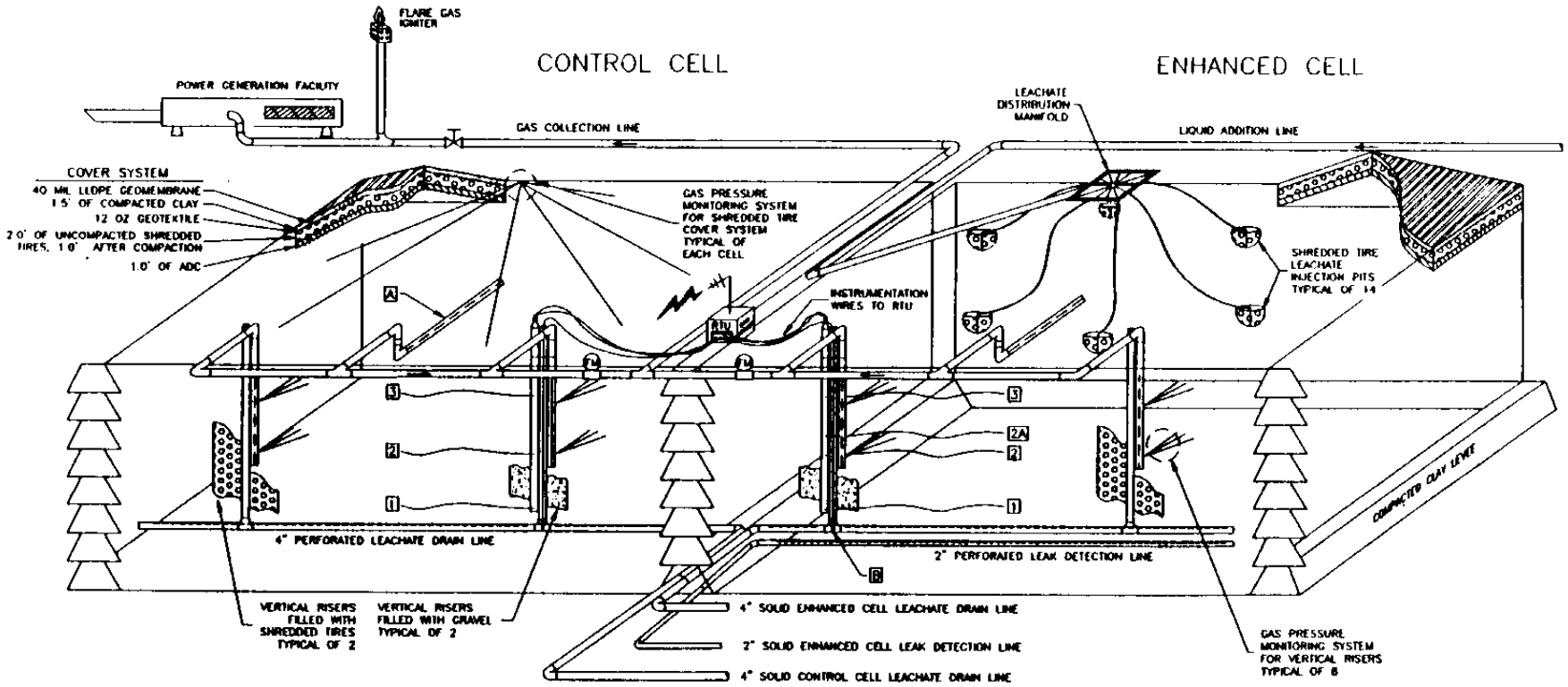
DRAWING II-1



PROJECT CELLS - BASE PRIOR TO WASTE PLACEMENT

DRAWING II-2

METHANE ENHANCEMENT BY ACCELERATED ANAEROBIC COMPOSTING DEMONSTRATION PROJECT AT THE YOLO COUNTY CENTRAL LANDFILL



FEATURE KEY

- 1 LEVEL 1 INSTRUMENTATION (MOISTURE AND TEMPERATURE)
- 2 LEVEL 2 INSTRUMENTATION (MOISTURE AND TEMPERATURE)
- 2A LEVEL 2A INSTRUMENTATION (MOISTURE ONLY)
- 3 LEVEL 3 INSTRUMENTATION (MOISTURE AND TEMPERATURE)
- A PERFORATED 4" PVC HORIZONTAL GAS EXTRACTION LINE TYPICAL OF 2
- B PRESSURE TRANSDUCER FOR LIQUID LEVEL MEASUREMENT, TYPICAL OF 2

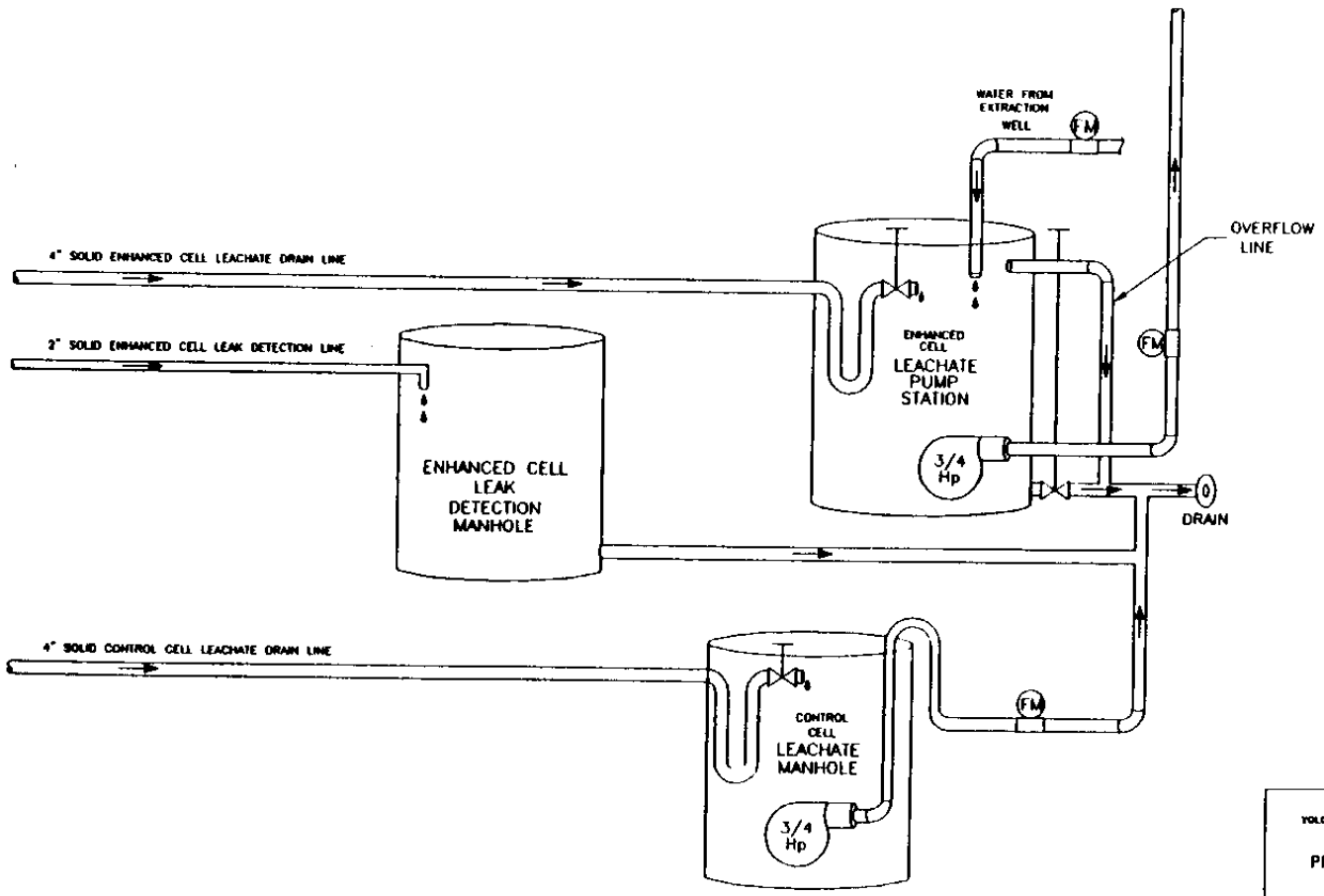
YOLO COUNTY CENTRAL LANDFILL
CEC PROJECT

PRINCIPAL SYSTEM COMPONENTS

CUTAWAY VIEW
LOOKING NORTH

DRAWING II-3A

CEC METHANE ENHANCEMENT PROJECT
LIQUID RETENTION AND LEAK DETECTION MANHOLES



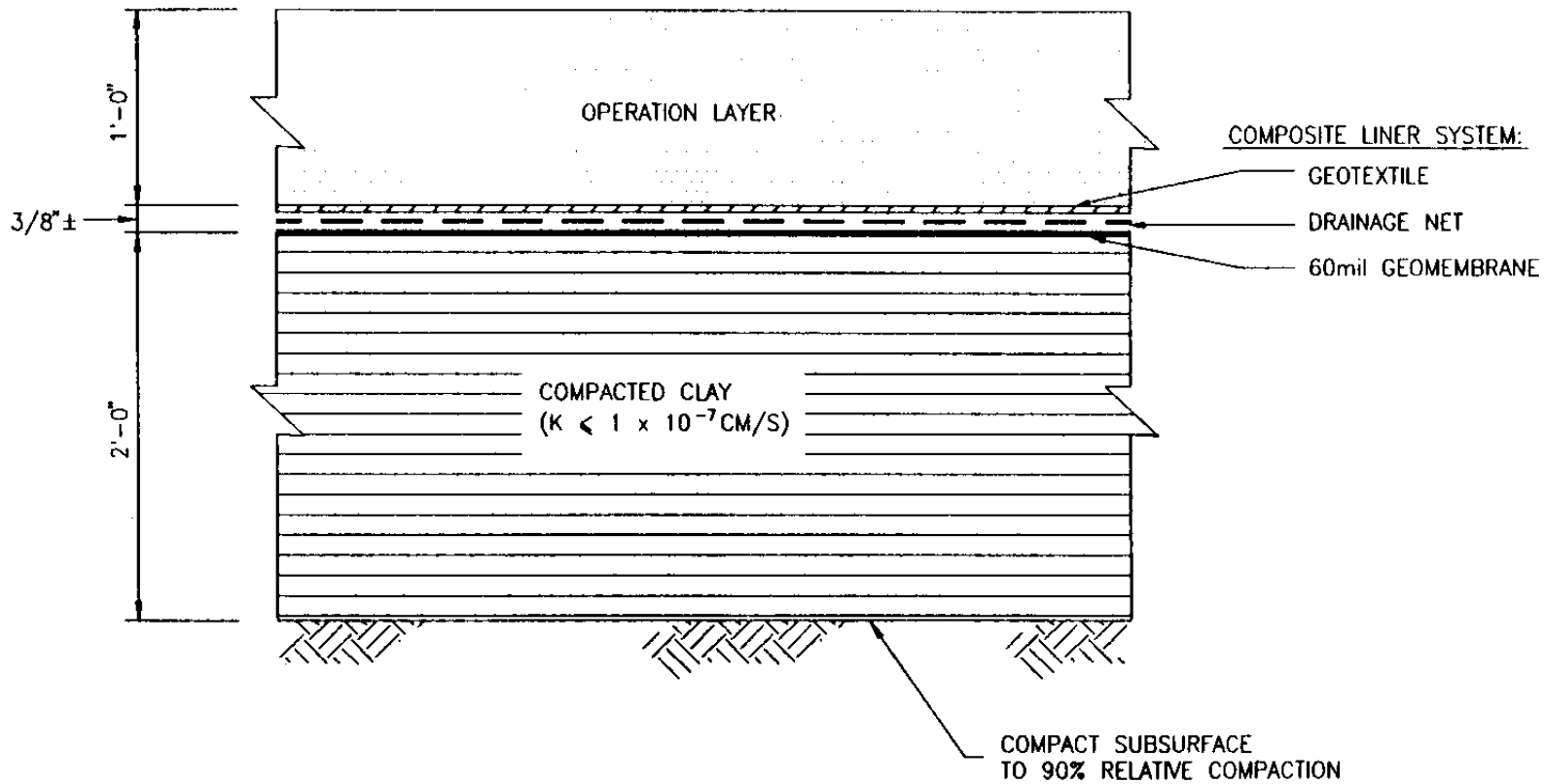
YOLO COUNTY CENTRAL LANDFILL
CEC PROJECT

PRINCIPAL SYSTEM COMPONENTS

CUTAWAY VIEW
LOOKING NORTH

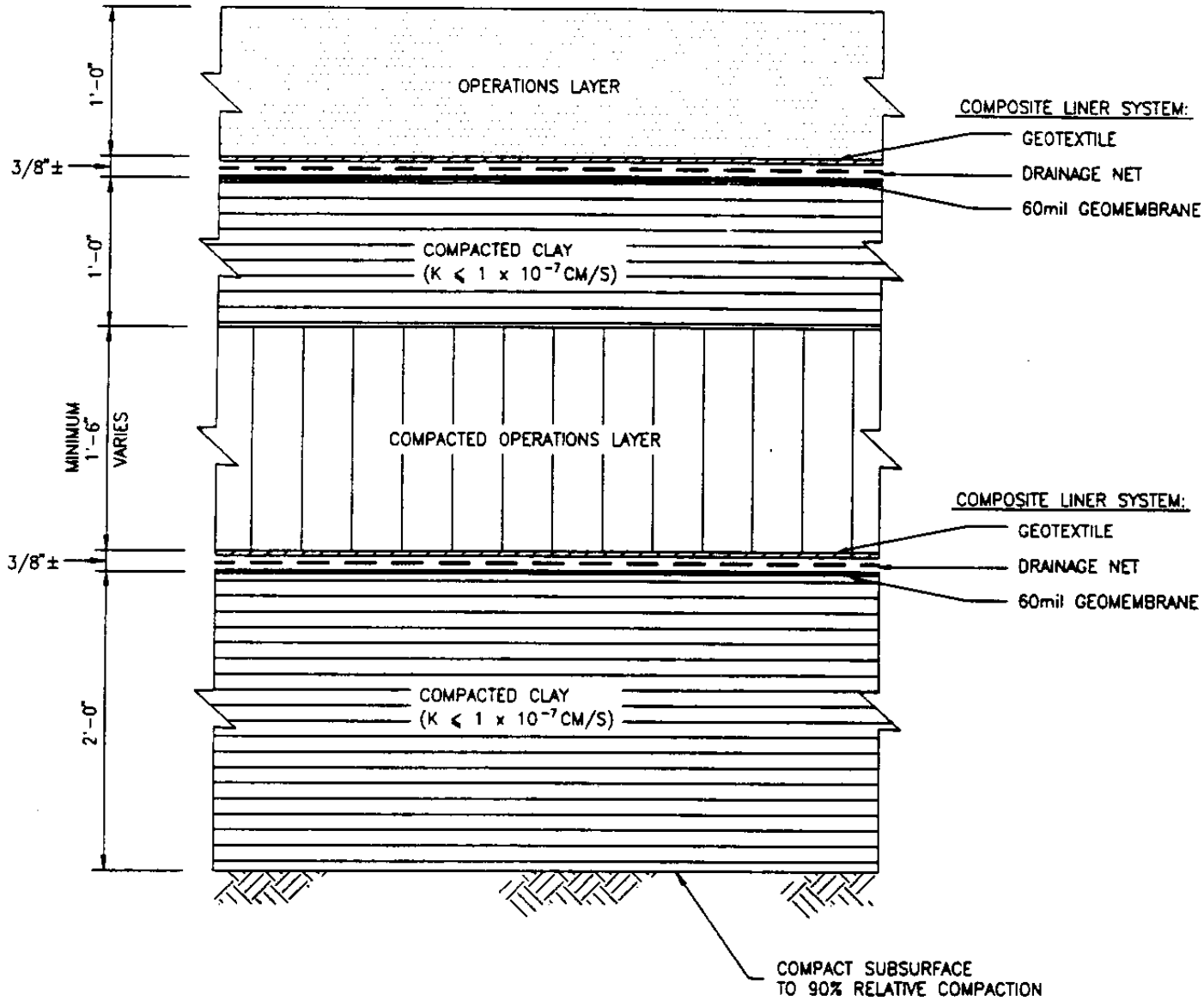
FILE NAME ORTHO 2B
DATE 2/13/97

DRAWING II-3B



MODULE B AND CEC CONTROL CELL COMPOSITE LINER SYSTEM DETAIL

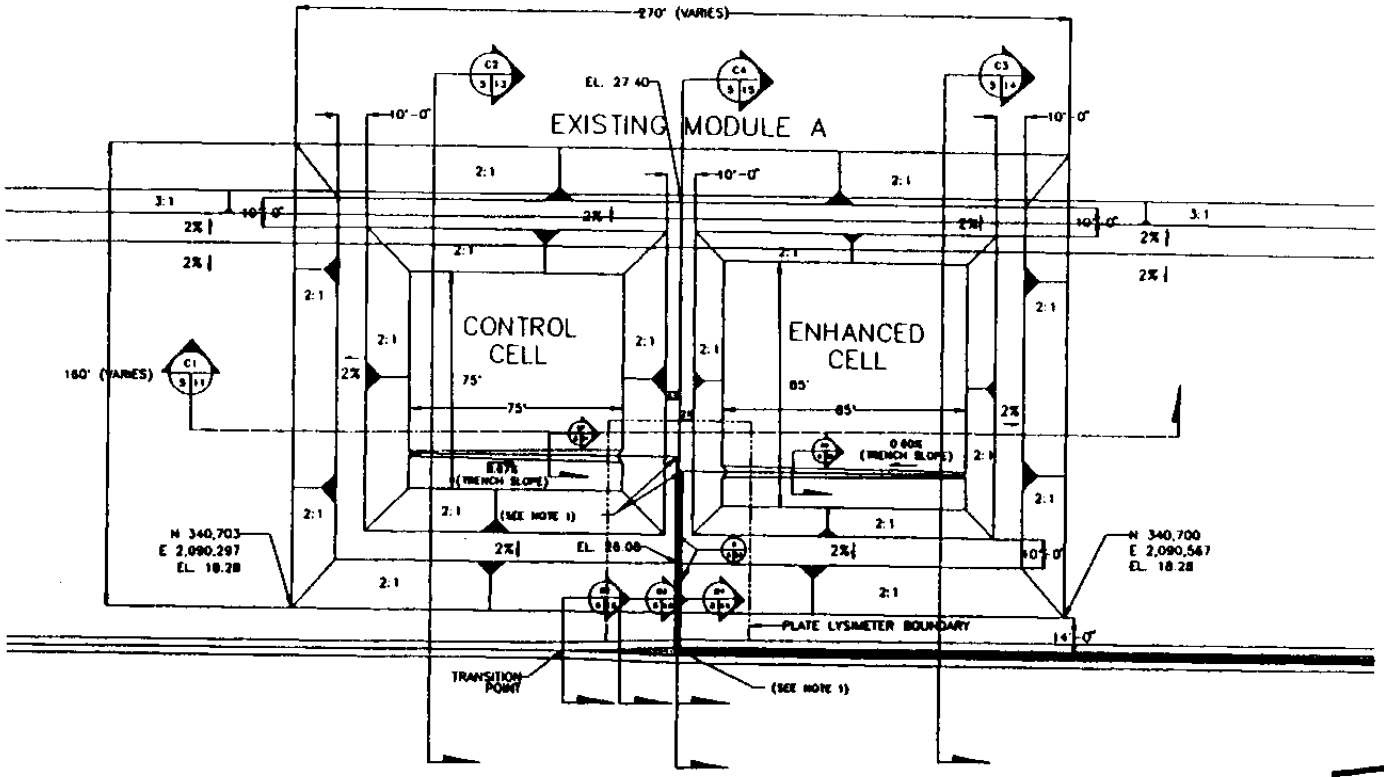
DRAWING II-4



CEC ENHANCED CELL
COMPOSITE LINER SYSTEM DETAIL

SCALE: 1" = 1'-0"

DRAWING II-5



REDUCED DRAWING

CEC CONTROL AND ENHANCED CELL GRADING PLAN

SCALE: 1" = 20'-0"

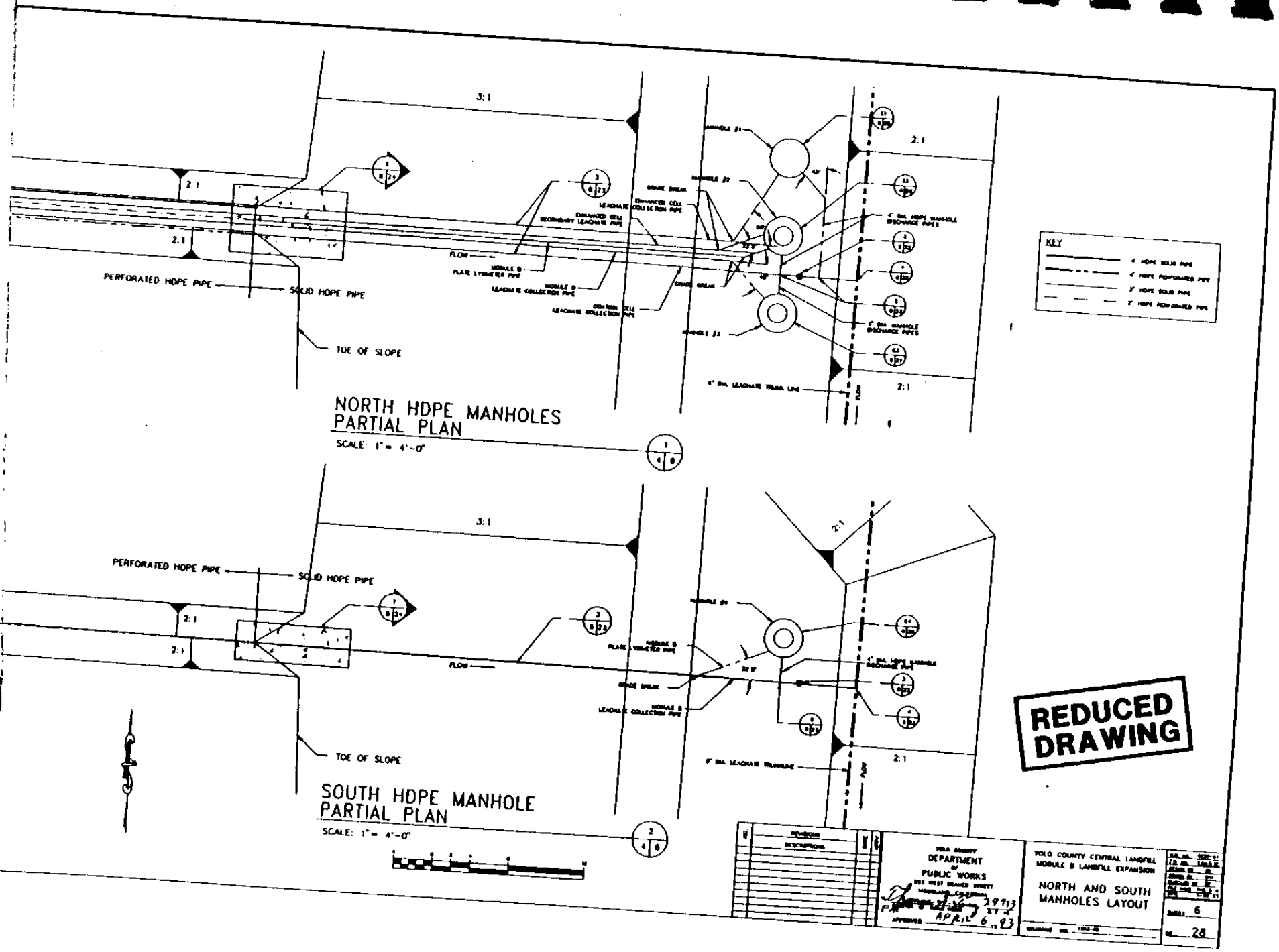
NOTES:

1. ALL PIPE [illegible] SHALL BE "[illegible]" [illegible]
2. GRADED SHOWN AND FINAL GRADED ON TOP OF OPERATIONS LAYER AND COMPACTED FILL (SEE SHEETS 8 THRU 12 FOR SECTIONS)

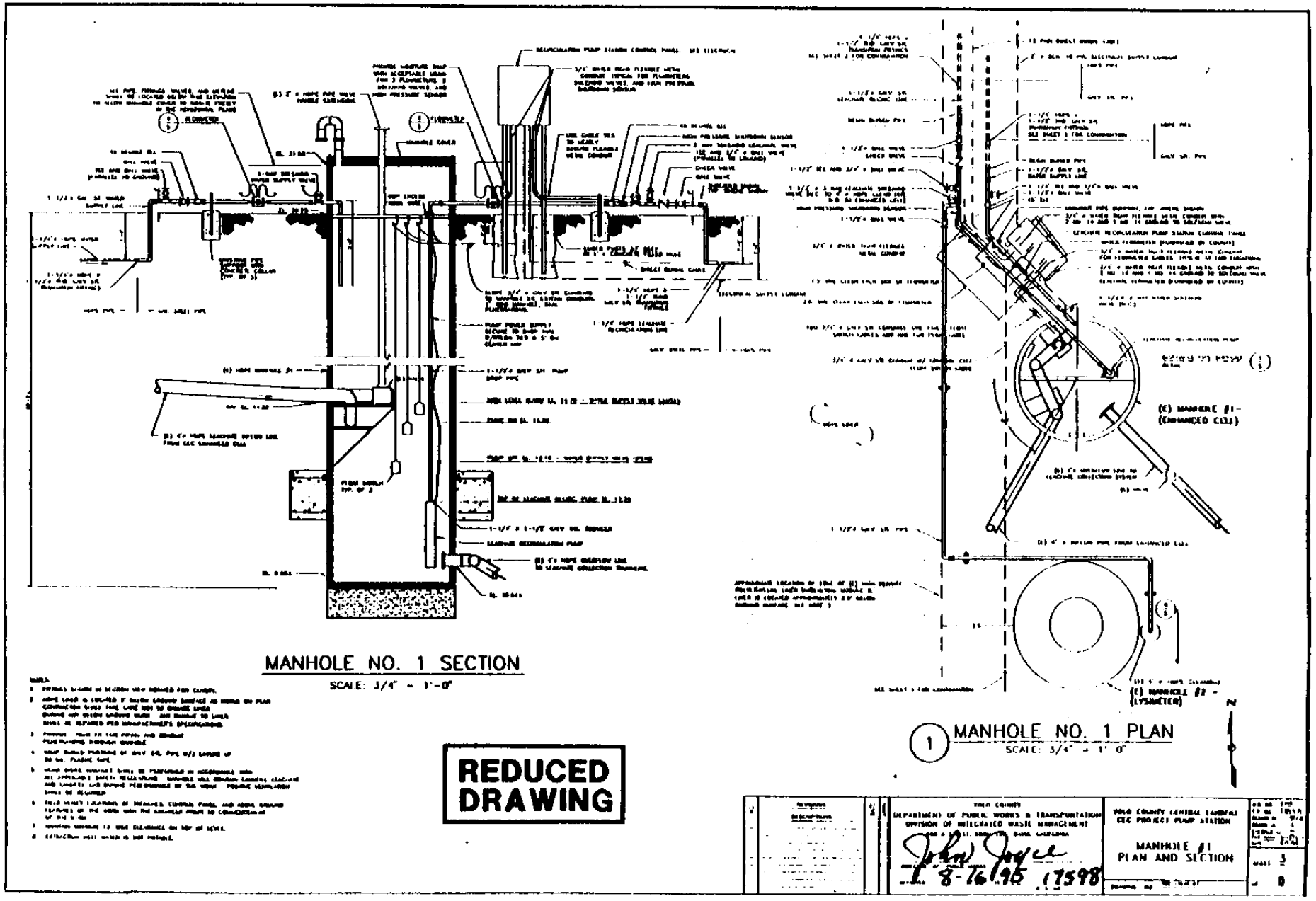
YOLO COUNTY DEPARTMENT OF PUBLIC WORKS 252 WEST BEAMER STREET WOODLAND, CALIFORNIA	YOLO COUNTY CENTRAL LANDFILL MODULE B LANDFILL EXPANSION CEC CONTROL AND ENHANCED CELL GRADING PLAN	SHEET 5 OF 28
APPROVED APRIL 6 1993		

DRAWING II-6

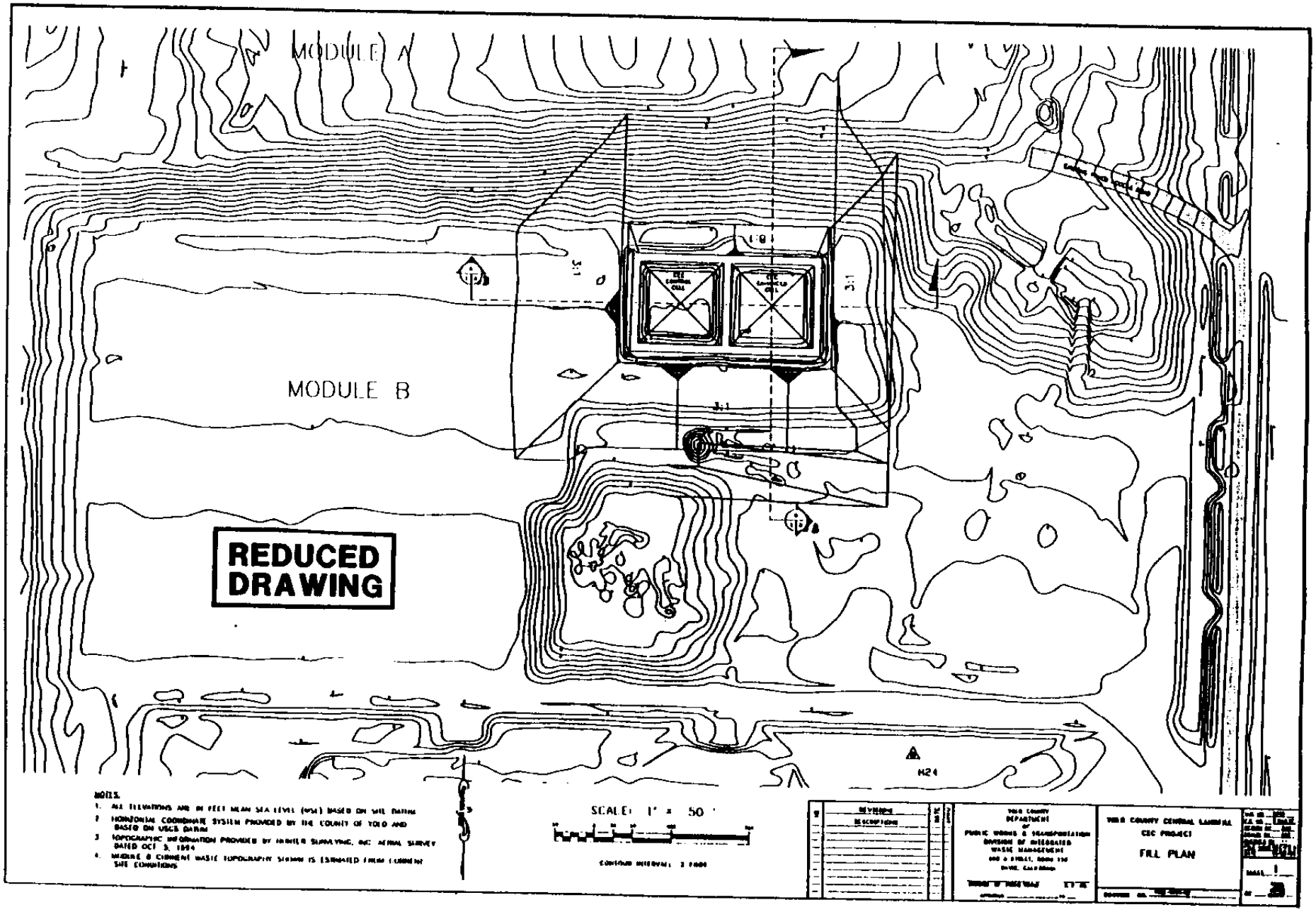
REDUCED DRAWING
TYPICAL CROSS-SECTION OF PLATE LYSIMETER AND LEACHATE COLLECTION TRENCH BEYOND 40 FT. EAST OF TRANSITION POINT
CROSS-SECTION OF PLATE LYSIMETER AND LEACHATE COLLECTION TRENCH AT 40 FT. EAST OF TRANSITION POINT
MODULE B PLATE LYSIMETER AND LEACHATE COLLECTION TRENCH CROSS-SECTIONS


3:1
2:1
PERFORATED HDPE PIPE
SOLID HDPE PIPE
TOE OF SLOPE
FLOW
GRADE BREAK
KEY
NORTH HDPE MANHOLES
PARTIAL PLAN
SCALE: 1" = 4'-0"
SOUTH HDPE MANHOLE
PARTIAL PLAN
SCALE: 1" = 4'-0"
REDUCED DRAWING
DEPARTMENT OF PUBLIC WORKS
YOLO COUNTY CENTRAL LANDFILL
MODULE B LANDFILL EXPANSION
NORTH AND SOUTH MANHOLES LAYOUT
APRIL 6, 1983
28

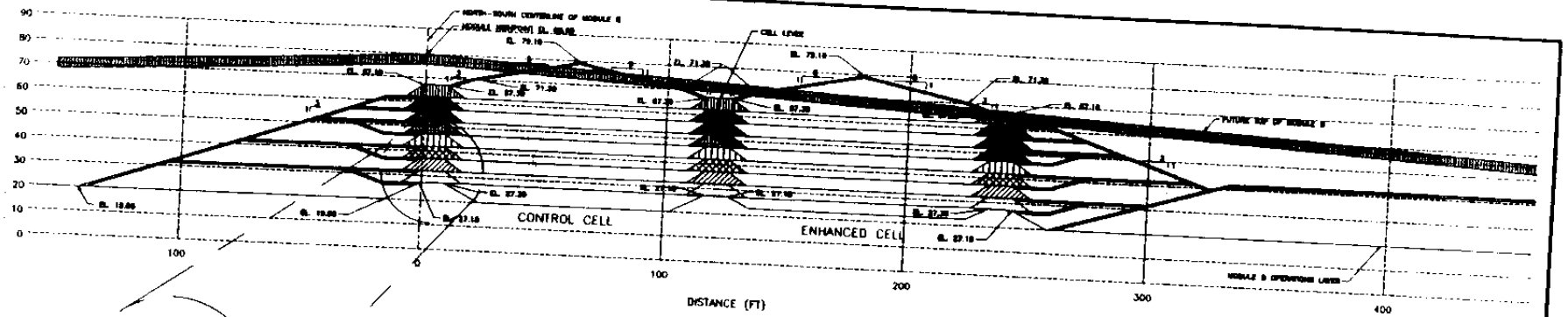
DRAWING II-8


MANHOLE NO. 1 SECTION
SCALE: 3/4" = 1'-0"
MANHOLE NO. 1 PLAN
SCALE: 3/4" = 1'-0"
(E) MANHOLE #1 - (ENHANCED CELL)
(E) MANHOLE #2 - (LYSIMETER)
REDUCED DRAWING
YOLO COUNTY
DEPARTMENT OF PUBLIC WORKS & TRANSPORTATION
DIVISION OF INTEGRATED WASTE MANAGEMENT
YOLO COUNTY CENTRAL LANDFILL
CEC PROJECT PUMP STATION
MANHOLE #1
PLAN AND SECTION
8-16-95
17598

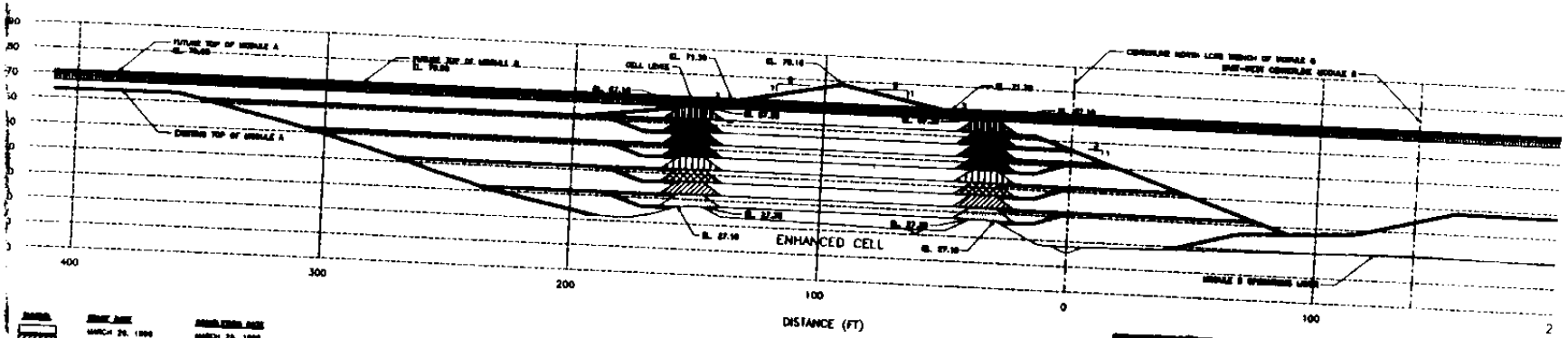
DRAWING II-9



DRAWING II-10



TYPICAL CROSS-SECTION
THROUGH CEC CELLS
SCALE: 1" = 20'



TYPICAL CROSS-SECTION
THROUGH ENHANCED CELL
SCALE: 1" = 20'

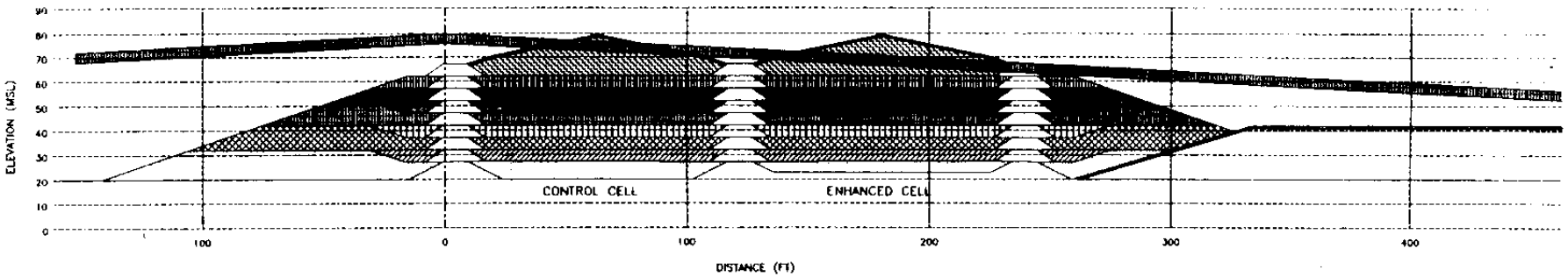
REDUCED DRAWING

YOLO COUNTY
DEPARTMENT OF PUBLIC WORKS

YOLO COUNTY CENTRAL LANDFILL

CROSS SECTIONS
LEVEE CONSTRUCTION
5 FOOT LIFTS

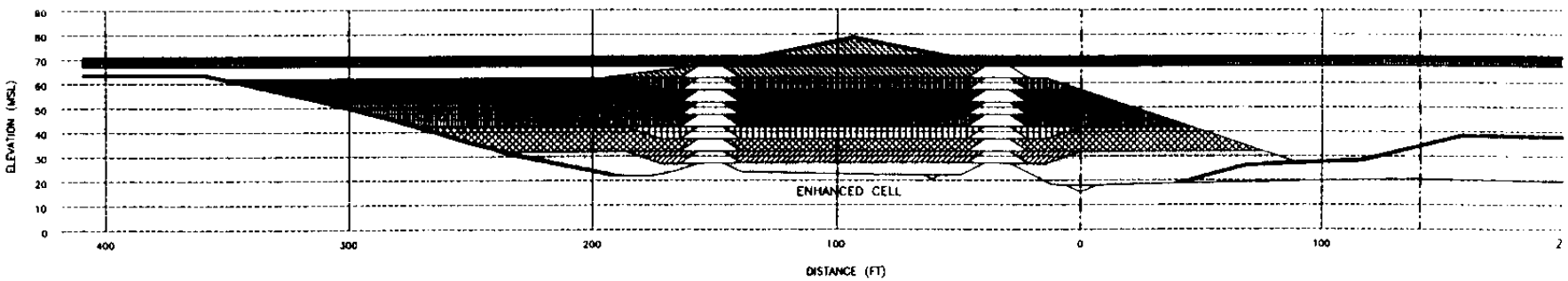
DRAWING II-11



TYPICAL CROSS-SECTION
THROUGH CEC CELLS

SCALE: 1" = 20'

A
1 | 2



TYPICAL CROSS-SECTION
THROUGH ENHANCED CELL

SCALE: 1" = 20'

B
1 | 2

LEGEND

PHASE	SYMBOL	[illegible]	[illegible]	[illegible]
PHASE 1		FEBRUARY 24, 1996	APRIL 14, 1996	32
PHASE 2		APRIL 26, 1996	MAY 3, 1996	7
PHASE 3		MAY 4, 1996	JUNE 1, 1996	26
PHASE 4		JUNE 8, 1996	JUNE 15, 1996	7
PHASE 5		JUNE 2, 1996	JULY 12, 1995	37
PHASE 6		JULY 18, 1996	JULY 26, 1995	7
PHASE 7		JULY 13, 1996	AUGUST 16, 1996	26
PHASE 8		AUGUST 23, 1996	AUGUST 30, 1995	7
PHASE 9		SEPTEMBER 6, 1996	SEPTEMBER 15, 1996	9

NOTES

1. THE TOP OF MODULE B IS SHOWN WITH 4 FT. OF FINAL COVER
2. THE TOP OF MODULE B IS ASSUMED TO NOT EXCEED 80 FT MSL
3. PHASES OF LEVEE CONSTRUCTION ARE TO TAKE PLACE DURING BREAKS IN WASTE LIFT FILLING.
4. NO SOIL COVER WILL BE PLACED OVER WASTE LIFTS WITHIN THE CEC CELLS

20 0 10 20 40 80

REDUCED DRAWING

NO.	REVISIONS DESCRIPTIONS	DATE	APPV

YOLO COUNTY
DEPARTMENT
OF
PUBLIC WORKS
[illegible]
WOODLAND, CALIFORNIA

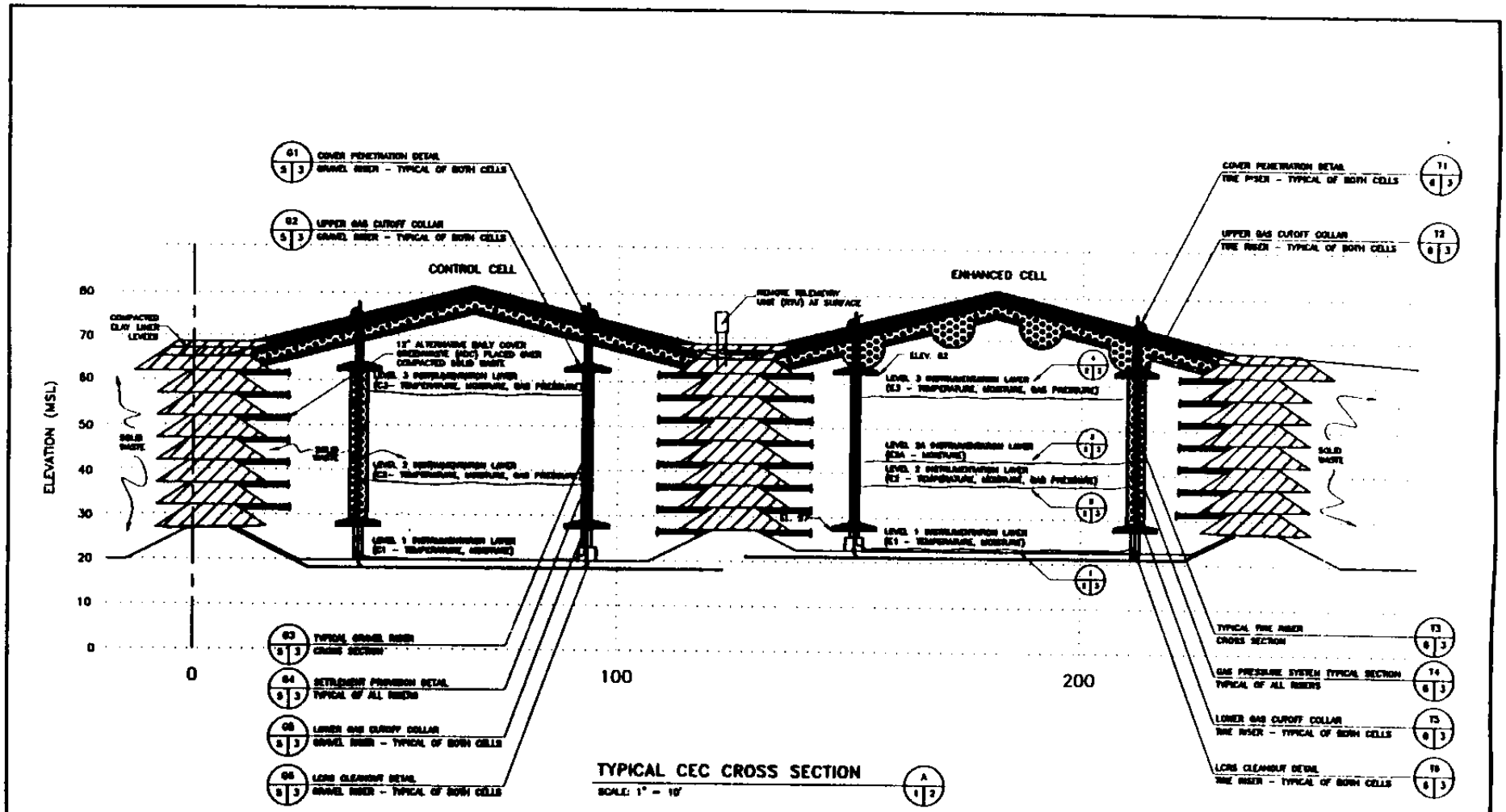
APPROVED _____ 19__

YOLO COUNTY CENTRAL LANDFILL
CEC PROJECT

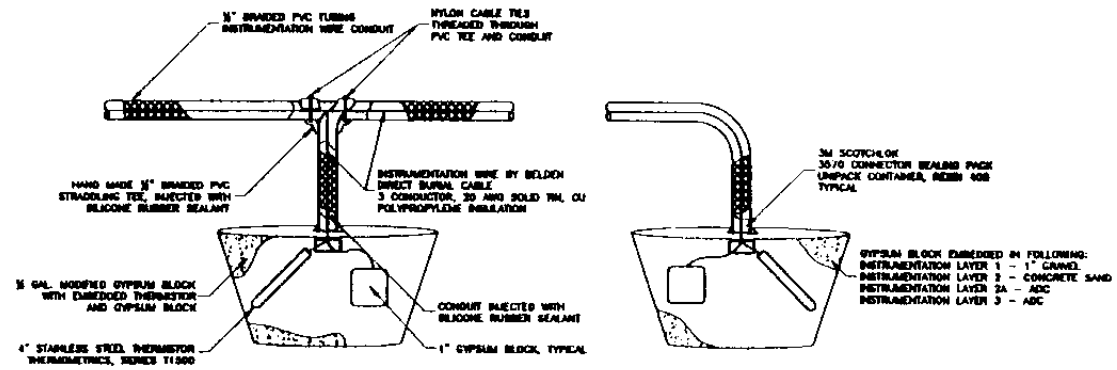
CROSS SECTIONS
FILLING SEQUENCE
5 FOOT LIFTS

DRAWING NO. [illegible]

SHEET 3
OF 3

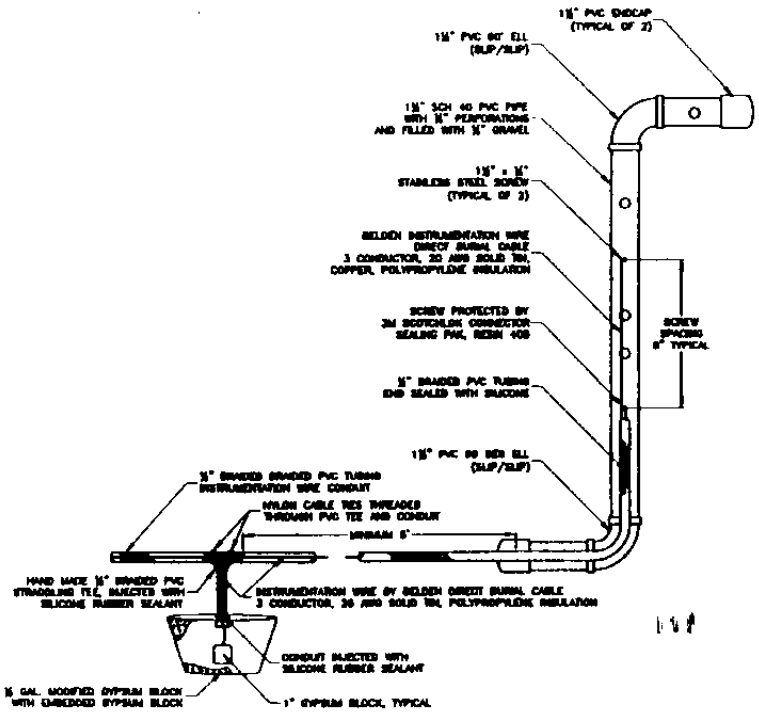


DRAWING II-13



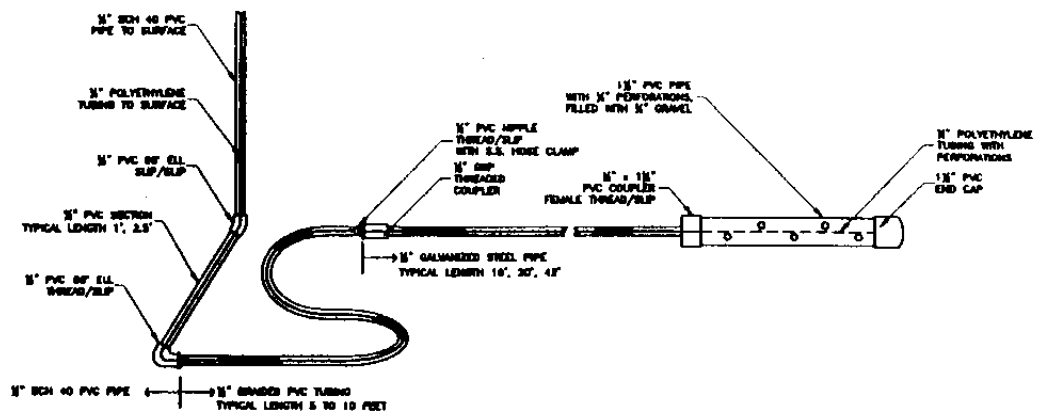
GYPSUM MOISTURE/
TEMPERATURE SENSOR (M/TE) (5/4/7)

NOT TO SCALE



GYPSUM MOISTURE/
PVC MOISTURE SENSOR (M/PVC) (6/4/7)

NOT TO SCALE



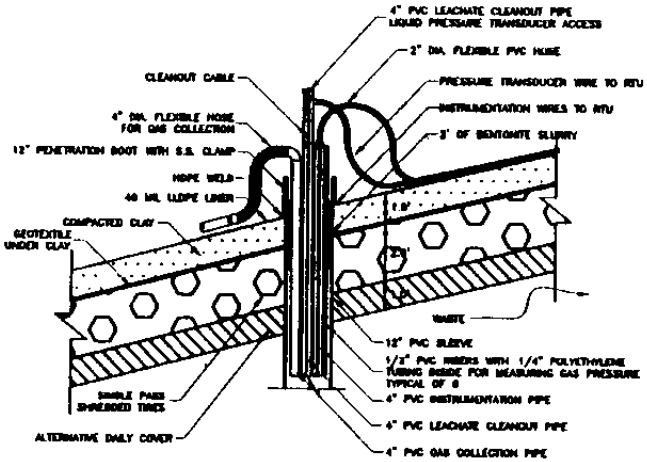
GAS PRESSURE SENSOR (7/4/7)

NOT TO SCALE

REDUCED DRAWING

	YOLO COUNTY DEPARTMENT OF PUBLIC WORKS & TRANSPORTATION DIVISION OF INTEGRATED WASTE MANAGEMENT	YOLO COUNTY CENTRAL LANDFILL CEC PROJECT MONITORING SYSTEM FOR WASTE MASS DETAILS	SHEET 7 / 7

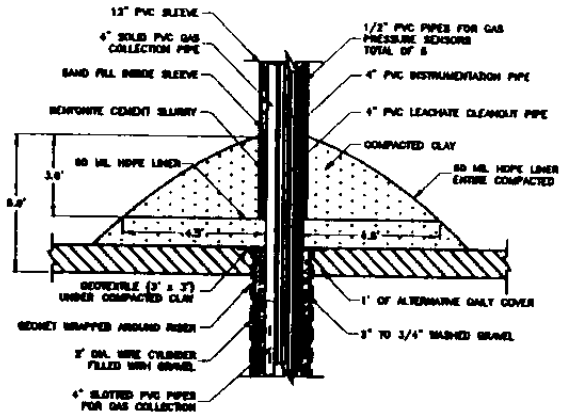
DRAWING II-14



COVER PENETRATION DETAIL

NOT TO SCALE

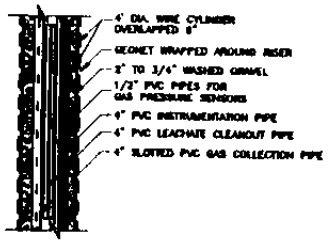
G1 | 3 | 5



UPPER GAS CUTOFF COLLAR

NOT TO SCALE

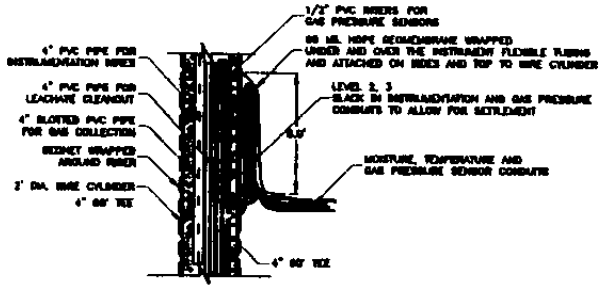
G2 | 3 | 5



TYPICAL GRAVEL RISER CROSS SECTION

NOT TO SCALE

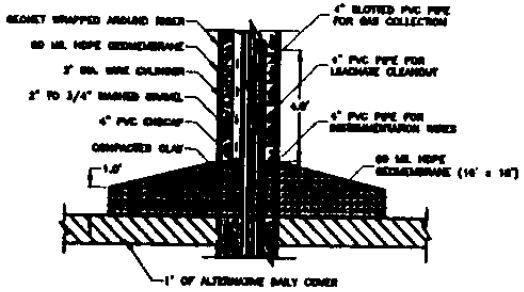
G3 | 3 | 5



SETTLEMENT PROVISION DETAIL

NOT TO SCALE

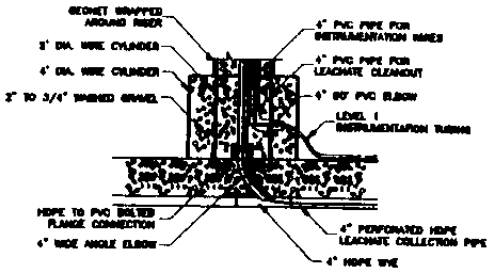
G4 | 3 | 5



LOWER GAS CUTOFF COLLAR

NOT TO SCALE

G5 | 3 | 5



LCRS CLEANOUT DETAIL

NOT TO SCALE

G6 | 3 | 5

REDUCED DRAWING

#	REVISIONS	DATE	BY

YOLO COUNTY
DEPARTMENT OF PUBLIC WORKS & TRANSPORTATION
DIVISION OF INTEGRATED WASTE MANAGEMENT
600 A STREET, WOODLAND, CALIFORNIA

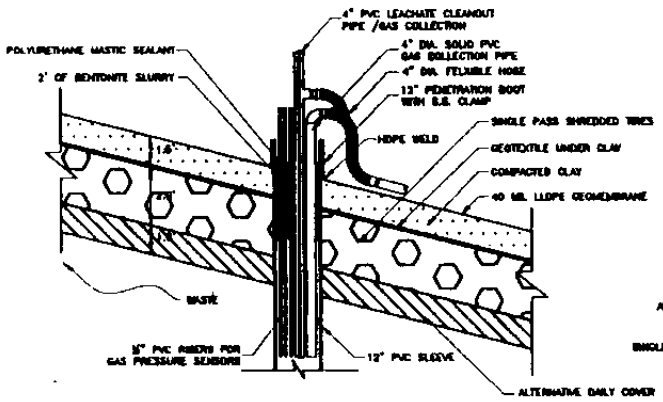
YOLO COUNTY CENTRAL LANDFILL
CELL 2

MONITORING SYSTEM FOR WASTE MASS

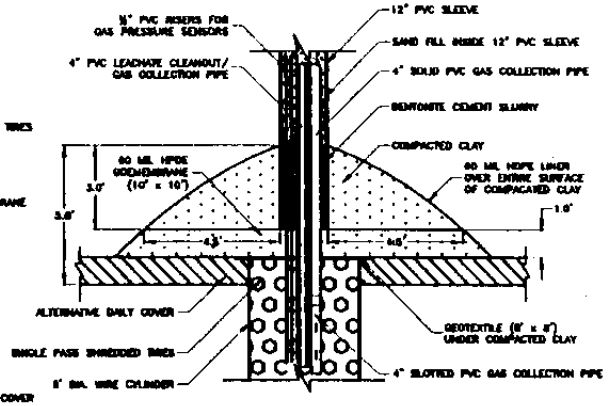
GRAVEL RISER DETAILS

SHEET 5 OF 7

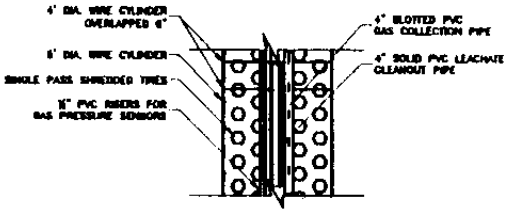
DRAWING II-15



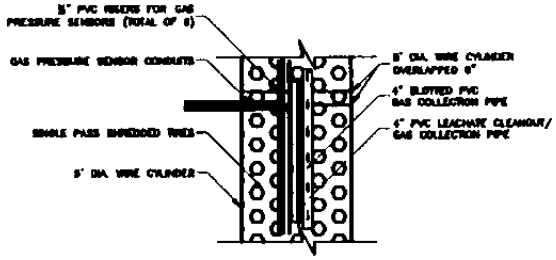
COVER PENETRATION DETAIL (T1 / 3|6)
NOT TO SCALE



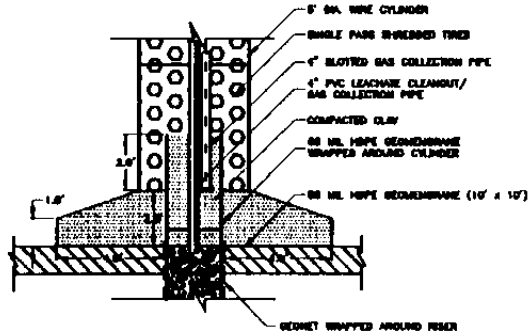
UPPER GAS CUTOFF COLLAR (T2 / 3|6)
NOT TO SCALE



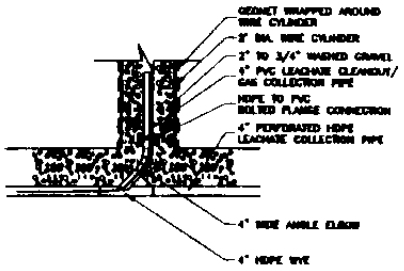
TYPICAL TIRE RISER CROSS SECTION (T3 / 3|6)
NOT TO SCALE



GAS PRESSURE SYSTEM TYPICAL SECTION (T4 / 3|6)
NOT TO SCALE



LOWER GAS CUTOFF COLLAR (T5 / 3|6)
NOT TO SCALE



LCRS CLEANOUT DETAIL (T6 / 3|6)
NOT TO SCALE

REDUCED DRAWING

REVISIONS			
	DESCRIPTION	DATE	BY

YOLO COUNTY
DEPARTMENT OF PUBLIC WORKS & TRANSPORTATION
DIVISION OF INTEGRATED WASTE MANAGEMENT
292 A STREET, SUITE 100 DAVIS, CALIFORNIA

DIRECTOR OF PUBLIC WORKS
APPROVED: _____ R. E. No.

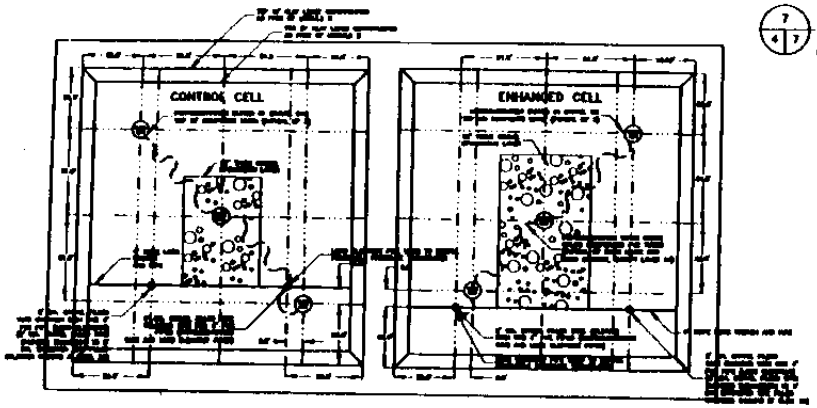
YOLO COUNTY CENTRAL LANDFILL
CELL

MONITORING SYSTEM FOR WASTE MASS

TIRE RISER DETAILS

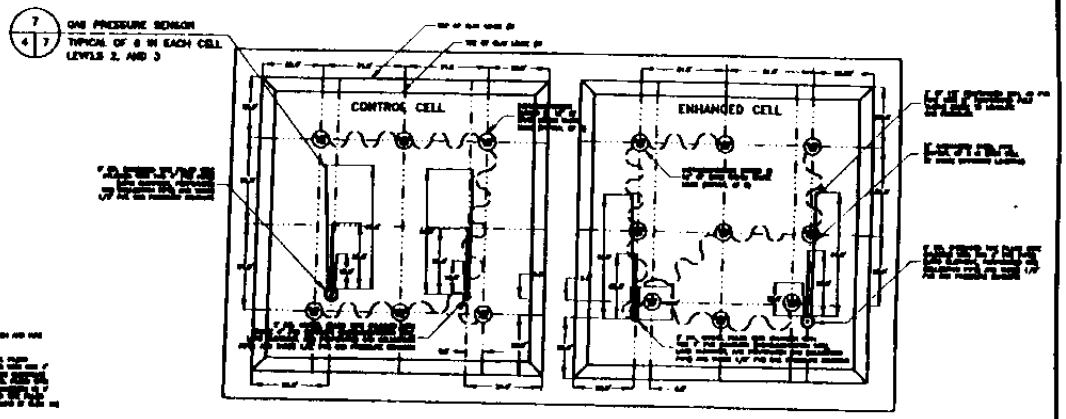
SHEET 6
No. 7

DRAWING II-16



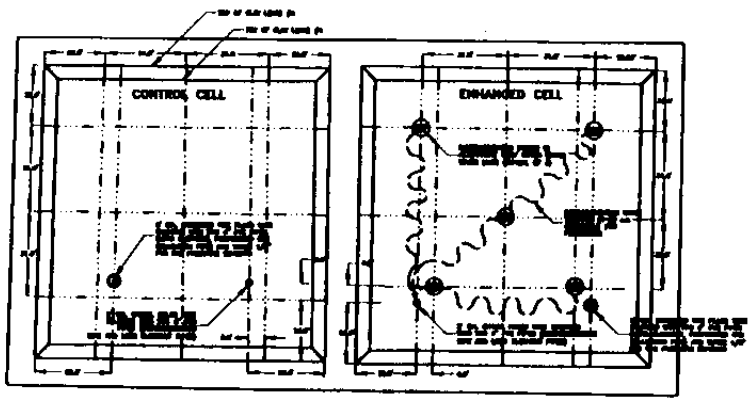
LEVEL 1 INSTRUMENTATION LAYER (C1, E1) 1/3|4

SCALE: 1" = 20'



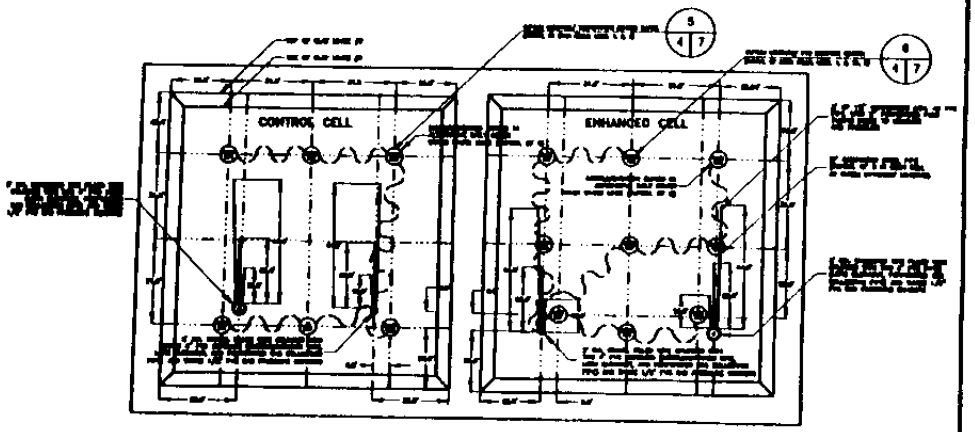
LEVEL 2 INSTRUMENTATION LAYER (C2, E2) 2/3|4

SCALE: 1" = 20'



LEVEL 2A INSTRUMENTATION LAYER (C2A, E2A) 3/3|4

SCALE: 1" = 20'



LEVEL 3 INSTRUMENTATION LAYER (C3, E3) 4/3|4

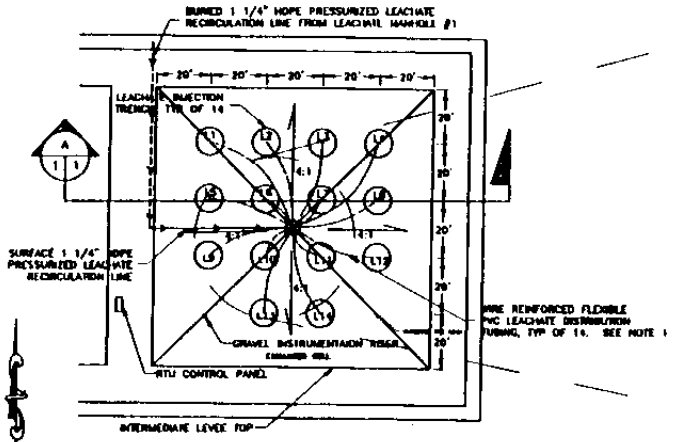
SCALE: 1" = 20'

REDUCED DRAWING

1. LAYOUT DIMENSIONS SHOWN ARE ACCURATE TO ±1.0'.
2. ALLOW 1000 GAUGES AND WIRE LENGTH ALLOWANCE AT LEVEL 1, AND 1000 GAUGES AND WIRE LENGTH ALLOWANCE AT LEVELS 2 AND 3, TO ALLOW FOR WASTE SUBSIDENCE.

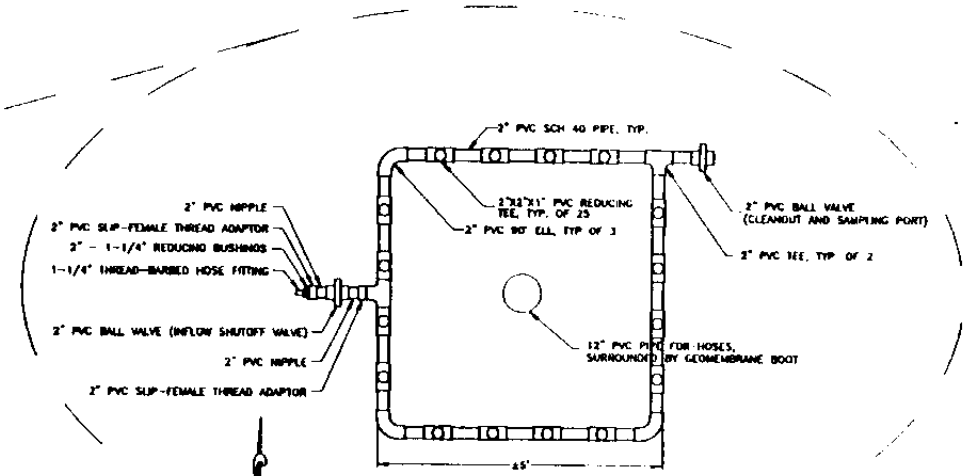
REVISIONS / DESCRIPTIONS	YOLO COUNTY DEPARTMENT OF PUBLIC WORKS & TRANSPORTATION DIVISION OF INTEGRATED WASTE MANAGEMENT 500 A STREET, ROOM 100 DAVIS, CALIFORNIA
YOLO COUNTY CENTRAL LANDFILL CEQ PROJECT	MONITORING SYSTEM FOR WASTE MASS INSTRUMENTATION LAYOUT
SHEET 4	7

DRAWING II-17



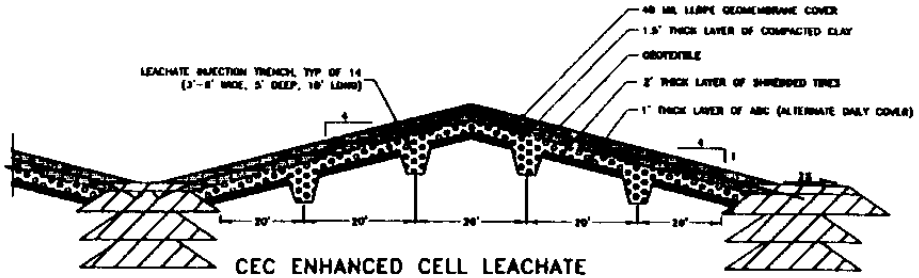
CEC ENHANCED CELL INJECTION TRENCH LOCATION PLAN

SCALE: 1" = 20'



LEACHATE DISTRIBUTION MANIFOLD DETAIL

NOT TO SCALE



CEC ENHANCED CELL LEACHATE INJECTION TRENCH CROSS SECTION

SCALE 1" = 10'

REDUCED COPY

NOTES:

1. LEACHATE DISTRIBUTION TUBING SHALL BE PLACED IN A "SNAKE LINE" MANNER SUCH THAT THERE IS 13' OF TUBING FOR EVERY 10' OF DISTANCE.

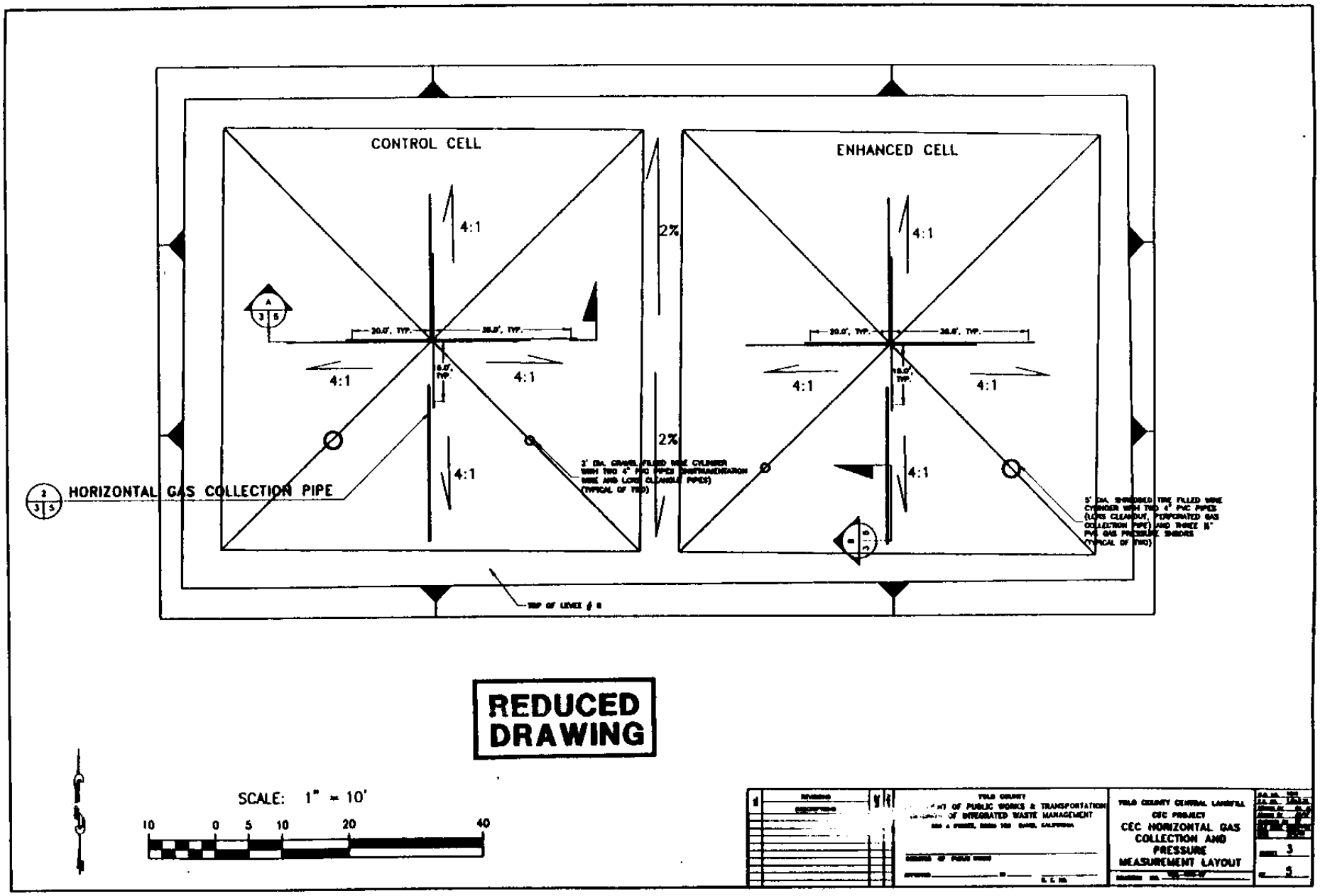
REVISIONS		
DESCRIPTIONS		

YOLO COUNTY DEPARTMENT OF PUBLIC WORKS & TRANSPORTATION DIVISION OF INTEGRATED WASTE MANAGEMENT 292 A STREET, SUITE 100 DAVIS, CALIFORNIA

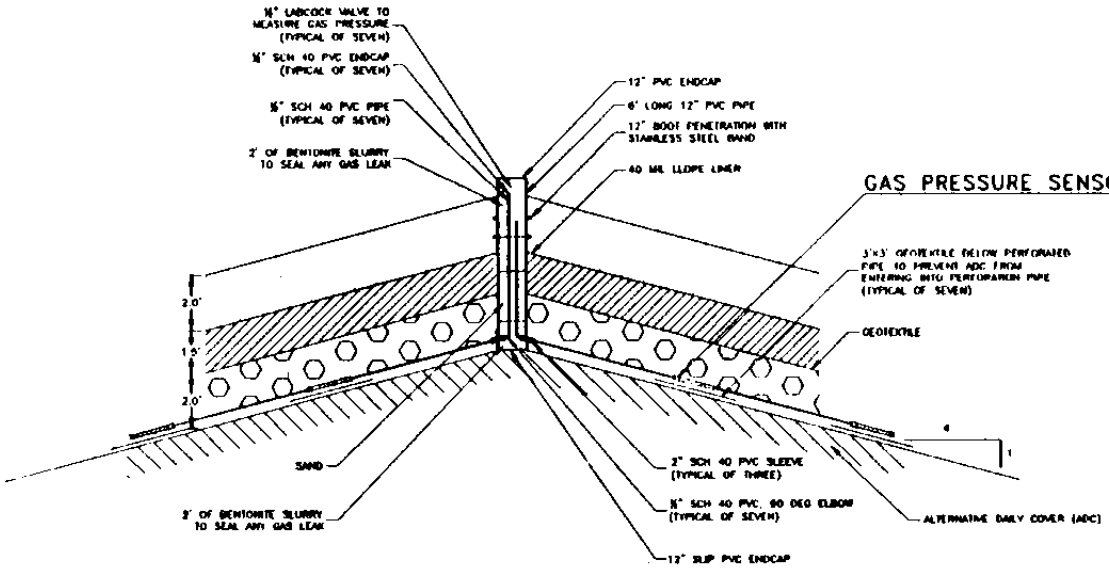
YOLO COUNTY CENTRAL LANDFILL
CEC PROJECT

CEC ENHANCED CELL LEACHATE INJECTION SYSTEM

SHEET 1

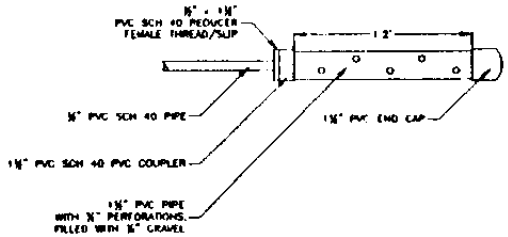


DRAWING II-19



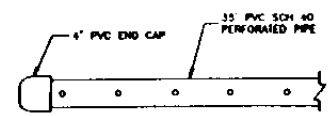
CEC CONTROL AND ENHANCED CELL HORIZONTAL GAS PRESSURE MEASUREMENT CROSS SECTION

SCALE: 1" = 2'



GAS PRESSURE SENSOR

NOT TO SCALE



HORIZONTAL GAS COLLECTION PIPE

NOT TO SCALE

LEGEND

- COMPACTED CLAY
- ALTERNATE DAILY COVER (ADC) CHIPPED GREEN WASTE
- SHREDDED SCRAP TIRES
- SOIL COVER
- BENTONITE

REDUCED DRAWING

WARNING: THE ORIGINAL DOCUMENTS CONTAIN A RED COLORED PROFESSIONAL SEAL AND BLACK SIGNATURE

NO.	REVISIONS DESCRIPTIONS	DATE	APPR.

YOLO COUNTY
DEPARTMENT OF PUBLIC WORKS & TRANSPORTATION
DIVISION OF INTEGRATED WASTE MANAGEMENT
600 A STREET, ROOM 150 DAVIS, CALIFORNIA

DIRECTOR OF PUBLIC WORKS

APPROVED _____ 19__ P.E. NO.

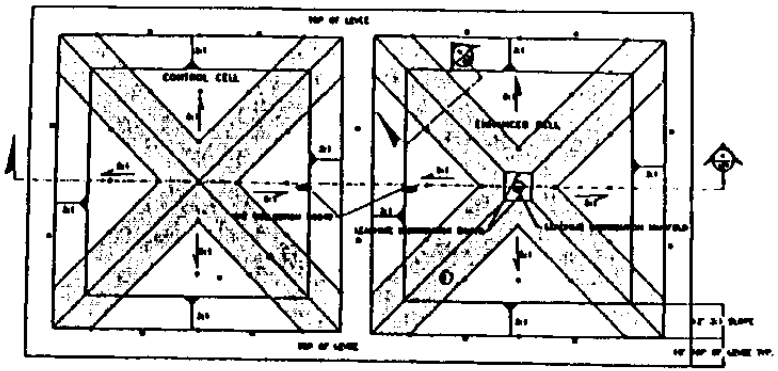
YOLO COUNTY CENTRAL LANDFILL
BASE MAP

GAS SYSTEM DETAILS

DRAWING NO. _____

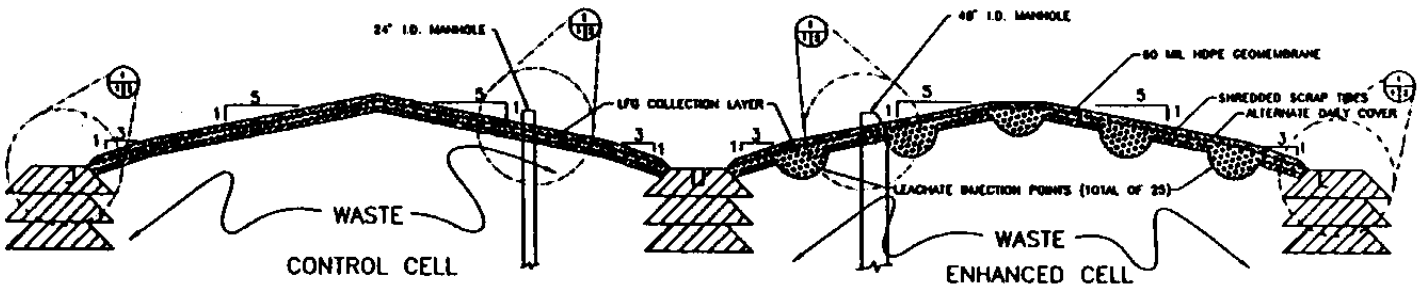
SHEET 6 OF 7

DRAWING II-20



CEC CONTROL AND ENHANCED CELL COVER PLAN

SCALE: 1" = 20'



CEC CONTROL AND ENHANCED CELL COVER CROSS SECTION

SCALE: 1" = 10'

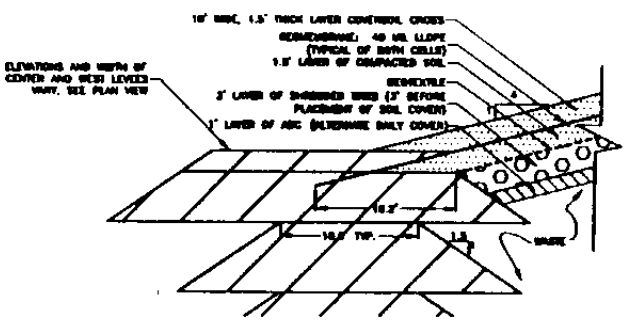
LEGEND

- SETTLEMENT MONUMENT "A"
- SETTLEMENT MONUMENT B
- ALTERNATE DAILY COVER (ADC) CHIPPED GREEN WASTE
- SHREDDED SCRAP TIRES
- SOIL COVER
- COMPACTED CLAY LEVEE

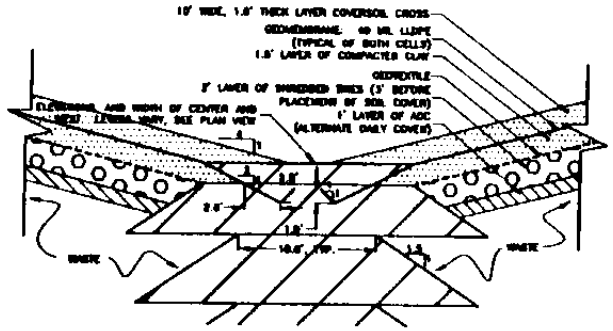
REDUCED COPY

YOLO COUNTY DEPARTMENT OF PUBLIC WORKS & TRANSPORTATION DIVISION OF INTEGRATED WASTE MANAGEMENT	YOLO COUNTY CENTRAL LANDFILL CEC PROJECT COVER DESIGN	SHEET 1

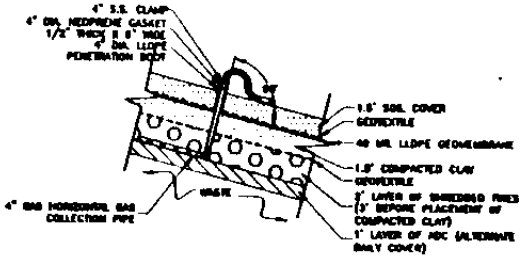
DRAWING II-21



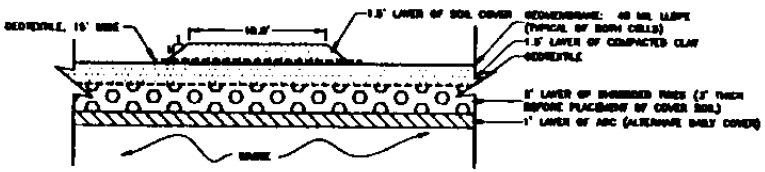
TYPICAL OUTER LEVEE CROSS SECTION (A 1|2)
SCALE 1"= 4'



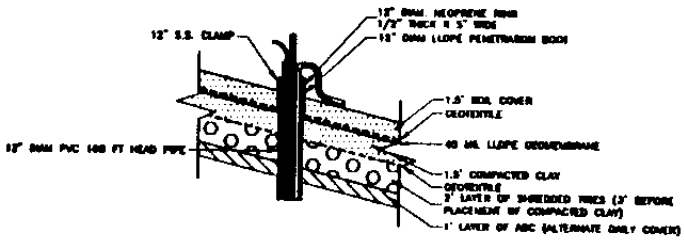
TYPICAL CENTER LEVEE CROSS SECTION (B 1|2)
SCALE 1"= 4'



HORIZONTAL GAS EXTRACTION SYSTEM
4" PENETRATION BOOT CROSS SECTION (C 1|2)
SCALE 1"= 4'



TYPICAL SOIL COVER LAYER CROSS SECTION (D 1|2)
SCALE 1"= 4'



WASTE AND GAS MONITORING SYSTEM 12"
PENETRATION BOOT CROSS SECTION (E 1|2)
SCALE 1"= 4'

SCALE: 1" = 4'

REDUCED COPY

REVISIONS		

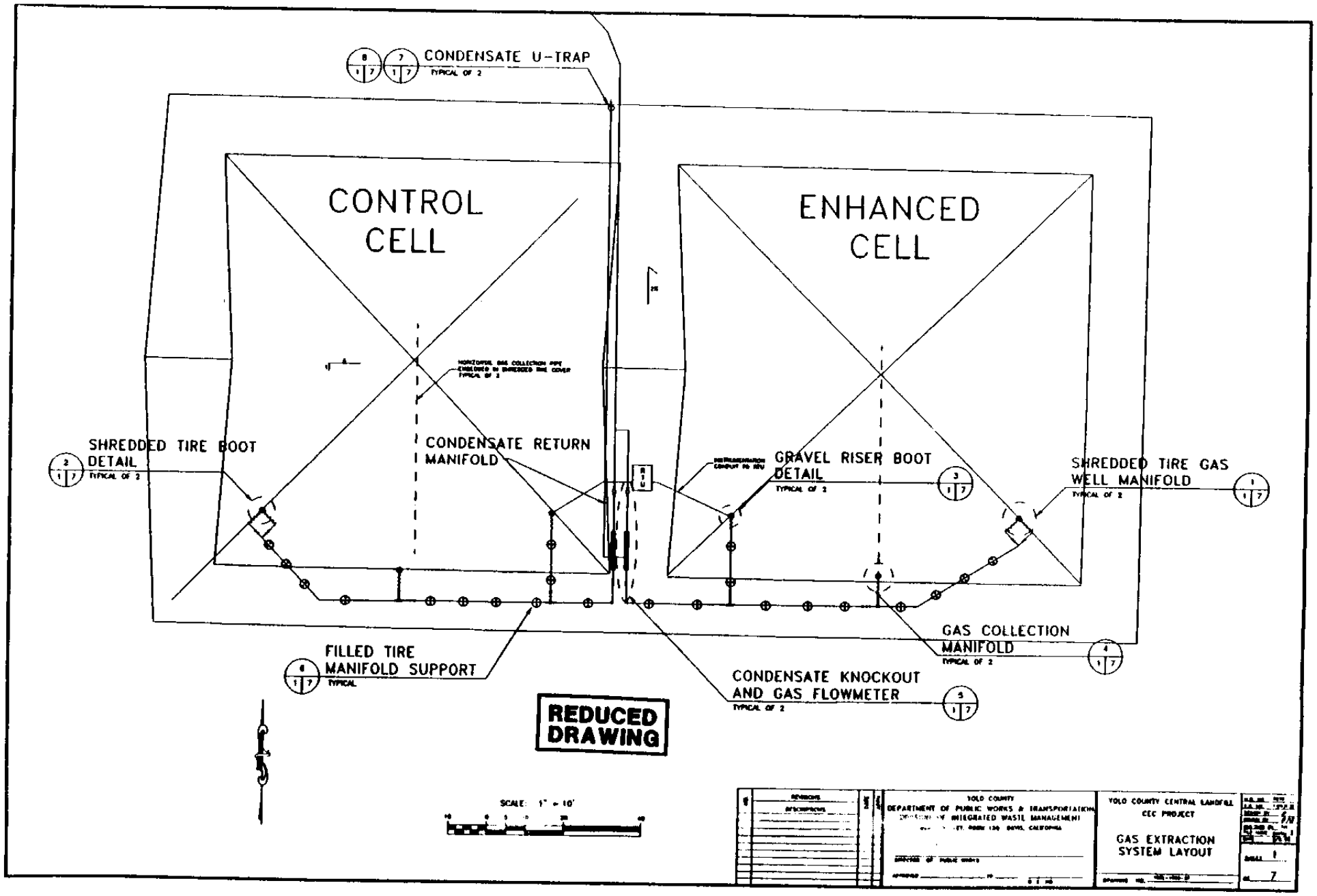
YOLO COUNTY
DEPARTMENT OF PUBLIC WORKS & TRANSPORTATION
DIVISION OF INTEGRATED WASTE MANAGEMENT

YOLO COUNTY CENTRAL LANDFILL
CEC PROJECT

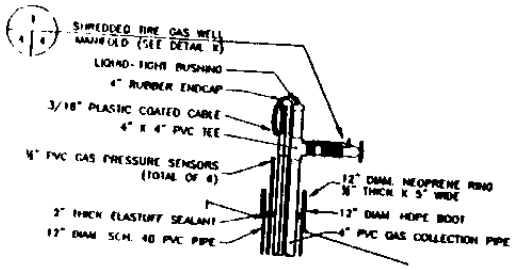
CEC COVER SYSTEM
DESIGN DETAILS

PAGE 2
NO. 2

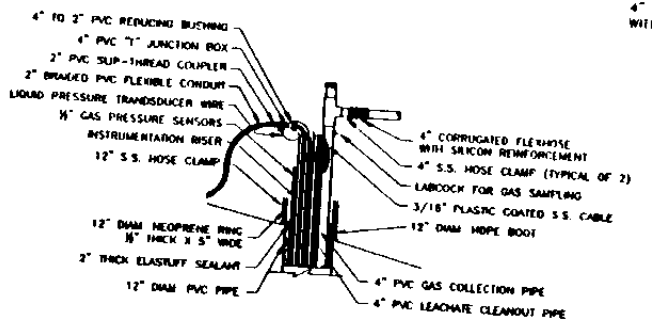
DRAWING II-22



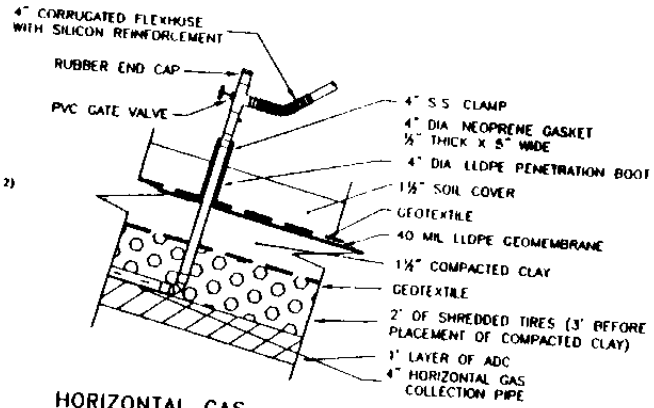
DRAWING II-23



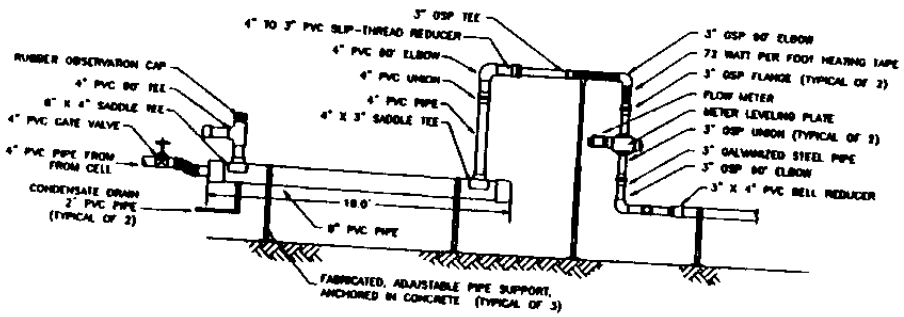
SHREDDED TIRE BOOT DETAIL
SCALE: 1" = 2'
2 | 7



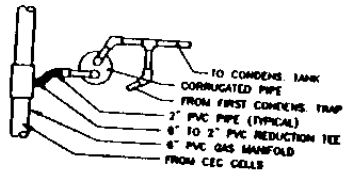
GRAVEL RISER BOOT DETAIL
SCALE: 1" = 1" = 2'
3 | 7



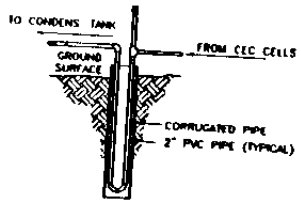
HORIZONTAL GAS EXTRACTION BOOT
SCALE: 1" = 2'
4 | 7



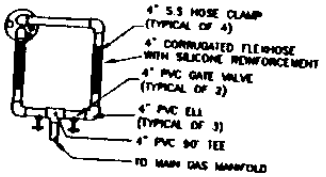
CONDENSATE KNOCKOUT & GAS FLOWMETER DETAIL
SCALE: 1" = 2'
5 | 7



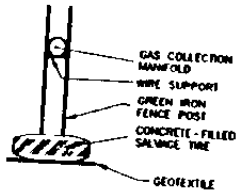
U-TRAP (PLAN)
SCALE: 1" = 1.67'
7 | 7



U-TRAP (ELEVATION)
SCALE: 1" = 2.5'
8 | 7



GAS MANIFOLD
SCALE: 1" = 2
1 | 7



MANIFOLD SUPPORT
SCALE: 1" = 2
6 | 7

REDUCED DRAWING

#	REVISIONS DESCRIPTION	DATE	APP.

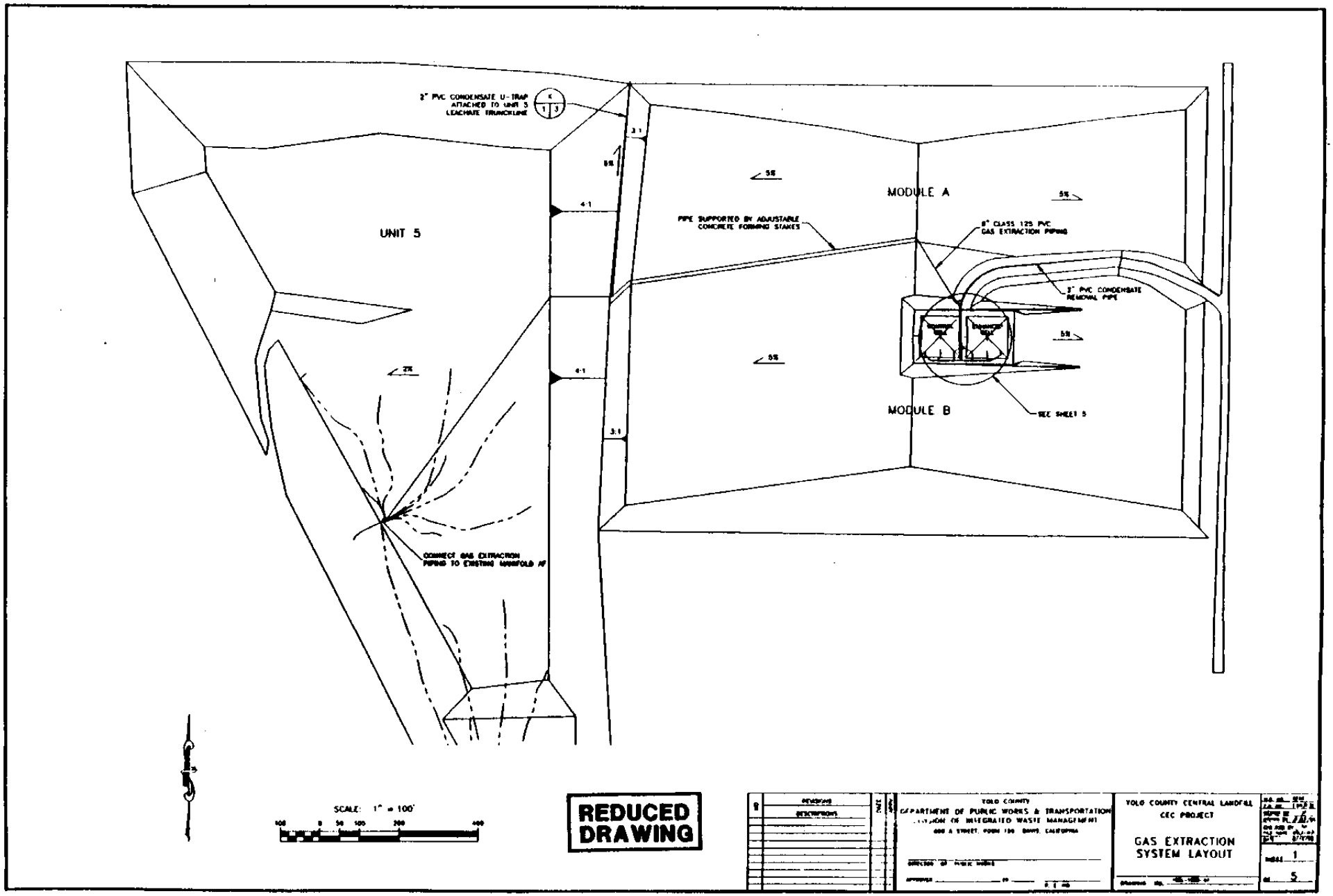
YOLO COUNTY
DEPARTMENT OF PUBLIC WORKS & TRANSPORTATION
DIVISION OF INTEGRATED WASTE MANAGEMENT
500 A STREET, WOODLAND, CALIFORNIA

YOLO COUNTY CENTRAL LANDFILL
CEC PROJECT

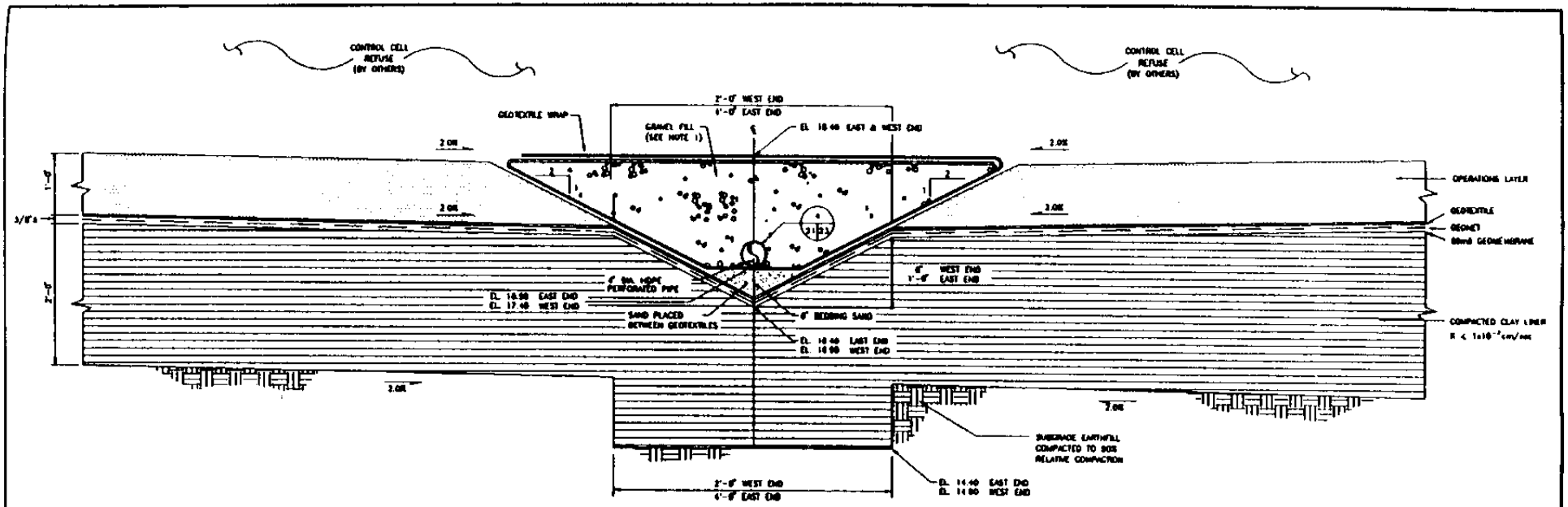
GAS SYSTEM DETAILS

SHEET 7 OF 7

DRAWING II-24



DRAWING II-25



REDUCED DRAWING

TYPICAL CEC CONTROL CELL LEACHATE COLLECTION TRENCH CROSS-SECTION

D7 5 21 / D7 13 21

SCALE: 1 1/2" = 1'-0"

1 1/2 0 3/4 1 1/2 3 6

NOTES:

1. GRAVEL FILL SHALL BE WRAPPED IN AN ADDITIONAL LAYER OF GEOTEXTILE. PROVIDE 4 FEET MINIMUM OF OVERLAP.

	REVISIONS DESCRIPTIONS	BY	CK
0			

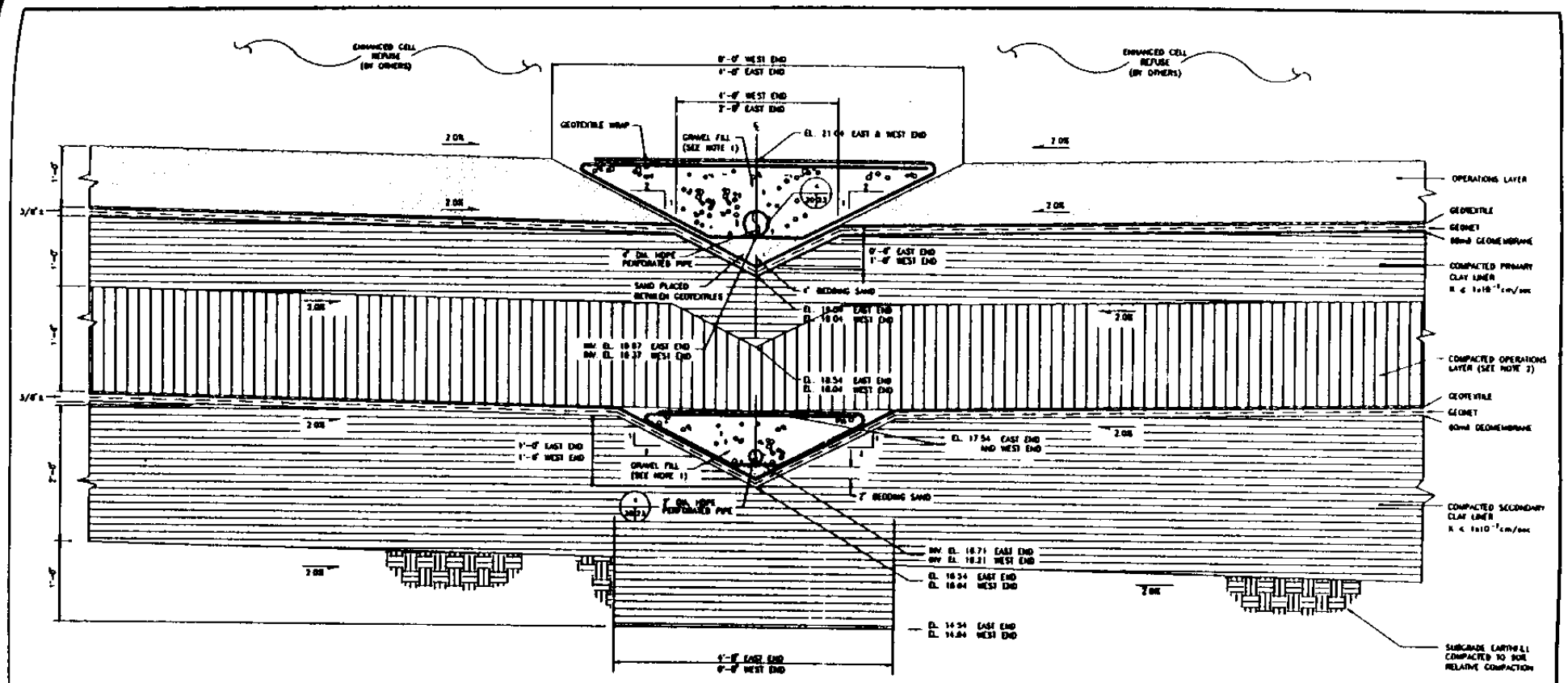
YOLO COUNTY DEPARTMENT OF PUBLIC WORKS
292 WEST BEAMER STREET
WOODLAND, CALIFORNIA
APPROVED APRIL 6, 93

YOLO COUNTY CENTRAL LANDFILL
MODULE B LANDFILL EXPANSION

TYPICAL CEC CONTROL CELL LEACHATE COLLECTION TRENCH CROSS-SECTION

SHEET 21 OF 28

DRAWING III-1



TYPICAL CEC ENHANCED CELL PRIMARY AND SECONDARY LEACHATE COLLECTION TRENCH CROSS-SECTION

SCALE: 1 1/2" = 1'-0"

D6 5 20 D6 14 20

1 1/2 0 3/4 1 1/2 3 6

REDUCED DRAWING

NOTES:

1. GRAVEL FILL SHALL BE WRAPPED IN AN ADDITIONAL LAYER OF GEOTEXTILE. PROVIDE 4 FEET MINIMUM OF OVERLAP
2. OPERATIONS LAYER SHALL BE PLACED AND COMPACTED TO 90% RELATIVE COMPACTION USING LOW GROUND PRESSURE EQUIPMENT, APPROVED BY THE ENGINEER, TO PROTECT THE UNDERLYING GEOSYNTHETIC MATERIALS.

NO.	REVISIONS DESCRIPTION	DATE	APPR.

YOLO COUNTY DEPARTMENT OF PUBLIC WORKS
[illegible] WEST BEAMER STREET
WOODLAND, CALIFORNIA

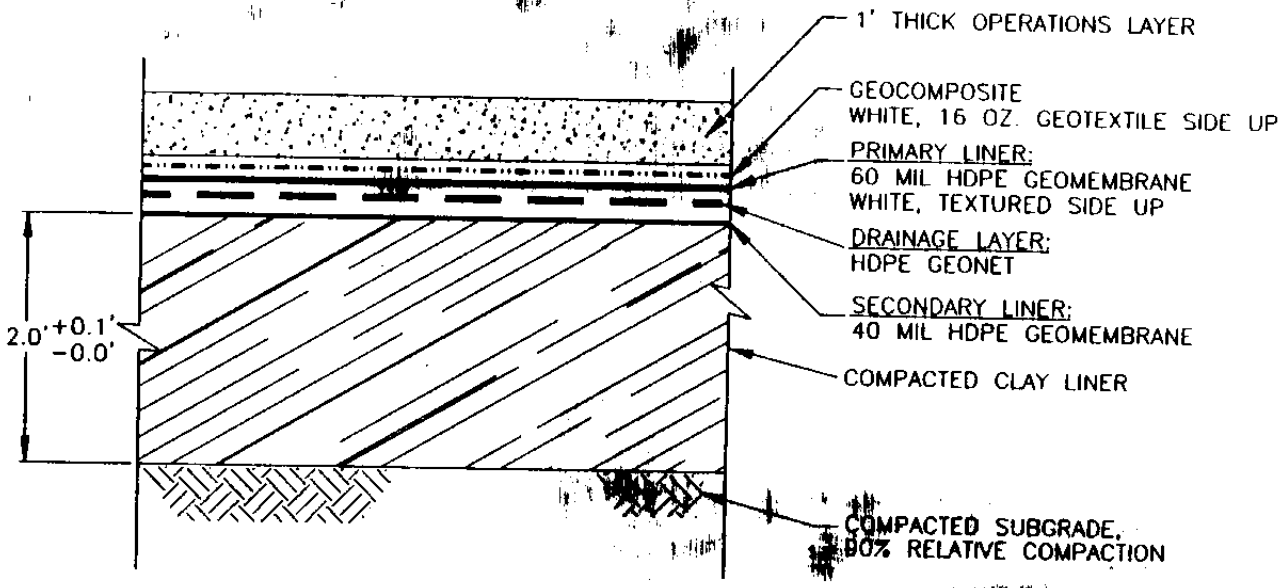
FOR APRIL 16 1993

YOLO COUNTY CENTRAL LANDFILL
MODULE B LANDFILL EXPANSION

TYPICAL CEC ENHANCED CELL PRIMARY AND SECONDARY LEACHATE COLLECTION TRENCH CROSS-SECTION

SHEET 20 OF 28

DRAWING III-2



YOLO COUNTY
DEPARTMENT OF PUBLIC WORKS & TRANSPORTATION
DIVISION OF INTEGRATED WASTE MANAGEMENT

YOLO COUNTY CENTRAL LANDFILL
LIQUID WASTE
SURFACE IMPOUNDMENT

DOUBLE LINER SECTION

DRAWING III-3