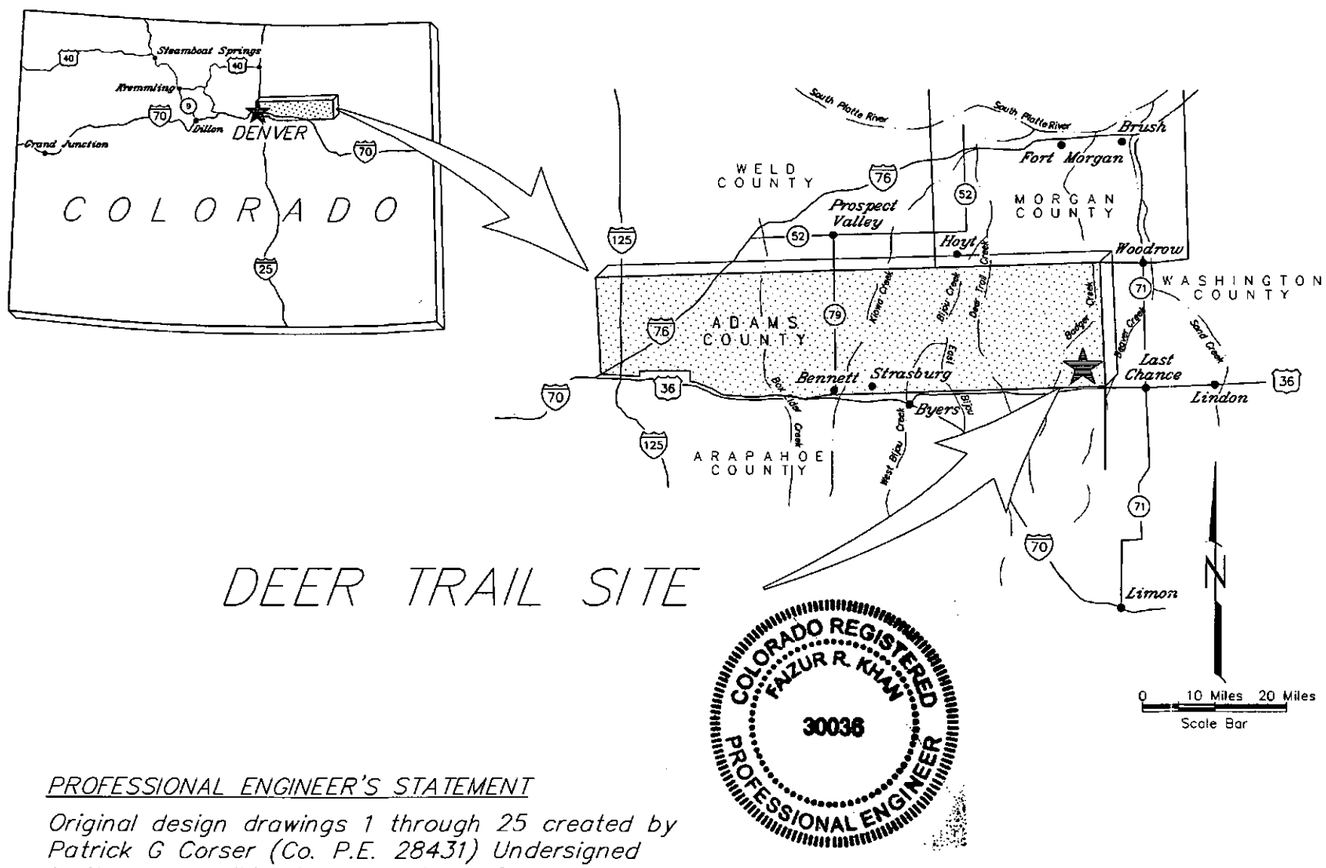
PERMIT ATTACHMENT LF-4
CONCEPTUAL SITE DEVELOPEMENT PLANS
CLEAN HARBORS DEER TRAIL, LLC
HAZARDOUS WASTE TREATMENT, STORAGE AND DISPOSAL FACILITY
ADAMS COUNTY, COLORADO

SEPTEMBER 2004

REVISION - 1



COLORADO REGISTERED PROFESSIONAL ENGINEER
FAIZUR R. KHAN
30036

LIST OF DRAWINGS

DRAWING NO.	DRAWING TITLE
1	COVER SHEET
2	COMPLIANCE BOUNDARY GENERAL LOCATION MAP
3	1994 EXISTING CONDITIONS
4-10	CELL DEVELOPMENT SEQUENCE
11	EXCAVATION PLAN FOR NEW SITE LAYOUT
12	STOCKPILE LOCATION MAP
13	NORTH - SOUTH CROSS-SECTION
14	EAST - WEST CROSS-SECTION
15	TYPICAL - EXCAVATION PLAN
16	TYPICAL - FILLING PLAN AND DETAILS (3 SHEETS)
17	TYPICAL - CELL CROSS-SECTION
18	TYPICAL LINER SYSTEM DETAILS
19	TYPICAL LINER SYSTEM DETAILS
20	TYPICAL - SUMP DETAILS AND CROSS-SECTIONS (4 SHEETS)
21	TYPICAL ACCESS RAMP DETAILS
22	TYPICAL - SURFACE WATER DETAILS (2 SHEETS)
23	TYPICAL LEACHATE PUMPING SYSTEM LAYOUT
24	TYPICAL LEACHATE PUMPING SYSTEM DETAILS
25	TYPICAL COVER CROSS-SECTIONS AND DETAILS

PROFESSIONAL ENGINEER'S STATEMENT

Original design drawings 1 through 25 created by Patrick G Corser (Co. P.E. 28431) Undersigned is the responsible design engineer for revisions discussed in the notes section dated September 2004.

9-27-04 Faizur R. Khan
Date *Faizur R. Khan, CO P.E. 30036*

NOTE: ORIGINAL DESIGN DRAWINGS PREPARED BY TERRAMATRIX ON 11/94

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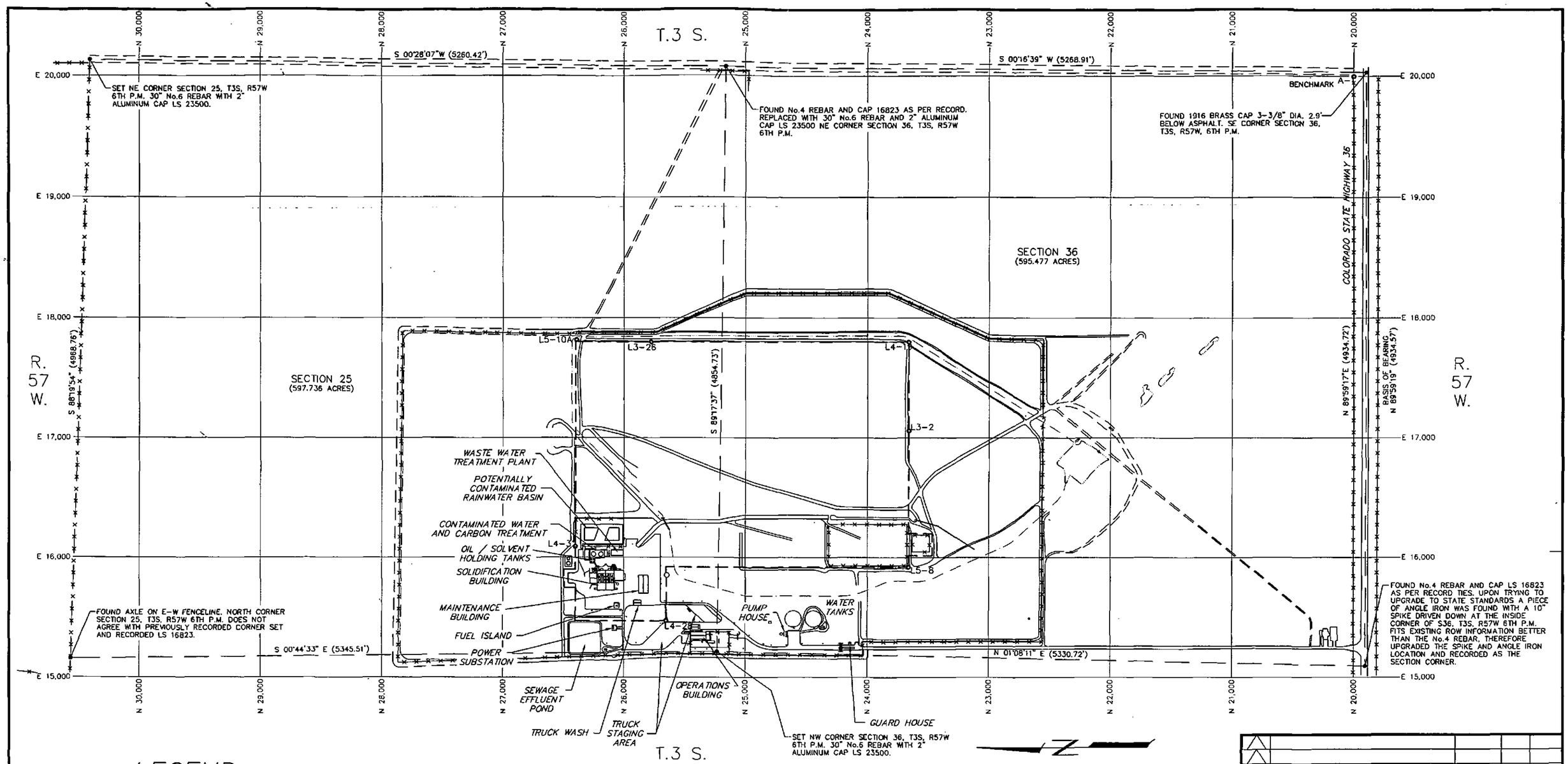
DWG.: Deertrail-1.DWG

DRAWING No.:	REV.
1	1



LEGEND

- — — — SURFACE WATER DRAINAGE
- ═══ = ROAD
- ×—×—× FENCE
- —— —— SECTION LINE BOUNDARY
- — — — COMPLIANCE BOUNDARY
- ⊙L3-2 BENCH MARK

NOTES:

1.) TOPOGRAPHIC MAPPING PERFORMED BY MERRICK & COMPANY, AURORA, COLORADO, IN JULY 1991, ORIGINAL MAP SCALE 1 INCH = 50', CONTOUR INTERVAL 2 FEET. GRID COORDINATES CORRESPOND TO LOCAL COORDINATE SYSTEM ESTABLISHED FOR THE H36LDC TSDF SITE (TIED TO BENCH MARK A1, HIGHWAY 36 RIGHT OF WAY MONUMENT AT N. 20,000, E. 20,000).

2.) SECTION CORNER INFORMATION OBTAINED FROM SURVEY DATA COLLECTED BY HASCALL SURVEYS INC. LONGMONT, COLORADO, IN AUGUST 1994.

3.) BENCH MARK INFORMATION OBTAINED FROM TOPOGRAPHIC MAPPING PERFORMED BY MERRICK & COMPANY, AURORA, COLORADO, IN JULY 1991.

4.) ORIGINAL DESIGN DRAWINGS PREPARED BY TERRAMATRIX ON 11/94

SCALE

400' 0 400' 800'

CONTOUR INTERVAL NONE

SURVEY BENCH MARKS

SURVEY BENCH MARKS

NO.	NORTHING	EASTING	ELEVATION
A1.	20,000.00	20,000.00	4779.95
L3-2	23,659.32	17,060.48	4891.27
L3-26	25,775.50	17,800.24	4892.34
L4-28	25,649.14	15,471.23	4880.85
L4-32	26,402.38	16,088.23	4874.14
L5-8	23,659.13	15,919.36	4869.82
L5-10A	26,389.30	17,817.65	4893.67

Rev. No.	NOTES	DATE	BY	CHKD
1	REVISED TO SHOW NEW OWNERSHIP	9/04	WDS	FK
0	ISSUED FOR PERMIT MOD. REPORT	11/94	JGN	PGC

SCALE: SEE BAR SCALE

DESIGN BY: TEL (TERRAMATRIX)

DRAWN BY: JGN (TERRAMATRIX)

CHECK BY: PGC (TERRAMATRIX)

PROJECT No. 603

FILE NAME: DEERTRAIL-2.DWG

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PROJECT: CONCEPTUAL SITE DEVELOPMENT PLAN

DRAWING TITLE: COMPLIANCE BOUNDARY GENERAL LOCATION MAP

SHEET: 1 OF 1

DRAWING No.: 2

REV. 1

LEGEND

- UC-2 — SURFACE WATER DRAINAGE
- FENCE
- 4820 — ELEVATION OF EXISTING GRADE (FEET)
- COMPLIANCE BOUNDARY
- L3-2 BENCH MARK (SEE DRAWING 2)
- CULVERT

NOTES:

1.) TOPOGRAPHIC MAPPING PERFORMED BY MERRICK & COMPANY, AURORA, COLORADO, IN JULY 1991, ORIGINAL MAP SCALE 1 INCH = 50', CONTOUR INTERVAL 2 FEET. GRID COORDINATES CORRESPOND TO LOCAL COORDINATE SYSTEM ESTABLISHED FOR THE H36LDC TSDF SITE (TIED TO BENCH MARK A1, HIGHWAY 36 RIGHT OF WAY MONUMENT AT N. 20,000, E. 20,000).

2.) CELL 1 AND CELL 2 TOPOGRAPHIC ELEVATION ASSUMES ELEVATIONS SHOWN ARE AT TOP OF LINER SYSTEM.

3.) CURRENT CONDITIONS – CELL 1 IS CLOSED, CELL 2 IS ACTIVE

4.) ORIGINAL DESIGN DRAWINGS PREPARED BY TERRAMATRIX ON 11/94

SCALE

250' 0 250' 500'

CONTOUR INTERVAL 2' AND 10'

TEMPORARY ROAD CROSSING CULVERT
CULVERT PC-3
LIFT STATION A
CULVERT
CELL 2 (SEE NOTE 2)
CELL 1 (SEE NOTE 2)
CULVERT UC-2
CULVERT PC-2
WASTE WATER TREATMENT PLANT
POTENTIALLY CONTAMINATED RAINWATER BASIN
CONTAMINATED WATER AND CARBON TREATMENT
OIL / SOLVENT HOLDING TANKS
SOLIDIFICATION BUILDING
CULVERT PC-1A
MAINTENANCE BUILDING
CULVERT PC-1
CULVERT PC-1.1
FUEL ISLAND
POWER SUBSTATION
CULVERT UC-5
SEWAGE EFFLUENT POND
TRUCK WASH
TRUCK STAGING AREA
OPERATIONS BUILDING
PUMP HOUSE
WATER TANK
GUARD HOUSE

Rev. No.	NOTES	DATE	BY	CHKD
1	ADDITION OF NOTE 3; NEW OWNERSHIP	9/04	WDS	FK
0	ISSUED FOR PERMIT MOD. REPORT	11/94	JGN	PGC

SCALE: SEE BAR SCALE
DESIGN BY: TEL (TERRAMATRIX)
DRAWN BY: JGN (TERRAMATRIX)
CHECK BY: PGC (TERRAMATRIX)
PROJECT No. 603
FILE NAME: DEERTRAIL-3.DWG

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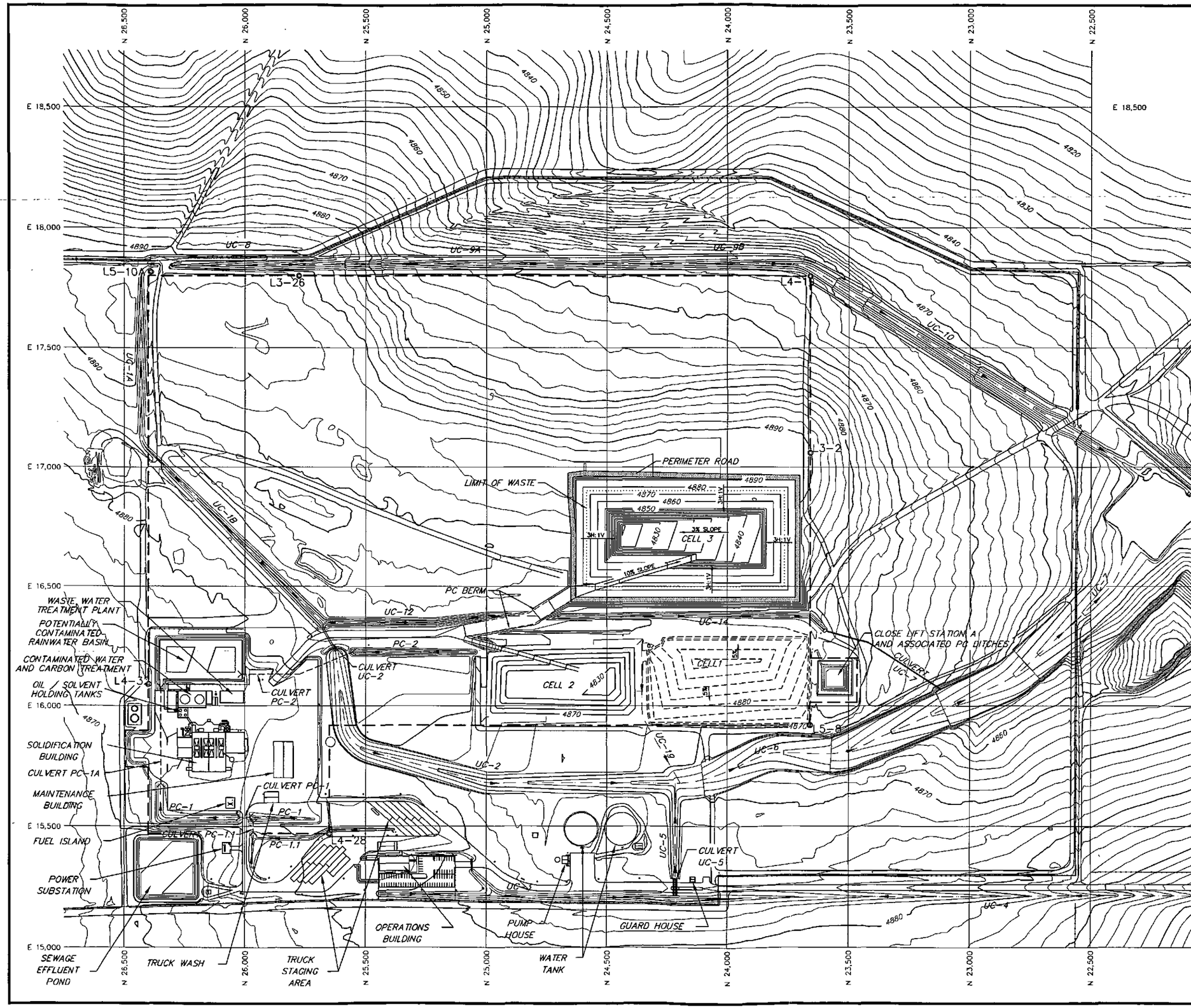
PROJECT: CONCEPTUAL SITE DEVELOPMENT PLAN

DRAWING TITLE: 1994 EXISTING CONDITIONS

SHEET: 1 OF 1
DRAWING No.: 3
REV. 1



LEGEND

- UC-2 — SURFACE WATER DRAINAGE
- FENCE
- 4820 — ELEVATION OF EXISTING GRADE (FEET) (BASED ON 1991 TOPOGRAPHY)
- COMPLIANCE BOUNDARY
- L3-2 BENCH MARK (SEE DRAWING 2)
- 4830 — ELEVATION OF CELL GRADE (FEET)
- 4870 — ELEVATION OF COVER GRADE (FEET)
- WASTE LIMIT
- PC BERM (POTENTIALLY CONTAMINATED)
- CULVERT

APPROXIMATE DESIGN VOLUME:	
CELL 1	173,385 cu.yd.
CELL 2	220,600 cu.yd.
CELL 3	414,300 cu.yd.
TOTAL	808,285 cu.yd.
PC AREA (POTENTIALLY CONTAMINATED):	
TOTAL PC AREA	19.8 acres

NOTE:

1.) ALL DIMENSIONS, GRADES AND LOCATIONS SHOWN ARE TYPICAL.

2.) FINAL DESIGN DIMENSIONS, GRADES AND LOCATIONS TO BE COMPILED IN CONSTRUCTION DRAWINGS AND SUBMITTED TO CDPHE PRIOR TO CONSTRUCTION.

3.) CURRENT CONDITIONS – CELL 1 IS CLOSED; CELL 2 IS ACTIVE; CELL 3 IS NOT CONSTRUCTED (FUTURE)

4.) ORIGINAL DESIGN DRAWINGS PREPARED BY TERRAMATRIX ON 11/94

SCALE

200' 0 200' 400'

CONTOUR INTERVAL 2' AND 10'

Rev. No.	NOTES	DATE	BY	CHKD
1	REV. CELL 2 DESIGN VOL; NEW OWNERSHIP; NOTE 3	9/04	WDS	FK
0	ISSUED FOR PERMIT MOD. REPORT	11/94	JGN	PGC

SCALE: SEE BAR SCALE

DESIGN BY: TEL (TERRAMATRIX)

DRAWN BY: JGN (TERRAMATRIX)

CHECK BY: PGC (TERRAMATRIX)

PROJECT No. 603

FILE NAME: DEERTRAIL-4.DWG

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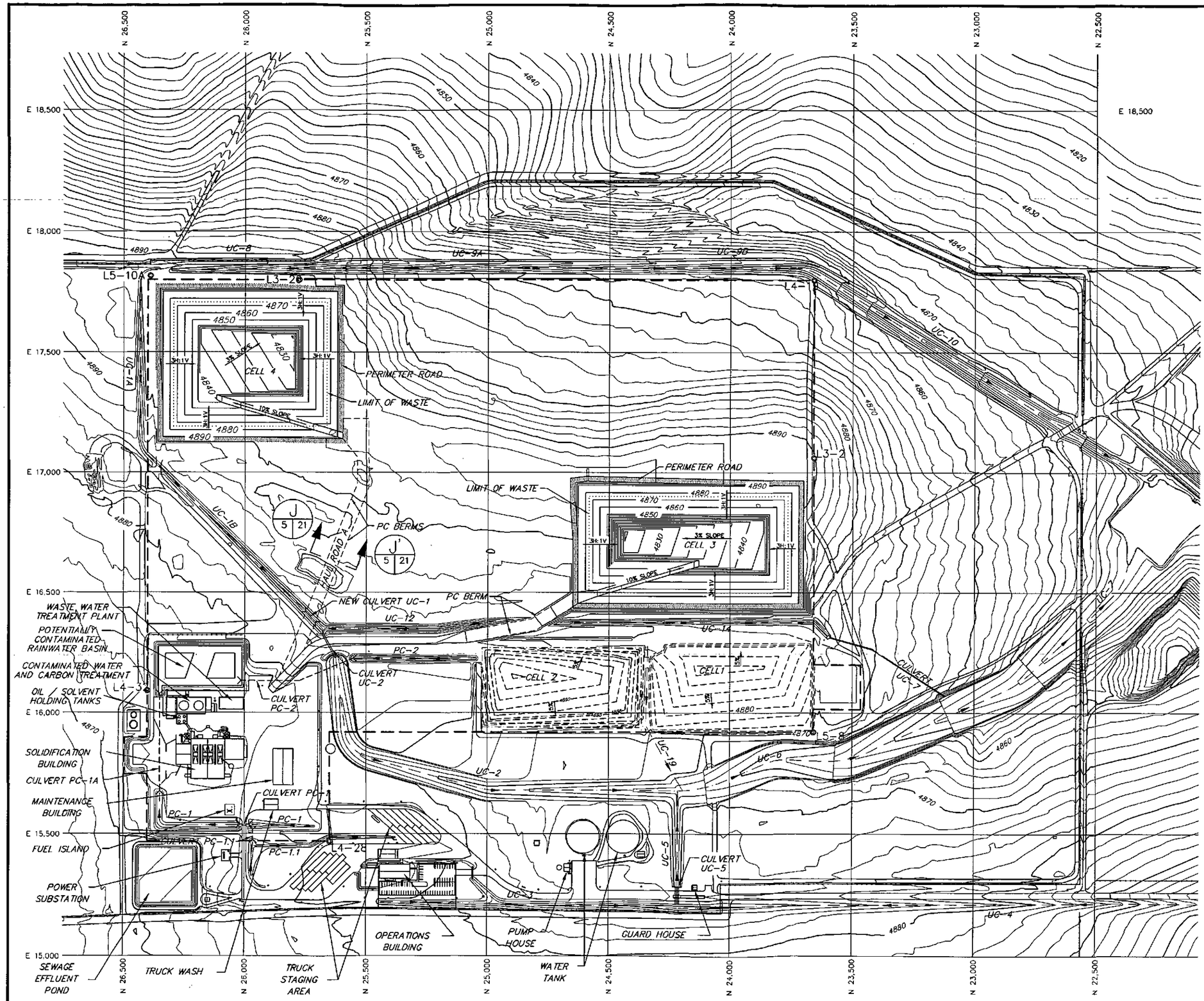
PROJECT: CONCEPTUAL SITE DEVELOPMENT PLAN

DRAWING TITLE: CELL DEVELOOPMENT SEQUENCE FILL CELL 2 – CONSTRUCT CELL 3

SHEET: 1 OF 1

DRAWING No.: 4

REV. 1



LEGEND

- UC-2 — SURFACE WATER DRAINAGE
- FENCE
- 4820 — ELEVATION OF EXISTING GRADE (FEET) (BASED ON 1991 TOPOGRAPHY)
- COMPLIANCE BOUNDARY
- L3-2 — BENCH MARK (SEE DRAWING 2)
- 4830 — ELEVATION OF CELL GRADE (FEET)
- 4870 — ELEVATION OF COVER GRADE (FEET)
- WASTE-LIMIT
- PC BERM (POTENTIALLY CONTAMINATED)
- CULVERT

APPROXIMATE DESIGN VOLUME:	
CELL 1	173,385 cu.yd.
CELL 2	220,600 cu.yd.
CELL 3	414,300 cu.yd.
CELL 4	424,200 cu.yd.
TOTAL	1,232,485 cu.yd.
PC AREA (POTENTIALLY CONTAMINATED):	
TOTAL PC AREA	21.1 acres

NOTE:

1.) ALL DIMENSIONS, GRADES AND LOCATIONS SHOWN ARE TYPICAL.

2.) FINAL DESIGN DIMENSIONS, GRADES AND LOCATIONS TO BE COMPILED IN CONSTRUCTION DRAWINGS AND SUBMITTED TO CDPHE PRIOR TO CONSTRUCTION.

3.) CURRENT CONDITIONS – CELL 1 IS CLOSED; CELL 2 IS ACTIVE; CELL 3 AND 4 ARE NOT CONSTRUCTED (FUTURE)

A / 6 6 — DETAIL/SECTION NUMBER; DRAWING No. WHERE DETAIL/SECTION IS REFERENCED; DRAWING No. WHERE DETAIL/SECTION IS SHOWN

SCALE

200' 0 200' 400'

CONTOUR INTERVAL 2' AND 10'

Rev. No.	NOTES	DATE	BY	CHKD
1	REV. CELL 2 VOL/CONT; NEW OWNERSHIP; NOTE 3	9/04	WDS	FK
0	ISSUED FOR PERMIT MOD. REPORT	11/94	JGN	PGC

SCALE: SEE BAR SCALE

DESIGN BY: TEL (TERRAMATRIX)

DRAWN BY: JGN (TERRAMATRIX)

CHECK BY: PGC (TERRAMATRIX)

PROJECT No. 603

FILE NAME: DEERTRAIL-5.DWG

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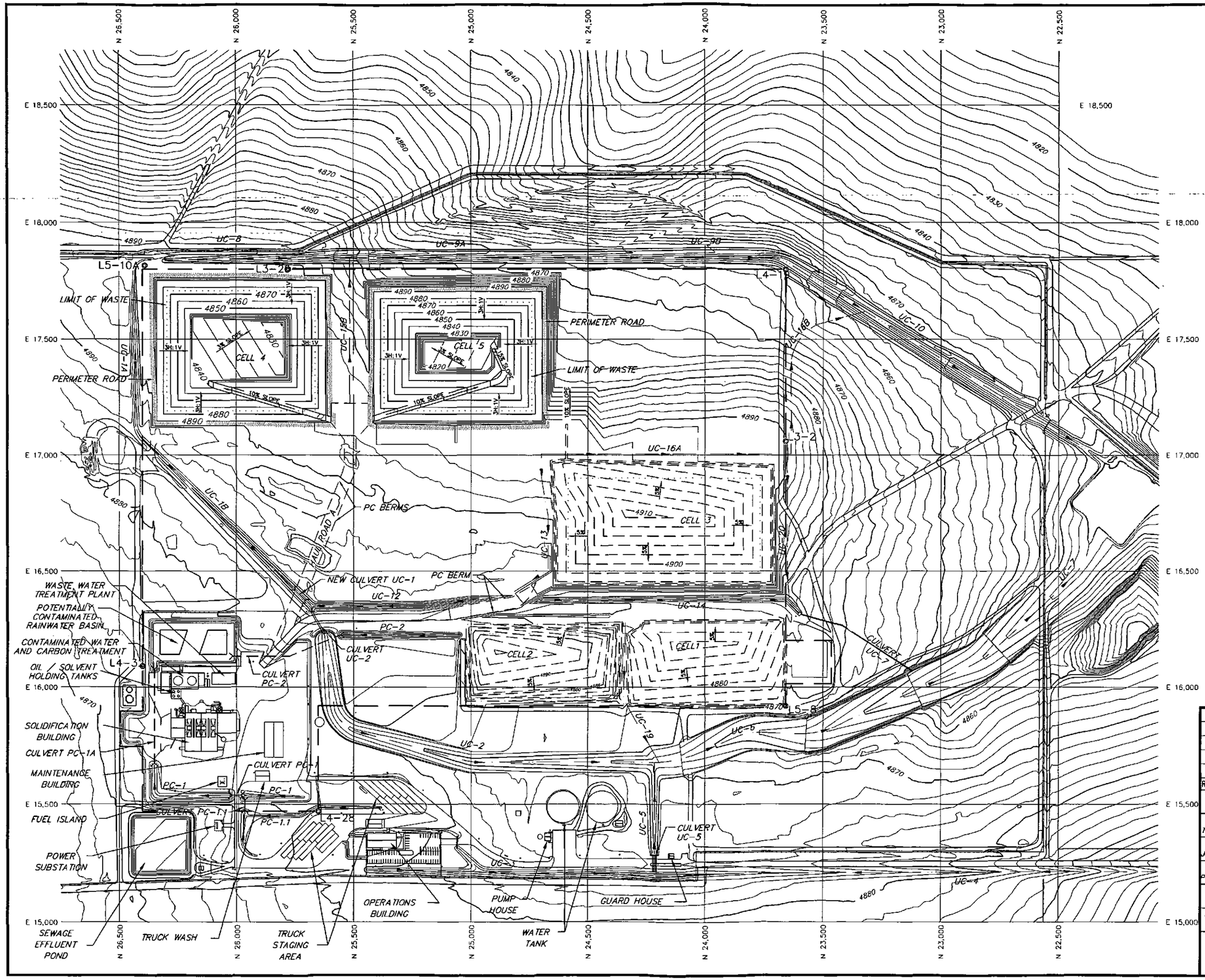
PROJECT: CONCEPTUAL SITE DEVELOPMENT PLAN

DRAWING TITLE: CELL DEVELOPMENT SEQUENCE FILL CELL 3 – CONSTRUCT CELL 4

SHEET: 1 OF 1

DRAWING No.: 5

REV. 1



LEGEND

- UC-2 — SURFACE WATER DRAINAGE
- FENCE
- 4820 — ELEVATION OF EXISTING GRADE (FEET) (BASED ON 1991 TOPOGRAPHY)
- COMPLIANCE BOUNDARY
- L3-2 — BENCH MARK (SEE DRAWING 2)
- 4830 — ELEVATION OF CELL GRADE (FEET)
- 4870 — ELEVATION OF COVER GRADE (FEET)
- WASTE LIMIT
- PC BERM (POTENTIALLY CONTAMINATED)
- CULVERT

APPROXIMATE DESIGN VOLUME:	
CELL 1	173,385 cu.yd.
CELL 2	220,600 cu.yd.
CELL 3	414,300 cu.yd.
CELL 4	424,200 cu.yd.
CELL 5	406,700 cu.yd.
TOTAL	1,639,185 cu.yd.
PC AREA (POTENTIALLY CONTAMINATED):	
TOTAL PC AREA	21.1 acres

NOTE:

1.) ALL DIMENSIONS, GRADES AND LOCATIONS SHOWN ARE TYPICAL.

2.) FINAL DESIGN DIMENSIONS, GRADES AND LOCATIONS TO BE COMPILED IN CONSTRUCTION DRAWINGS AND SUBMITTED TO CDPHE PRIOR TO CONSTRUCTION.

3.) CURRENT CONDITIONS – CELL 1 IS CLOSED; CELL 2 IS ACTIVE; CELL 3 THRU 5 ARE NOT CONSTRUCTED (FUTURE)

SCALE

200' 0 200' 400'

CONTOUR INTERVAL 2' AND 10'

Rev. No.	NOTES	DATE	BY	CHKD
1	REV CELL 2 VOL/CONT; NEW OWNERSHIP; NOTE 3	9/04	WDS	FK
0	ISSUED FOR PERMIT MOD. REPORT	11/94	JGN	PGC

SCALE: SEE BAR SCALE

DESIGN BY: TEL (TERRAMATRIX)

DRAWN BY: JGN (TERRAMATRIX)

CHECK BY: PGC (TERRAMATRIX)

PROJECT No. 603

FILE NAME: DEERTRAIL-6.DWG

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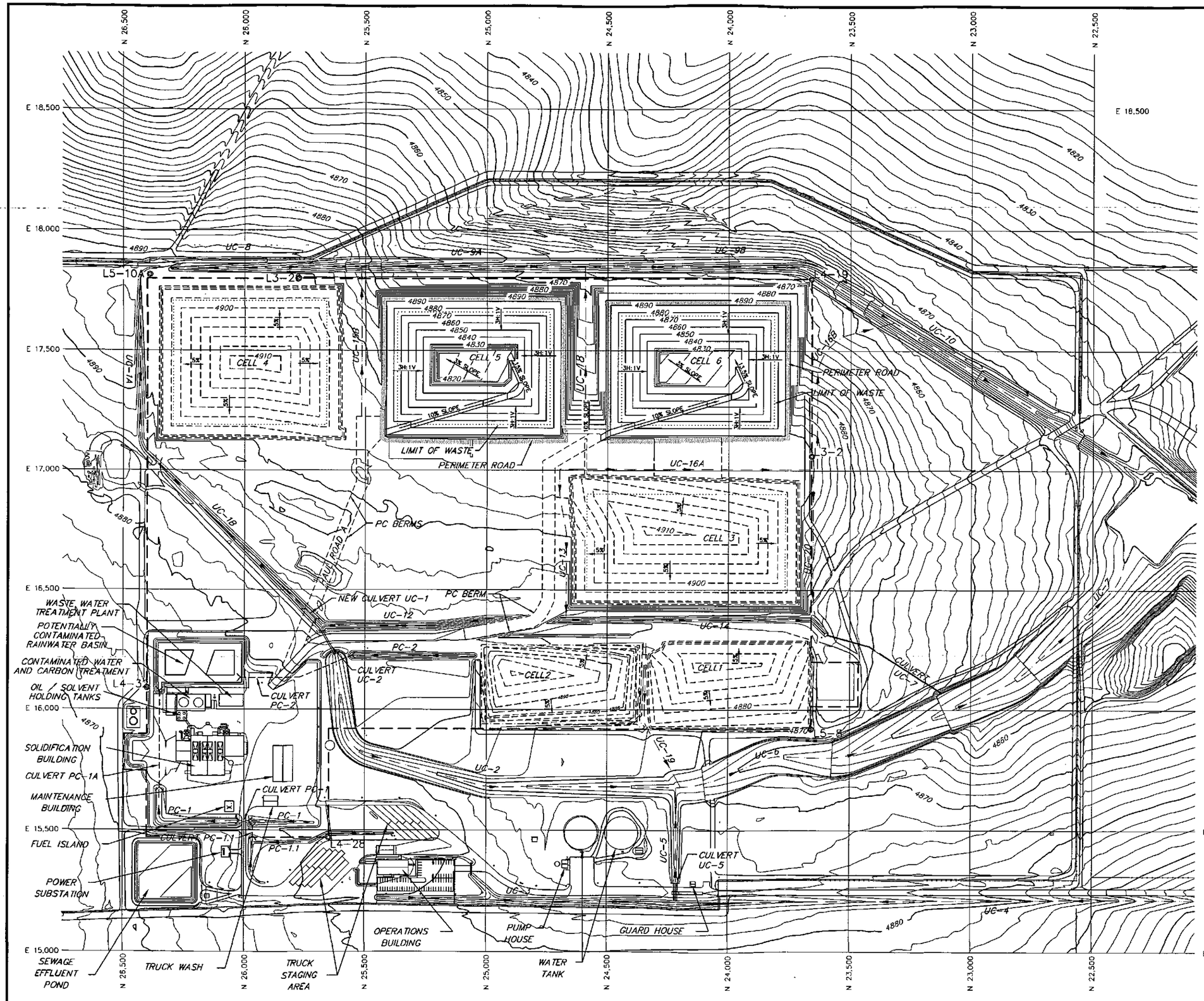
PROJECT: CONCEPTUAL SITE DEVELOPMENT PLAN

DRAWING TITLE: CELL DEVELOPMENT SEQUENCE FILL CELL 4 – CONSTRUCT CELL 5

SHEET: 1 OF 1

DRAWING No.: 6

REV. 1



LEGEND

- UC-2 — SURFACE WATER DRAINAGE
- FENCE
- 4820 — ELEVATION OF EXISTING GRADE (FEET) (BASED ON 1991 TOPOGRAPHY)
- COMPLIANCE BOUNDARY
- L3-2 BENCH MARK (SEE DRAWING 2)
- 4830 — ELEVATION OF CELL GRADE (FEET)
- 4870 — ELEVATION OF COVER GRADE (FEET)
- WASTE LIMIT
- PC BERM (POTENTIALLY CONTAMINATED)
- CULVERT

APPROXIMATE DESIGN VOLUME:	
CELL 1	173,385 cu.yd.
CELL 2	220,600 cu.yd.
CELL 3	414,300 cu.yd.
CELL 4	424,200 cu.yd.
CELL 5	406,700 cu.yd.
CELL 6	373,700 cu.yd
TOTAL	2,012,885 cu.yd.
PC AREA (POTENTIALLY CONTAMINATED):	
TOTAL PC AREA	21.8 acres

NOTE:

1.) ALL DIMENSIONS, GRADES AND LOCATIONS SHOWN ARE TYPICAL.

2.) FINAL DESIGN DIMENSIONS, GRADES AND LOCATIONS TO BE COMPILED IN CONSTRUCTION DRAWINGS AND SUBMITTED TO CDPHE PRIOR TO CONSTRUCTION.

3.) CURRENT CONDITIONS – CELL 1 IS CLOSED; CELL 2 IS ACTIVE; CELL 3 THRU 6 ARE NOT CONSTRUCTED (FUTURE)

SCALE

200' 0 200' 400'

CONTOUR INTERVAL 2' AND 10'

Rev. No.	NOTES	DATE	BY	CHKD
4				
3				
2				
1	REV CELL 2 VOL/CONT; NEW OWNERSHIP; NOTE 3	9/04	WDS	FK
0	ISSUED FOR PERMIT MOD. REPORT	11/94	JGN	PGC

SCALE: SEE BAR SCALE

DESIGN BY: TEL (TERRAMATRIX)

DRAWN BY: JGN (TERRAMATRIX)

CHECK BY: PGC (TERRAMATRIX)

PROJECT No. 603

FILE NAME: DEERTRAIL-7.DWG

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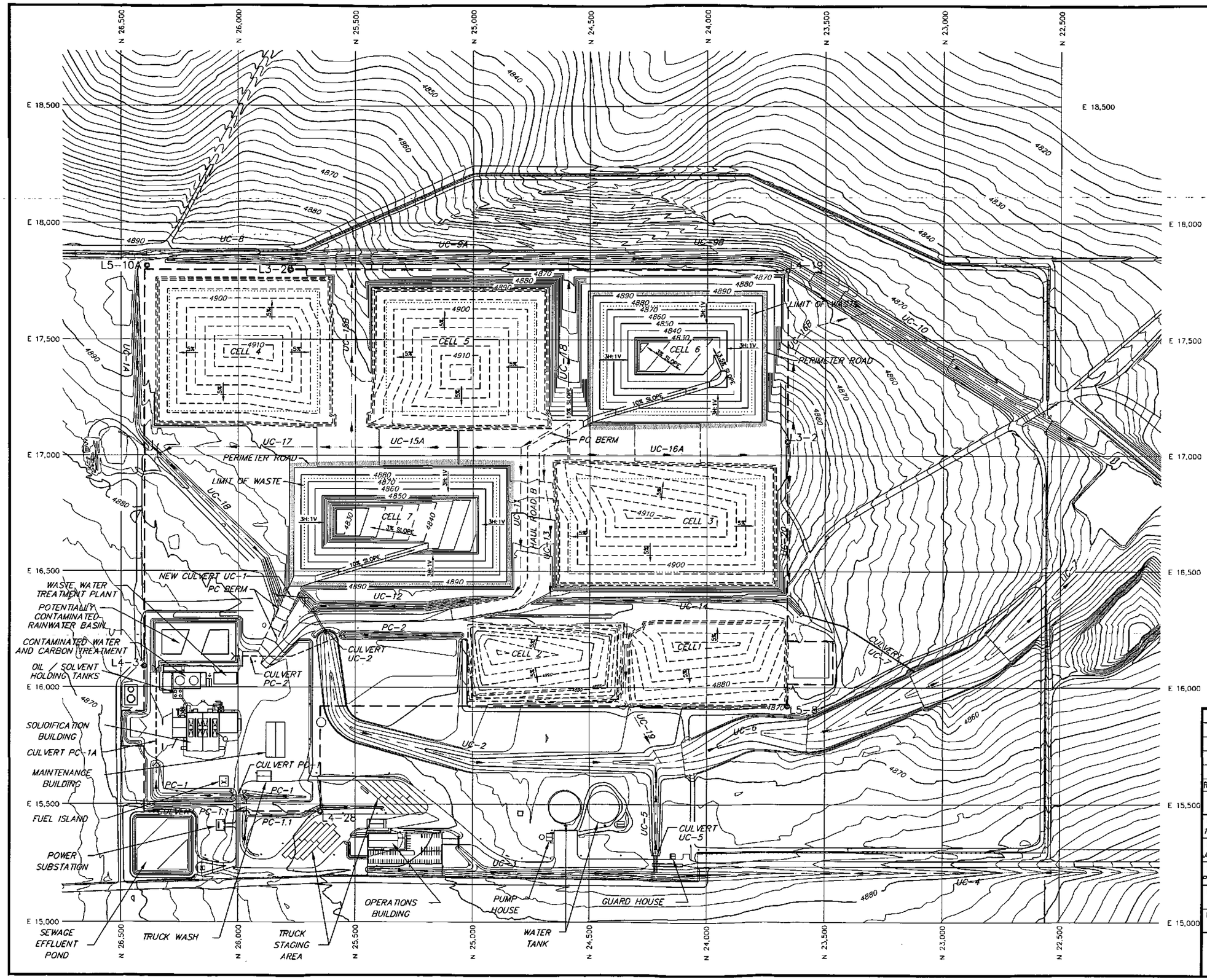
PROJECT: CONCEPTUAL SITE DEVELOPMENT PLAN

DRAWING TITLE: CELL DEVELOPMENT SEQUENCE FILL CELL 5 – CONSTRUCT CELL 6.

SHEET: 1 OF 1

DRAWING No.: 7

REV. 1



LEGEND

- UC-2 — SURFACE WATER DRAINAGE
- FENCE
- 4820 — ELEVATION OF EXISTING GRADE (FEET) (BASED ON 1991 TOPOGRAPHY)
- COMPLIANCE BOUNDARY
- L3-2 BENCH MARK (SEE DRAWING 2)
- 4830 — ELEVATION OF CELL GRADE (FEET)
- 4870 — ELEVATION OF COVER GRADE (FEET)
- WASTE LIMIT
- PC BERM (POTENTIALLY CONTAMINATED)
- CULVERT

APPROXIMATE DESIGN VOLUME:	
CELL 1	173,385 cu.yd.
CELL 2	220,600 cu.yd.
CELL 3	414,300 cu.yd.
CELL 4	424,200 cu.yd.
CELL 5	406,700 cu.yd.
CELL 6	373,700 cu.yd.
CELL 7	401,760 cu.yd.
TOTAL	2,334,645 cu.yd.
PC AREA (POTENTIALLY CONTAMINATED):	
TOTAL PC AREA	20.4 acres

NOTE:

1.) ALL DIMENSIONS, GRADES AND LOCATIONS SHOWN ARE TYPICAL.

2.) FINAL DESIGN DIMENSIONS, GRADES AND LOCATIONS TO BE COMPILED IN CONSTRUCTION DRAWINGS AND SUBMITTED TO CDPHE PRIOR TO CONSTRUCTION.

3.) CURRENT CONDITIONS – CELL 1 IS CLOSED; CELL 2 IS ACTIVE; CELL 3 THRU 7 ARE NOT CONSTRUCTED (FUTURE)

SCALE

200' 0 200' 400'

CONTOUR INTERVAL 2' AND 10'

Rev. No.	NOTES	DATE	BY	CHKD
1	REV CELL 2 VOL/CONT; NEW OWNERSHIP; NOTE 3	9/04	WDS	FK
0	ISSUED FOR PERMIT MOD. REPORT	11/94	JGN	PGC

SCALE: SEE BAR SCALE

DESIGN BY: TEL (TERRAMATRIX)

DRAWN BY: JGN (TERRAMATRIX)

CHECK BY: PGC (TERRAMATRIX)

PROJECT No. 603

FILE NAME: DEERTRAIL-8.DWG

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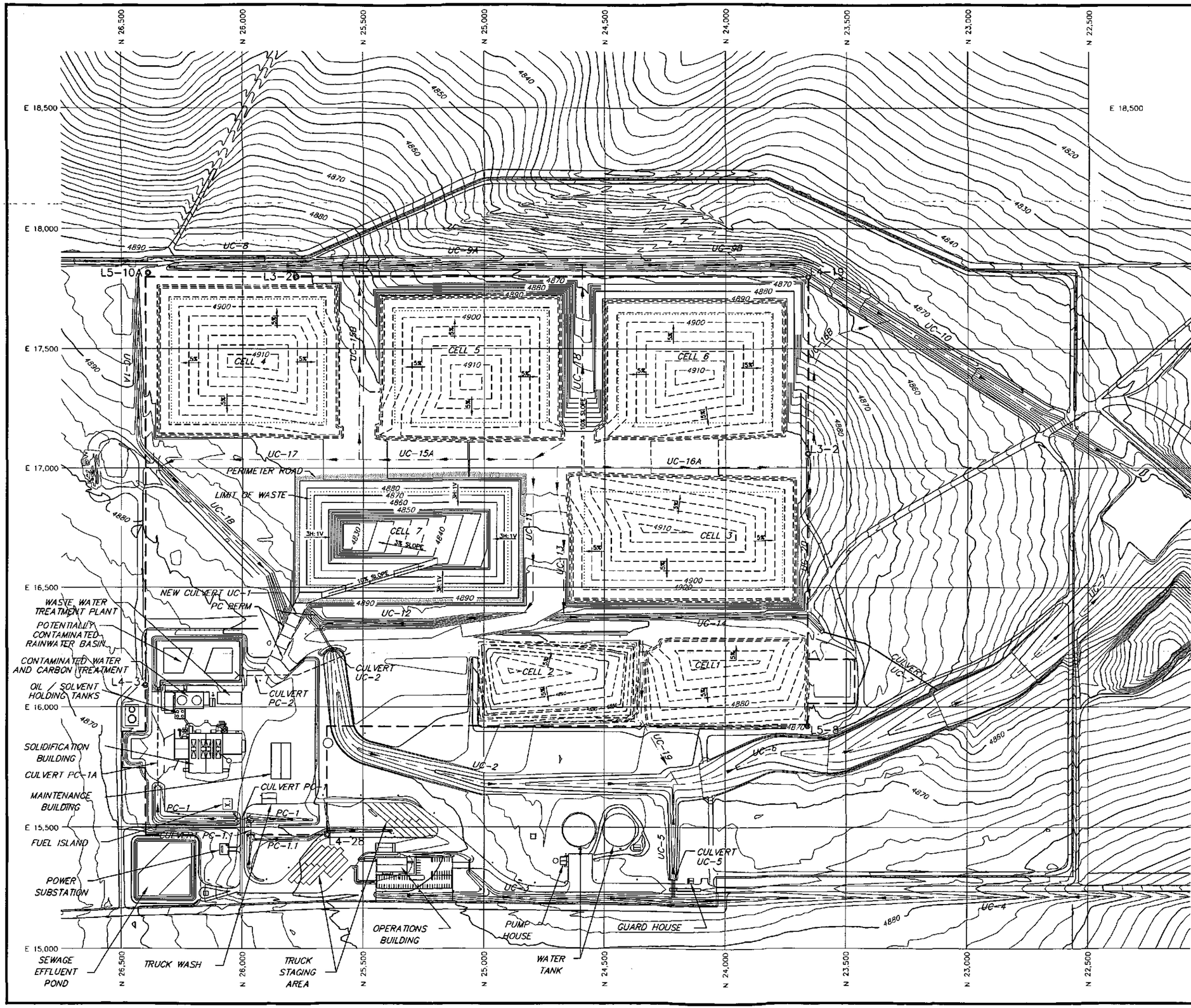
PROJECT: CONCEPTUAL SITE DEVELOPMENT PLAN

DRAWING TITLE: CELL DEVELOPMENT SEQUENCE FILL CELL 6 – CONSTRUCT CELL 7

SHEET: 1 OF 1

DRAWING No.: 8

REV. 1



LEGEND

- UC-2 — SURFACE WATER DRAINAGE
- FENCE
- 4820 — ELEVATION OF EXISTING GRADE (FEET) (BASED ON 1991 TOPOGRAPHY)
- COMPLIANCE BOUNDARY
- L3-2 BENCH MARK (SEE DRAWING 2)
- 4830 — ELEVATION OF CELL GRADE (FEET)
- 4870 — ELEVATION OF COVER GRADE (FEET)
- WASTE LIMIT
- PC BERM (POTENTIALLY CONTAMINATED)
- CULVERT

APPROXIMATE DESIGN VOLUME:	
CELL 1	173,385 cu.yd.
CELL 2	220,600 cu.yd.
CELL 3	414,300 cu.yd.
CELL 4	424,200 cu.yd.
CELL 5	406,700 cu.yd.
CELL 6	373,700 cu.yd.
CELL 7	401,760 cu.yd.
TOTAL	2,414,645 cu.yd.
PC AREA (POTENTIALLY CONTAMINATED):	
TOTAL PC AREA	18.2 acres

NOTE:

1.) ALL DIMENSIONS, GRADES AND LOCATIONS SHOWN ARE TYPICAL.

2.) FINAL DESIGN DIMENSIONS, GRADES AND LOCATIONS TO BE COMPILED IN CONSTRUCTION DRAWINGS AND SUBMITTED TO CDPHE PRIOR TO CONSTRUCTION.

3.) CURRENT CONDITIONS – CELL 1 IS CLOSED; CELL 2 IS ACTIVE; CELL 3 THRU 7 ARE NOT CONSTRUCTED (FUTURE)

SCALE

200' 0 200' 400'

CONTOUR INTERVAL 2' AND 10'

Rev. No.	NOTES	DATE	BY	CHKD
2				
1	REV CELL 2 VOL/CONT; NEW OWNERSHIP; NOTE 3	9/04	WDS	FK
0	ISSUED FOR PERMIT MOD. REPORT	11/94	JGN	PGC

SCALE: SEE BAR SCALE

DESIGN BY: TEL (TERRAMATRIX)

DRAWN BY: JGN (TERRAMATRIX)

CHECK BY: PGC (TERRAMATRIX)

PROJECT No. 603

FILE NAME: DEERTRAIL-9.DWG

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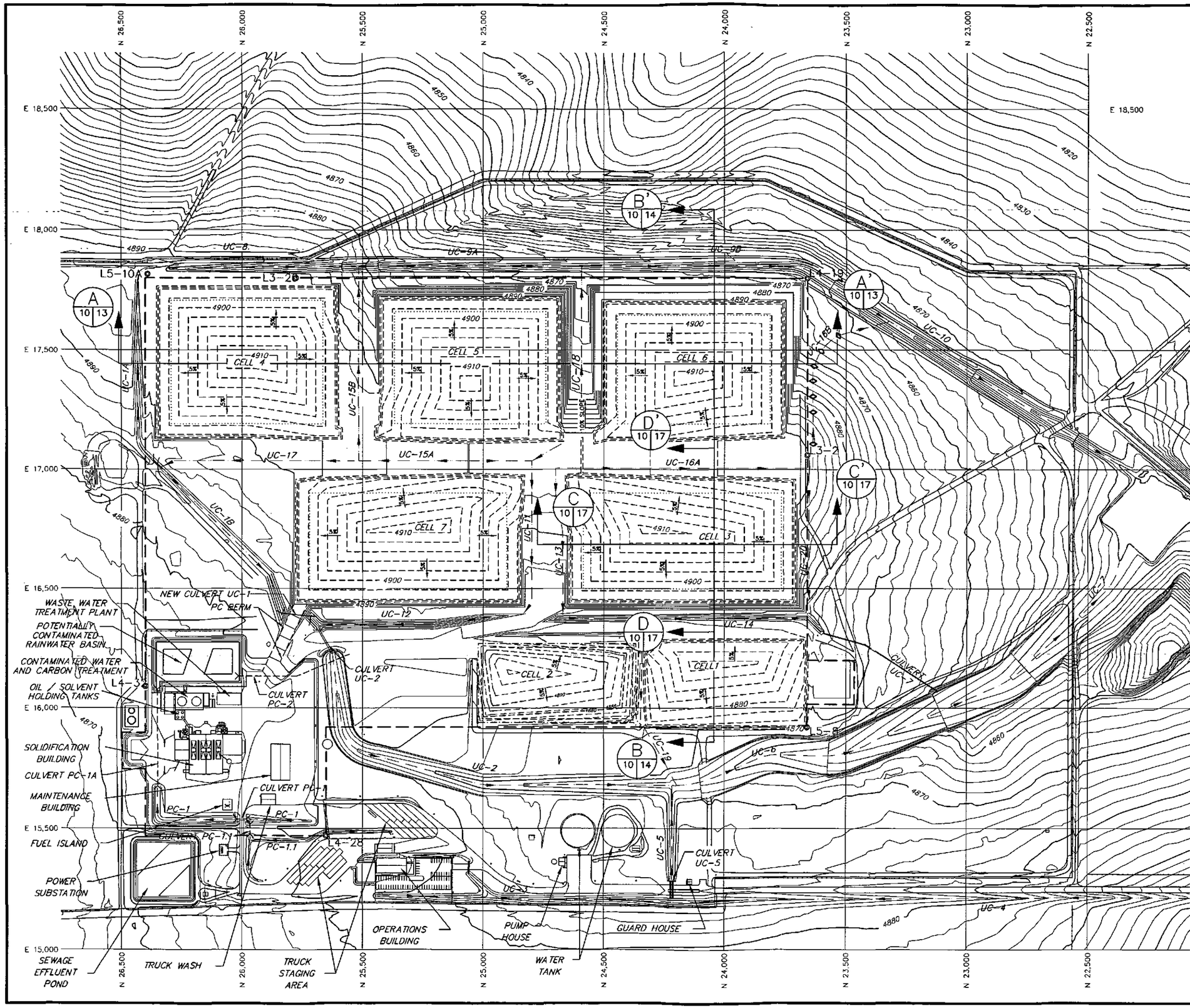
PROJECT: CONCEPTUAL SITE DEVELOPMENT PLAN

DRAWING TITLE: CELL DEVELOPMENT SEQUENCE FILL CELL 7

SHEET: 1 OF 1

DRAWING No.: 9

REV. 1



LEGEND

- UC-2 — SURFACE WATER DRAINAGE
- FENCE
- 4820 — ELEVATION OF EXISTING GRADE (FEET) (BASED ON 1991 TOPOGRAPHY)
- COMPLIANCE BOUNDARY
- L3-2 — BENCH MARK (SEE DRAWING 2)
- 4830 — ELEVATION OF CELL GRADE (FEET)
- 4870 — ELEVATION OF COVER GRADE (FEET)
- WASTE LIMIT
- PC BERM (POTENTIALLY CONTAMINATED)
- CULVERT
- DROP STRUCTURE

NOTE:

1.) ALL DIMENSIONS, GRADES AND LOCATIONS SHOWN ARE TYPICAL.

2.) FINAL DESIGN DIMENSIONS, GRADES AND LOCATIONS TO BE COMPILED IN CONSTRUCTION DRAWINGS AND SUBMITTED TO CDPHE PRIOR TO CONSTRUCTION.

3.) CURRENT CONDITIONS – CELL 1 IS CLOSED; CELL 2 IS ACTIVE; CELL 3 THRU 7 ARE NOT CONSTRUCTED (FUTURE)

A 6 | 6 — DETAIL/SECTION NUMBER

DRAWING No. WHERE DETAIL/SECTION IS REFERENCED

DRAWING No. WHERE DETAIL/SECTION IS SHOWN

SCALE

200' 0 200' 400'

CONTOUR INTERVAL 2' AND 10'

Rev. No.	NOTES	DATE	BY	CHKD
4				
3				
2				
1	REV CELL 2 VOL/CONT; NEW OWNERSHIP; NOTE 3	9/04	WDS	FK
0	ISSUED FOR PERMIT MOD. REPORT	11/94	JGN	PGC

SCALE: SEE BAR SCALE

DESIGN BY: TEL (TERRAMATRIX)

DRAWN BY: JGN (TERRAMATRIX)

CHECK BY: PGC (TERRAMATRIX)

PROJECT No. 603

FILE NAME: DEERTRAIL-10.DWG

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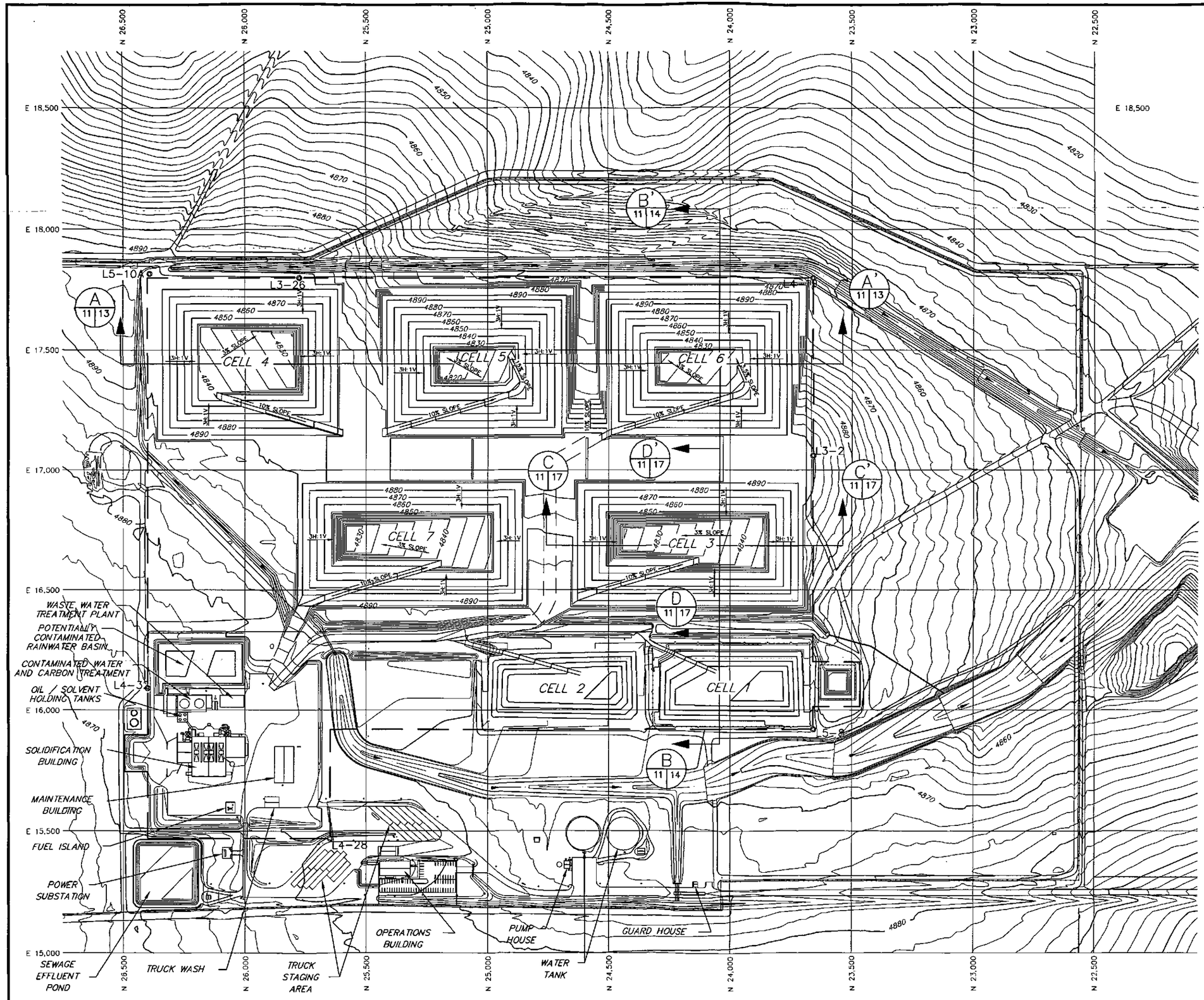
PROJECT: CONCEPTUAL SITE DEVELOPMENT PLAN

DRAWING TITLE: FINAL CLOSURE CELL DEVELOPMENT SEQUENCE FINAL COVER CELL 7

SHEET: 1 OF 1

DRAWING No.: 10

REV.: 1



LEGEND

- UC-2 — SURFACE WATER DRAINAGE
- FENCE
- 4820 — ELEVATION OF EXISTING GRADE (FEET) (BASED ON 1991 TOPOGRAPHY)
- COMPLIANCE BOUNDARY
- L3-2 BENCH MARK (SEE DRAWING 2)

NOTE:
FOR CELL DETAILS SEE DRAWINGS 4 THRU 10 (CELL DEVELOPMENT SEQUENCE), AND DRAWING 15 (TYPICAL – EXCAVATION PLAN).

A
6 6

DETAIL/SECTION NUMBER

DRAWING No. WHERE DETAIL/SECTION IS REFERENCED

DRAWING No. WHERE DETAIL/SECTION IS SHOWN

SCALE
200' 0 200' 400'
CONTOUR INTERVAL 2' AND 10'

Rev. No.	NOTES	DATE	BY	CHKD
4				
3				
2				
1	REVISED TO SHOW NEW OWNERSHIP	9/04	WDS	FK
0	ISSUED FOR PERMIT MOD. REPORT	11/94	JGN	PGC

SCALE: SEE BAR SCALE
DESIGN BY: TEL (TERRAMATRIX)
DRAWN BY: JGN (TERRAMATRIX)
CHECK BY: PGC (TERRAMATRIX)
PROJECT No. 603
FILE NAME: DEERTRAIL-11.DWG

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PROJECT: CONCEPTUAL SITE DEVELOPMENT PLAN

DRAWING TITLE: EXCAVATION PLAN FOR NEW SITE LAYOUT

SHEET: 1 OF 1
DRAWING No.: 11
REV. 1

LEGEND

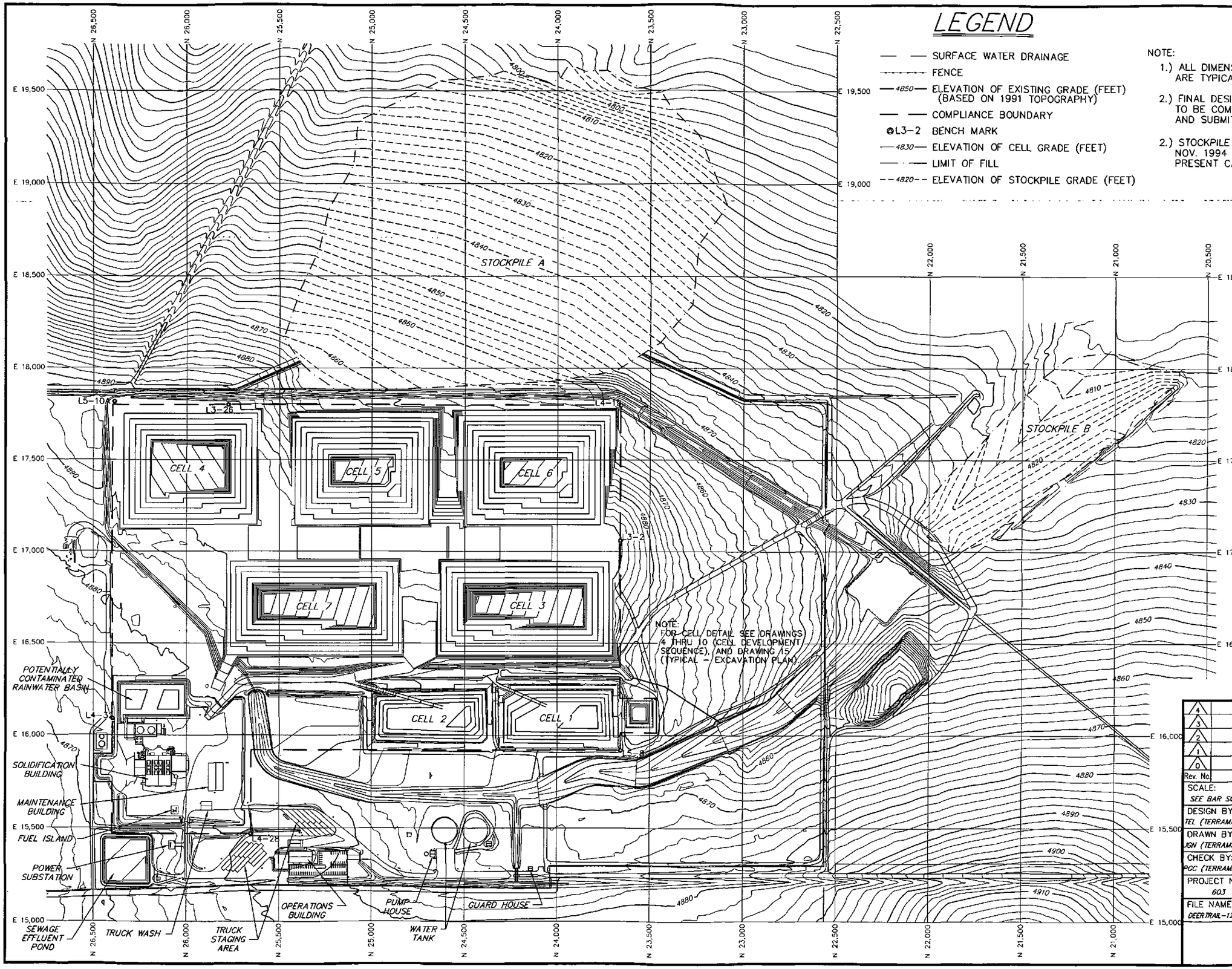
- SURFACE WATER DRAINAGE
- FENCE
- 4850 ELEVATION OF EXISTING GRADE (FEET) (BASED ON 1991 TOPOGRAPHY)
- COMPLIANCE BOUNDARY
- L3-2 BENCH MARK
- 4830 ELEVATION OF CELL GRADE (FEET)
- LIMIT OF FILL
- 4820 ELEVATION OF STOCKPILE GRADE (FEET)

NOTE:

1.) ALL DIMENSIONS, GRADES AND LOCATIONS SHOWN ARE TYPICAL.

2.) FINAL DESIGN DIMENSIONS, GRADES AND LOCATIONS TO BE COMPILED IN CONSTRUCTION DRAWINGS AND SUBMITTED TO CDPHE PRIOR TO CONSTRUCTION.

2.) STOCKPILE CAPACITY TABLE WAS PREPARED ON NOV. 1994 AND MAY NOT ACCURATELY REFLECT PRESENT CAPACITY



STOCKPILE CAPACITY TABLE	
AREA	VOLUME
A	957,700 cy
B	256,900 cy

SCALE

250' 0 250' 500'

CONTOUR INTERVAL 2'

Rev. No.	NOTES	DATE	BY	CHKD
4				
3				
2				
1	REVISED TO SHOW NEW OWNERSHIP	9/04	WDS	FK
0	ISSUED FOR PERMIT MOD. REPORT	11/94	JGN	PGC

SCALE: SEE BAR SCALE

DESIGN BY: TEL (TERRAMATRIX)

DRAWN BY: JGN (TERRAMATRIX)

CHECK BY: PGC (TERRAMATRIX)

PROJECT No. 603

FILE NAME: DEER TRAIL-12.DWG

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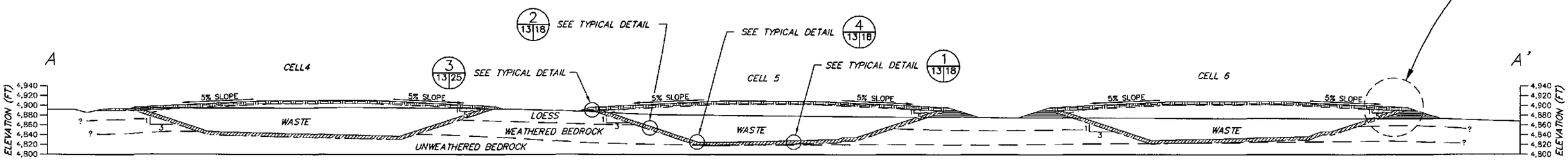
PROJECT: CONCEPTUAL SITE DEVELOPMENT PLAN

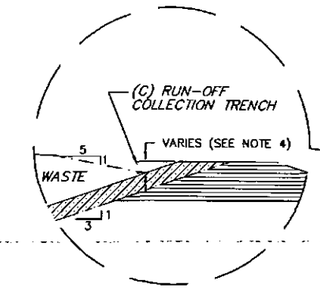
DRAWING TITLE: TYPICAL STOCKPILE LOCATION MAP

SHEET: 1 OF 1

DRAWING No.: 12

REV. 1





TYPICAL (C) RUN-OFF COLLECTION TRENCH PRIOR TO COVER CONSTRUCTION

NOT TO SCALE

NORTH – SOUTH CROSS-SECTION (A 0,1 13)

HORIZONTAL SCALE
0 100' 200'

VERTICAL SCALE
0 100' 200'

LEGEND

- EXISTING GRADE
- TOP OF WASTE
- SUBGRADE
- LINER LAYER
- COVER LAYER
- FILL
- CUT

NOTES:

1.) CONTACT BETWEEN LOESS / WEATHERED BEDROCK AND WEATHERED BEDROCK / UNWEATHERED BEDROCK IS BASED ON ISOPACH MAPS PRODUCED FROM REVIEW OF ALL BORINGS COMPLETED AT THE SITE. ACTUAL LIMITS MAY VARY FROM THOSE SHOWN.

2.) ALL DIMENSIONS, GRADES AND LOCATIONS SHOWN ARE TYPICAL

3.) FINAL DESIGN DIMENSIONS, GRADES AND LOCATIONS TO BE COMPILED IN DESIGN CONSTRUCTION DRAWINGS AND SUBMITTED TO CDPHE PRIOR TO CONSTRUCTION.

4.) DIMENSION VARIES TO MAINTAIN STORAGE CAPACITY OF RUN-OFF FROM 24 HOUR 8.2 INCH RAIN FALL WITH 1-INCH OF FREEBOARD AS REQUIRED BY SECTION I (D)(9)(a) OF PART B PERMIT. CONTAMINATED WATER STORAGE DITCH MAY BE FILLED WITH WASTE AS COVER IS CONSTRUCTED AND DRAINAGE AREA REDUCED.

A 6 6

DETAIL/SECTION NUMBER

DRAWING No. WHERE DETAIL/SECTION IS REFERENCED

DRAWING No. WHERE DETAIL/SECTION IS SHOWN

Rev. No	NOTES	DATE	BY	CHKD
4				
3				
2				
1	REVISED TO SHOW NEW OWNERSHIP	9/04	WDS	FK
0	ISSUED FOR PERMIT MOD. REPORT	11/94	JGN	PGC

SCALE: SEE BAR SCALE

DESIGN BY: TEL (TERRAMATRIX)

DRAWN BY: JGN (TERRAMATRIX)

CHECK BY: PGC (TERRAMATRIX)

PROJECT No. 603

FILE NAME: DEERTRAIL-13.DWG

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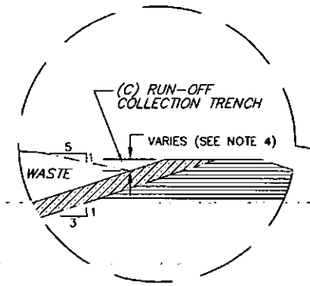
PROJECT: CONCEPTUAL SITE DEVELOPMENT PLAN

DRAWING TITLE: NORTH-SOUTH CROSS-SECTION

SHEET: 1 OF 1

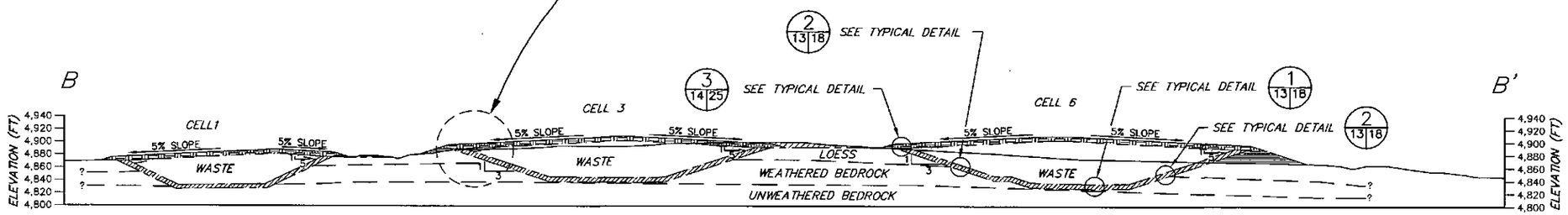
DRAWING No.: 13

REV. 1



TYPICAL (C) RUN-OFF COLLECTION TRENCH PRIOR TO COVER CONSTRUCTION

NOT TO SCALE



EAST – WEST CROSS-SECTION (B / 10,1 14)

HORIZONTAL SCALE
0 100' 200'

VERTICAL SCALE
0 100' 200'

LEGEND

- EXISTING GRADE
- TOP OF WASTE
- SUBGRADE
- LINER LAYER
- COVER LAYER
- FILL
- CUT

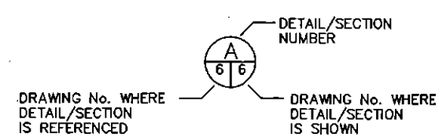
NOTES:

1.) CONTACT BETWEEN LOESS / WEATHERED BEDROCK AND WEATHERED BEDROCK / UNWEATHERED BEDROCK IS BASED ON ISOPACH MAPS PRODUCED FROM REVIEW OF ALL BORINGS COMPLETED AT THE SITE. ACTUAL LIMITS MAY VARY FROM THOSE SHOWN.

2.) ALL DIMENSIONS, GRADES AND LOCATIONS SHOWN ARE TYPICAL

3.) FINAL DESIGN DIMENSIONS, GRADES AND LOCATIONS TO BE COMPILED IN DESIGN CONSTRUCTION DRAWINGS AND SUBMITTED TO CDPHE PRIOR TO CONSTRUCTION.

4.) DIMENSION VARIES TO MAINTAIN STORAGE CAPACITY OF RUN-OFF FROM 24 HOUR 8.2 INCH RAIN FALL WITH 1-INCH OF FREEBOARD AS REQUIRED BY SECTION I (D)(9)(a) OF PART B PERMIT. CONTAMINATED WATER STORAGE DITCH MAY BE FILLED WITH WASTE AS COVER IS CONSTRUCTED AND DRAINAGE AREA REDUCED.



Rev. No	NOTES	DATE	BY	CHKD
4				
3				
2				
1	REVISED TO SHOW NEW OWNERSHIP	9/04	WDS	FK
0	ISSUED FOR PERMIT MOD. REPORT	11/94	JGN	PGC

SCALE: SEE BAR SCALE
DESIGN BY: TEL (TERRAMATRIX)
DRAWN BY: JGN (TERRAMATRIX)
CHECK BY: PGC (TERRAMATRIX)
PROJECT No. 603
FILE NAME: DEERTRAIL-14.DWG

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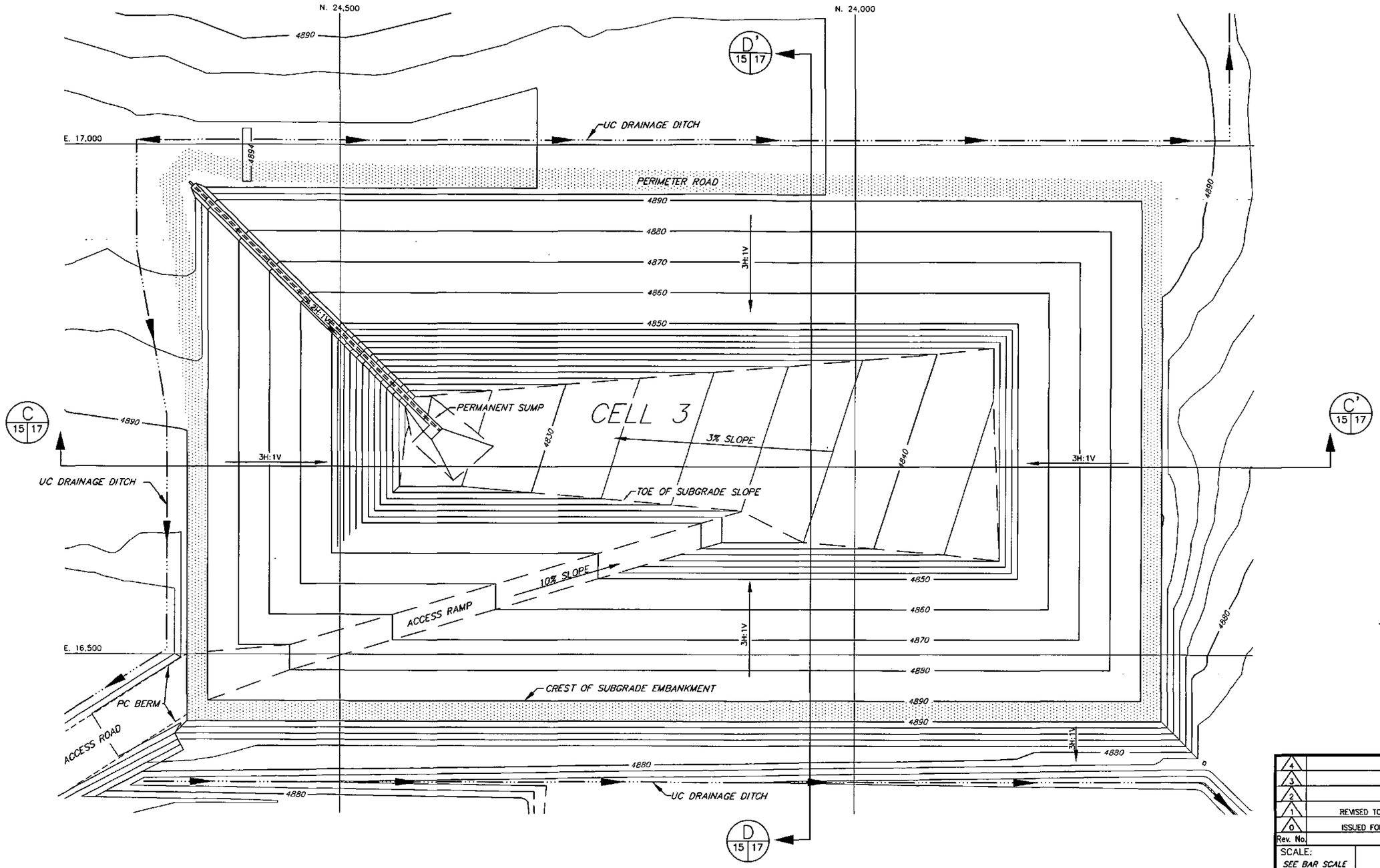
PROJECT: CONCEPTUAL SITE DEVELOPMENT PLAN

DRAWING TITLE: EAST-WEST CROSS-SECTION

SHEET: 1 OF 1
DRAWING No.: 14
REV. 1



SCALE

50' 0 50' 100'

CONTOUR INTERVAL 2'

LEGEND

- —4890— ELEVATION OF CELL GRADE (FEET)
- —4880— ELEVATION OF EXISTING GRADE (FEET)
- PC BERM (POTENTIALLY CONTAMINATED)
- UC DRAINAGE DITCH (UNCONTAMINATED)
- LIMITS OF CONSTRUCTION
- GRADE BREAK

NOTES:

1.) GRADING PLANS INDICATE 90 DEGREE CORNERS. FINAL DESIGN MAY INCORPORATE UNIFORM RADIUS CORNERS.

2.) ALL DIMENSIONS, GRADES AND LOCATIONS SHOWN ARE TYPICAL

3.) FINAL DESIGN DIMENSIONS, GRADES AND LOCATIONS TO BE COMPILED IN DESIGN CONSTRUCTION DRAWINGS AND SUBMITTED TO CDPHE PRIOR TO CONSTRUCTION.

A 6 5

DETAIL/SECTION NUMBER

DRAWING No. WHERE DETAIL/SECTION IS REFERENCED

DRAWING No. WHERE DETAIL/SECTION IS SHOWN

Rev. No.	NOTES	DATE	BY	CHKD
4				
3				
2				
1	REVISED TO SHOW NEW OWNERSHIP	9/04	WDS	FK
0	ISSUED FOR PERMIT MOD. REPORT	11/94	JGN	PGC

SCALE: SEE BAR SCALE

DESIGN BY: TEL (TERRAMATRIX)

DRAWN BY: JGN (TERRAMATRIX)

CHECK BY: PGC (TERRAMATRIX)

PROJECT No. 603

FILE NAME: DEERTRAIL-15.DWG

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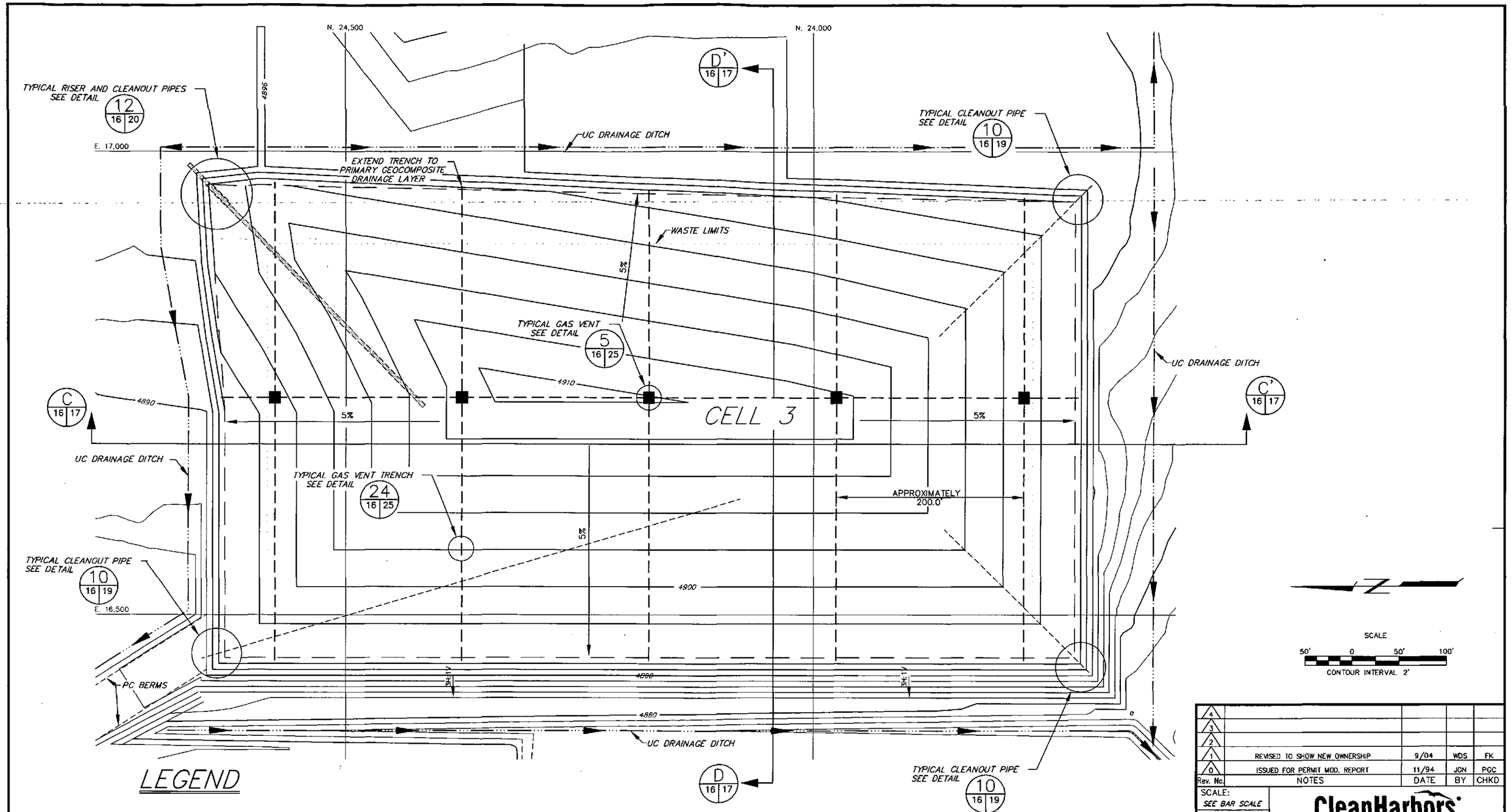
PROJECT: CONCEPTUAL SITE DEVELOPMENT PLAN

DRAWING TITLE: TYPICAL EXCAVATION PLAN

SHEET: 1 OF 1

DRAWING No.: 15

REV. 1



LEGEND

- 4890 — ELEVATION OF CELL GRADE (FEET)
- 4870 — ELEVATION OF COVER GRADE (FEET)
- WASTE LIMIT
- PC BERM (POTENTIALLY CONTAMINATED)
- UC DRAINAGE DITCH (UNCONTAMINATED)
- 4880 — ELEVATION OF EXISTING GRADE (FEET)
- GRADE BREAK LINE
- GAS VENT TRENCH (APPROX. LOCATION)
- GAS VENT (APPROX. LOCATION)

NOTES:

1.) GRADING PLANS INDICATE 90 DEGREE CORNERS. FINAL DESIGN MAY INCORPORATE UNIFORM RADIUS CORNERS.

2.) ALL DIMENSIONS, GRADES AND LOCATIONS SHOWN ARE TYPICAL

3.) FINAL DESIGN DIMENSIONS, GRADES AND LOCATIONS TO BE COMPILED IN DESIGN CONSTRUCTION DRAWINGS AND SUBMITTED TO CDPHE PRIOR TO CONSTRUCTION.

A 6 6 — DETAIL/SECTION NUMBER; DRAWING No. WHERE DETAIL/SECTION IS REFERENCED; DRAWING No. WHERE DETAIL/SECTION IS SHOWN

SCALE
50' 0 50' 100'
CONTOUR INTERVAL 2'

Rev. No.	NOTES	DATE	BY	CHKD
4				
3				
2				
1	REVISED TO SHOW NEW OWNERSHIP	9/04	WDS	FK
0	ISSUED FOR PERMIT MOD. REPORT	11/94	JGN	PGC

SCALE: SEE BAR SCALE
DESIGN BY: TEL (TERRAMATRIX)
DRAWN BY: JGN (TERRAMATRIX)
CHECK BY: PGC (TERRAMATRIX)
PROJECT No. 603
FILE NAME: DEERTRAIL-16A.DWG

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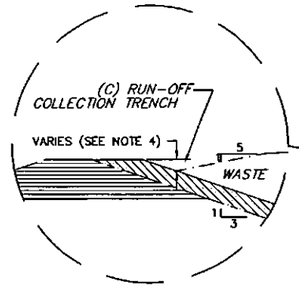
PROJECT: CONCEPTUAL SITE DEVELOPMENT PLAN

DRAWING TITLE: TYPICAL – FILLING PLAN AND DETAILS

SHEET: 1 OF 3
DRAWING No.: 16
REV. 1



TYPICAL (C) RUN-OFF COLLECTION TRENCH PRIOR TO COVER CONSTRUCTION

NOT TO SCALE

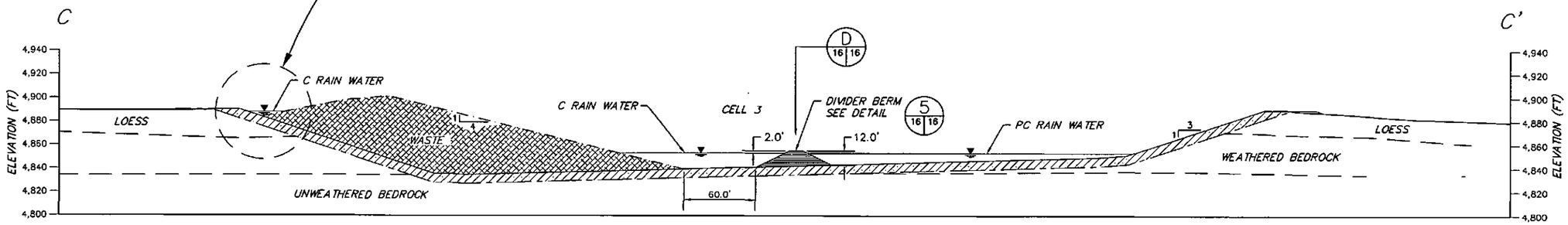
NOTES:

(1) TYPICAL DIVIDER BERM IS SHOWN TO SEGREGATE PC AND C WATER WITHIN ACTIVE CELLS. THE LOCATION OF THE BERM CAN BE VARIED TO MEET OPERATIONAL REQUIREMENTS PROVIDED ADEQUATE STORAGE CAPACITY IS AVAILABLE.

(2) A FILLING PLAN FOR EACH SECURE CELL WILL BE DEVELOPED AS PART OF THE CONSTRUCTION DRAWING PREPARATION. THIS FILLING PLAN WILL INCORPORATE OPERATIONAL REQUIREMENTS, STABILITY CONSTRAINTS AND SURFACE WATER CONTROL FEATURES.

(3) CONTACT BETWEEN LOESS/WEATHERED BEDROCK AND WEATHERED BEDROCK/UNWEATHERED BEDROCK IS BASED ON ISOPACH MAPS PRODUCED FROM REVIEW OF ALL BORINGS COMPLETED AT THE SITE, ACTUAL LIMITS MAY VARY FROM THOSE SHOWN.

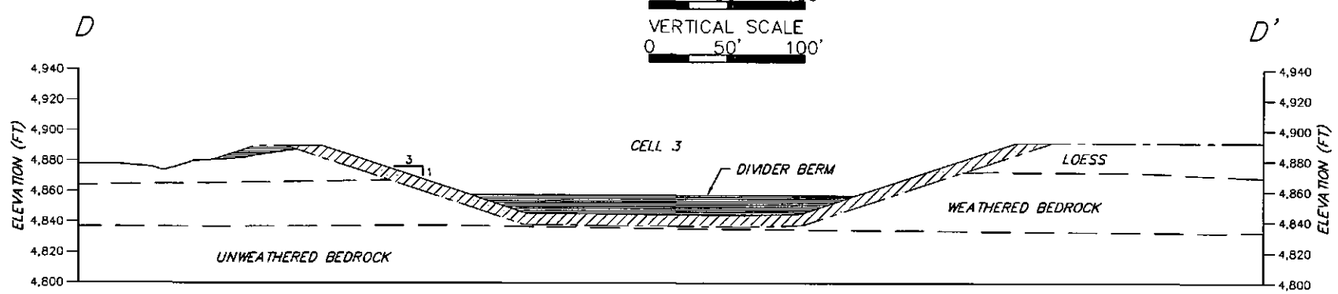
4.) DIMENSION VARIES TO MAINTAIN STORAGE CAPACITY OF RUN-OFF FROM 24 HOUR 8.2 INCH RAIN FALL WITH 1-INCH OF FREEBOARD AS REQUIRED BY SECTION-I (D)(9)(o) OF PART B PERMIT. CONTAMINATED WATER STORAGE DITCH MAY BE FILLED WITH WASTE AS COVER IS CONSTRUCTED AND DRAINAGE AREA REDUCED.



TYPICAL INTERMEDIATE FILLING PLAN CROSS-SECTION WITH DIVIDER BERM (C 16|16)

HORIZONTAL SCALE 0 50' 100'

VERTICAL SCALE 0 50' 100'



TYPICAL INTERMEDIATE FILLING PLAN CROSS-SECTION WITH DIVIDER BERM (D 16|16)

HORIZONTAL SCALE 0 50' 100'

VERTICAL SCALE 0 50' 100'

LEGEND

- EXISTING GRADE
- TOP OF WASTE
- SUBGRADE
- LINER LAYER
- WASTE
- FILL

A 6|6 — DETAIL/SECTION NUMBER; DRAWING No. WHERE DETAIL/SECTION IS REFERENCED; DRAWING No. WHERE DETAIL/SECTION IS SHOWN

Rev. No.	NOTES	DATE	BY	CHKD
4				
3				
2				
1	REVISED TO SHOW NEW OWNERSHIP	9/04	WDS	FK
0	ISSUED FOR PERMIT MOD. REPORT	11/94	JGN	PGC

SCALE: SEE BAR SCALE

DESIGN BY: TEL (TERRAMATRIX)

DRAWN BY: JGN (TERRAMATRIX)

CHECK BY: PGC (TERRAMATRIX)

PROJECT No. 603

FILE NAME: DEERTRAIL-16B.DWG

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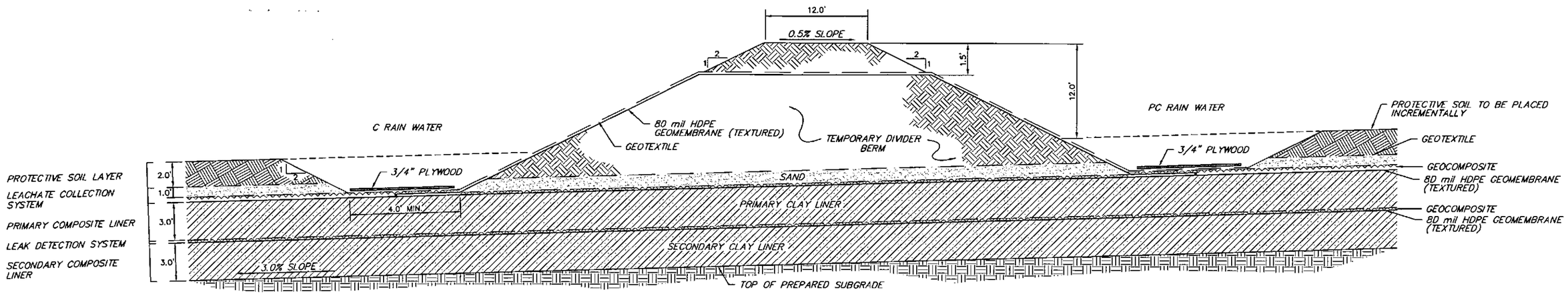
PROJECT: CONCEPTUAL SITE DEVELOPMENT PLAN

DRAWING TITLE: TYPICAL – FILLING PLAN AND DETAILS

SHEET: 2 OF 3

DRAWING No.: 16 REV. 1



TEMPORARY DIVIDER BERM DETAIL

5 (16|16)

NOT TO SCALE

NOTE:

1.) HEIGHT OF TEMPORARY DIVIDER BERM MAY VARY DEPENDING ON LOCATION IN CELL.

2.) BERM AND TEMPORARY LINER SYSTEM WILL BE REMOVED PRIOR TO FILLING.

3.) SEE ADDITIONAL NOTES ON DRAWING 16, SHEET 2 OF 3

A (6|6)

DETAIL/SECTION NUMBER

DRAWING No. WHERE DETAIL/SECTION IS REFERENCED

DRAWING No. WHERE DETAIL/SECTION IS SHOWN

Rev. No.	NOTES	DATE	BY	CHKD
4				
3				
2				
1	REVISED TO SHOW NEW OWNERSHIP	9/04	WDS	FK
0	ISSUED FOR PERMIT MOD. REPORT	11/94	JGN	PGC

SCALE: SEE BAR SCALE

DESIGN BY: TEL (TERRAMATRIX)

DRAWN BY: JGN (TERRAMATRIX)

CHECK BY: PGC (TERRAMATRIX)

PROJECT No. 603

FILE NAME: DEERTRAIL-16C.DWG

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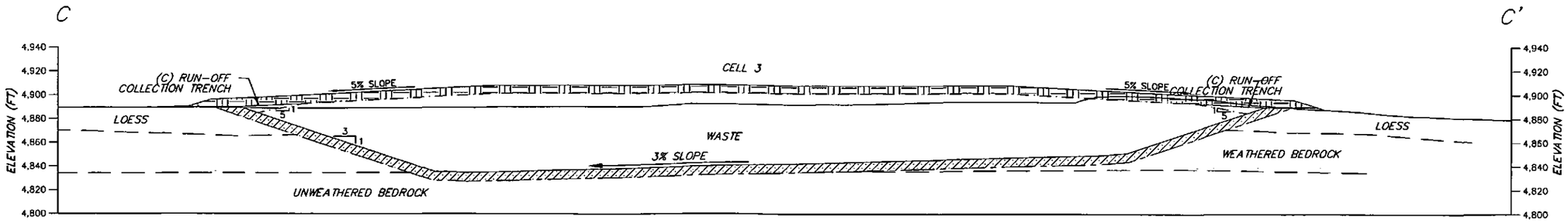
PROJECT: CONCEPTUAL SITE DEVELOPMENT PLAN

DRAWING TITLE: TYPICAL – FILLING PLAN AND DETAILS

SHEET: 3 OF 3

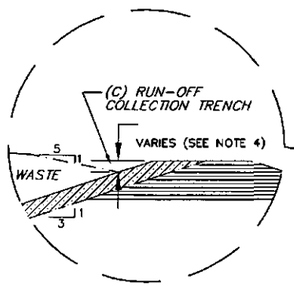
DRAWING No.: 16

REV. 1



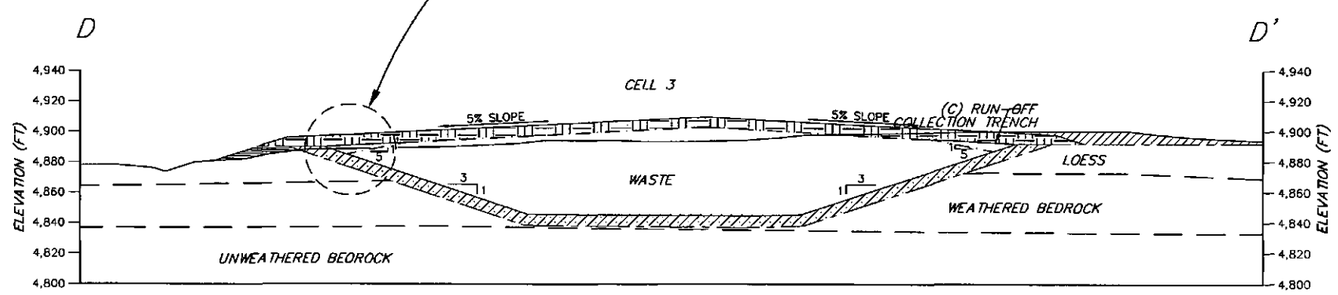
TYPICAL CROSS-SECTION C 10,11,15,18 17

HORIZONTAL SCALE
0 50' 100'
VERTICAL SCALE
0 50' 100'



TYPICAL (C) RUN-OFF COLLECTION TRENCH PRIOR TO COVER CONSTRUCTION

NOT TO SCALE



TYPICAL CROSS-SECTION D 10,11,15,18 17

HORIZONTAL SCALE
0 50' 100'
VERTICAL SCALE
0 50' 100'

LEGEND

- EXISTING GRADE
- TOP OF WASTE
- SUBGRADE
- LINER LAYER
- COVER LAYER
- FILL
- CUT

NOTES:

1.) CONTACT BETWEEN LOESS / WEATHERED BEDROCK AND WEATHERED BEDROCK / UNWEATHERED BEDROCK IS BASED ON ISOPACH MAPS PRODUCED FROM REVIEW OF ALL BORINGS COMPLETED AT THE SITE. ACTUAL LIMITS MAY VARY FROM THOSE SHOWN.

2.) ALL DIMENSIONS, GRADES AND LOCATIONS SHOWN ARE TYPICAL

3.) FINAL DESIGN DIMENSIONS, GRADES AND LOCATIONS TO BE COMPILED IN DESIGN CONSTRUCTION DRAWINGS AND SUBMITTED TO CDPHE PRIOR TO CONSTRUCTION.

4.) DIMENSION VARIES TO MAINTAIN STORAGE CAPACITY OF RUN-OFF FROM 24 HOUR 8.2 INCH RAIN FALL WITH 1-INCH OF FREEBOARD AS REQUIRED BY SECTION I (D)(9)(a) OF PART B PERMIT. CONTAMINATED WATER STORAGE DITCH MAY BE FILLED WITH WASTE AS COVER IS CONSTRUCTED AND DRAINAGE AREA REDUCED.

A 6 6
DETAIL/SECTION NUMBER
DRAWING No. WHERE DETAIL/SECTION IS REFERENCED
DRAWING No. WHERE DETAIL/SECTION IS SHOWN

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3				
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0	ISSUED FOR PERMIT MOD. REPORT	11/94	JGN	PGC

SCALE: SEE BAR SCALE
DESIGN BY: TEL (TERRAMATRIX)
DRAWN BY: JGN (TERRAMATRIX)
CHECK BY: PGC (TERRAMATRIX)
PROJECT No. 603
FILE NAME: DEERTRAIL-17.DWG

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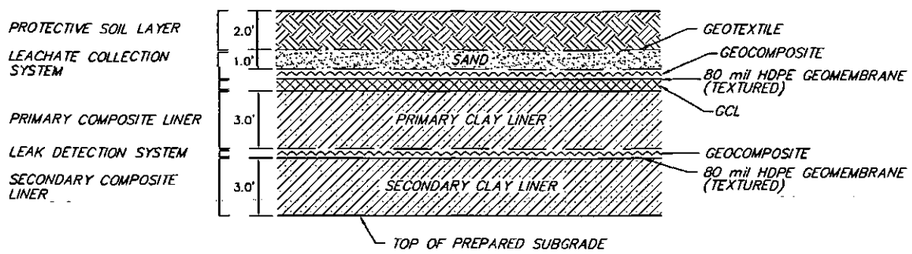
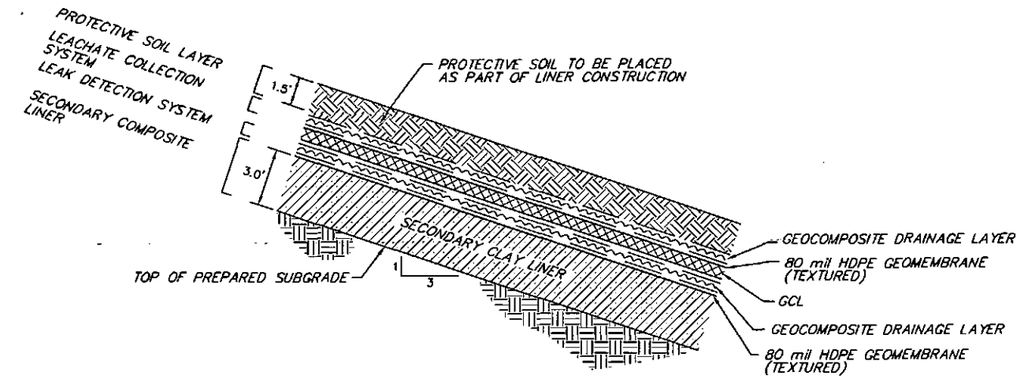
PROJECT: CONCEPTUAL SITE DEVELOPMENT PLAN
DRAWING TITLE: TYPICAL CELL CROSS-SECTION

SHEET: 1 OF 1
DRAWING No.: 17
REV. 1



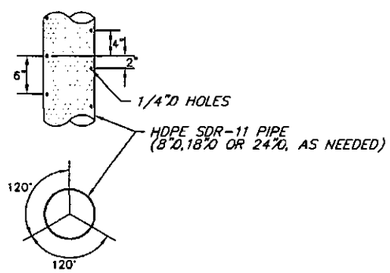
TYPICAL BASE LINING SYSTEM DETAIL (1 / 13 18)

0 4'
SCALE IN FEET



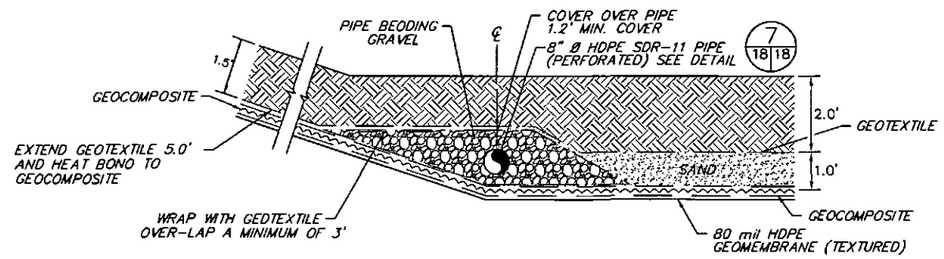
TYPICAL SIDESLOPE LINING SYSTEM DETAIL (2 / 13 18)

0 4'
SCALE IN FEET



TYPICAL PIPE PERFORATION DETAIL (7 / 18 18)

NOT TO SCALE
(SEE NOTE 4)



TYPICAL LEACHATE COLLECTION SYSTEM PIPE OR GEONET FLUSH PIPE AND BEDDING GRAVEL (6 / 18 18)

0 2'
SCALE IN FEET

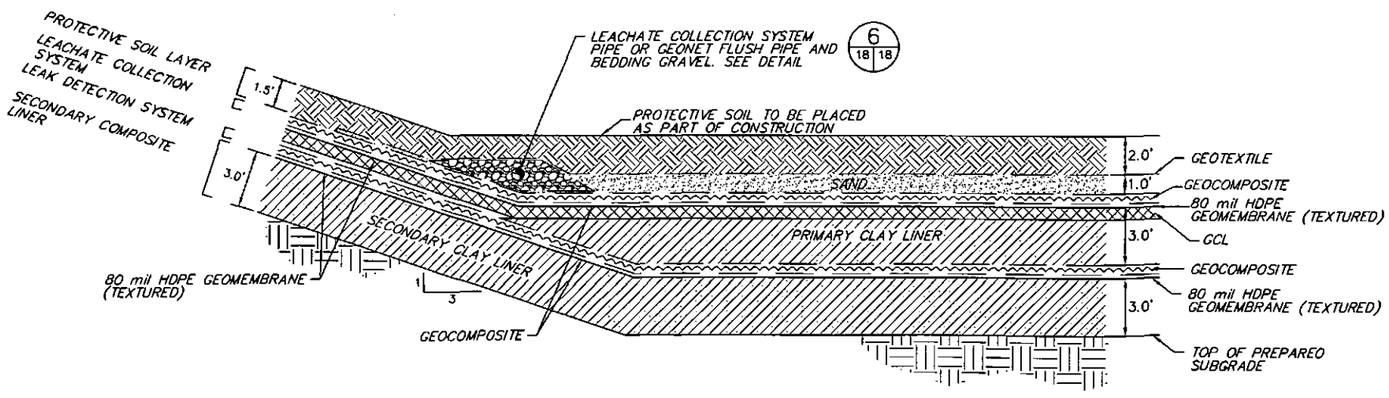
NOTES:

1.) DETAILS ARE SHOWN TO THE SCALE NOTED EXCEPT FOR THE GEOSYNTHETICS; THESE ARE SHOWN AT AN EXAGGERATED SCALE FOR CLARITY.

2.) MATERIAL SPECIFICATIONS ARE PROVIDED IN THE GENERAL SPECIFICATIONS AND THE SUPPLEMENTAL SPECIFICATIONS.

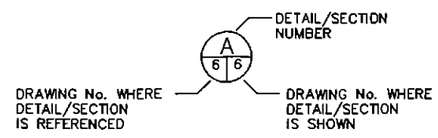
3.) PERFORATIONS SHALL CONSIST OF THREE ROWS OF HOLES 1/4" IN DIAMETER AT 6" CENTERS WITH ALLOWABLE TOLERANCE OF 1/16" ON THE DIAMETER AND 1/4" ON THE SPACING. THE ROWS SHALL BE PARALLEL TO THE AXIS OF THE PIPE AND SET 120 DEGREES PLUS OR MINUS 5 DEGREES APART. THE HOLES OF EACH ROW SHALL BE OFFSET FROM THE HOLES OF THE OTHER ROWS BY 2".

4.) ALL DIMENSIONS ARE TYPICAL (EXCEPT SOIL LINER THICKNESS) AND COULD VARY IN FINAL DESIGN CONSTRUCTION DRAWINGS.



TYPICAL TOE OF SLOPE DETAIL (4 / 13 18)

0 4'
SCALE IN FEET
(SEE NOTE 1,2 AND 3)



Rev. No.	NOTES	DATE	BY	CHKD
4				
3				
2				
1	REVISED TO SHOW NEW OWNERSHIP	9/04	WDS	FK
0	ISSUED FOR PERMIT MOD. REPORT	11/94	JGN	PGC

SCALE: SEE BAR SCALE
DESIGN BY: TEL (TERRAMATRIX)
DRAWN BY: JGN (TERRAMATRIX)
CHECK BY: PGC (TERRAMATRIX)
PROJECT No. 603
FILE NAME: DEERTRAIL-18.DWG

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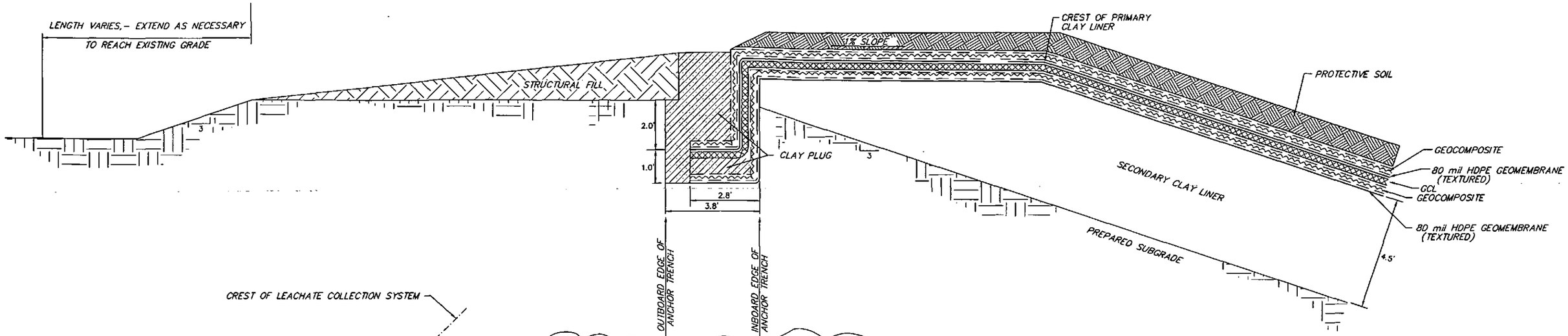
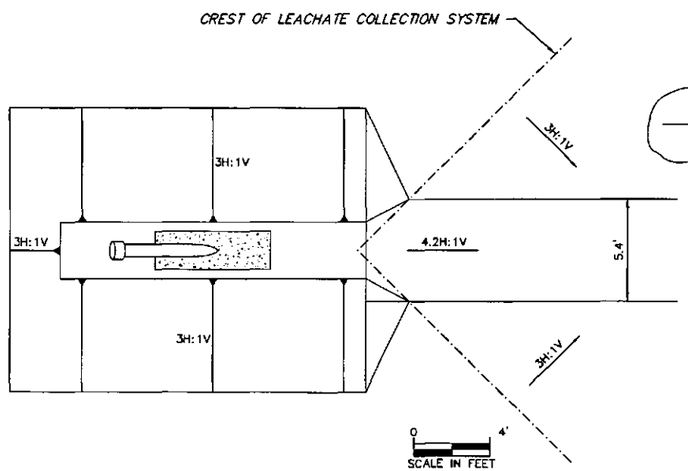
PROJECT: CONCEPTUAL SITE DEVELOPMENT PLAN
DRAWING TITLE: TYPICAL LINER SYSTEM DETAILS

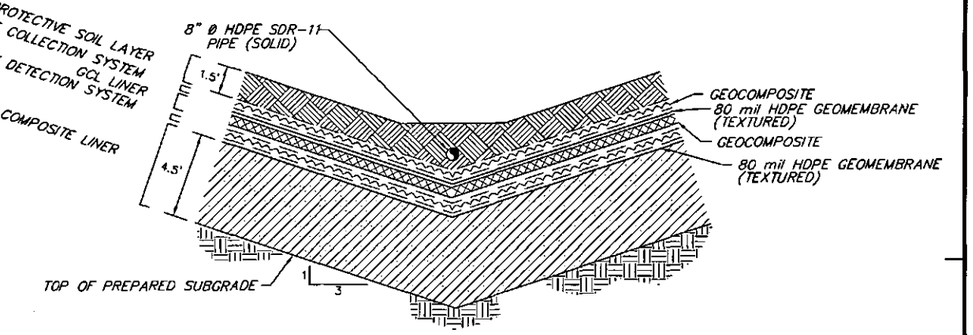
SHEET: 1 OF 1
DRAWING No.: 18
REV. 1



TYPICAL ANCHOR TRENCH DETAIL (8/19)

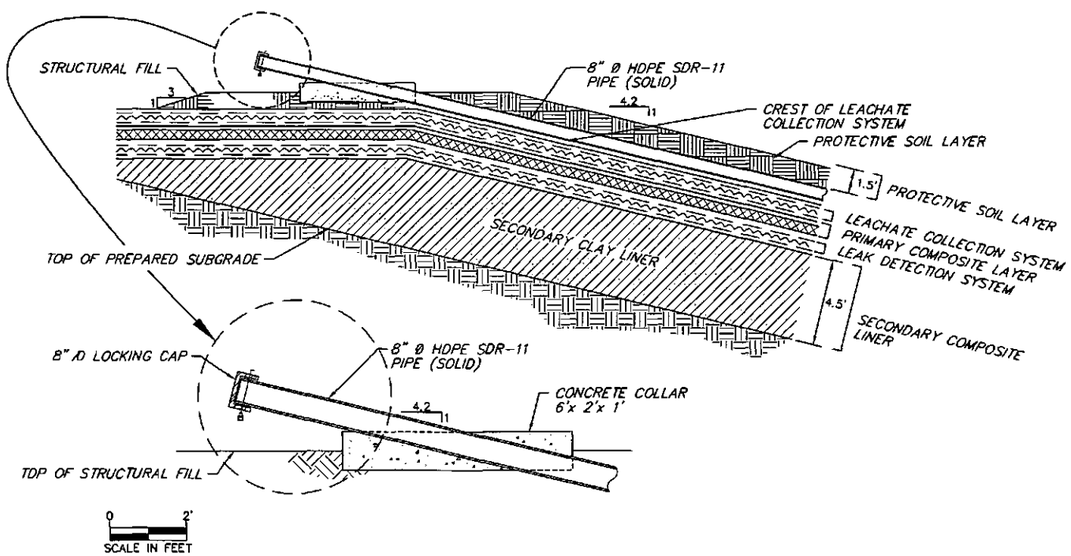
0 2'
SCALE IN FEET
(SEE NOTE 1 AND 2)





TYPICAL CLEANOUT PIPE DETAIL (9/19)

0 4'
SCALE IN FEET
(SEE NOTE 1 AND 2)



TYPICAL CLEANOUT PIPE SUPPORT PLAN, PROFILE, AND DETAIL (10/16 19)

NOTES:

1.) DETAILS ARE SHOWN TO THE SCALE NOTED EXCEPT FOR THE GEOSYNTHETICS; THESE ARE SHOWN AT AN EXAGGERATED SCALE FOR CLARITY.

2.) MATERIAL SPECIFICATIONS ARE PROVIDED IN THE GENERAL SPECIFICATIONS AND THE SUPPLEMENTAL SPECIFICATIONS.

3.) ALL DIMENSIONS ARE TYPICAL (EXCEPT SOIL LINER THICKNESS) AND COULD VARY IN FINAL DESIGN CONSTRUCTION DRAWINGS.

A / 6 6
DETAIL/SECTION NUMBER
DRAWING No. WHERE DETAIL/SECTION IS REFERENCED
DRAWING No. WHERE DETAIL/SECTION IS SHOWN

Rev. No.	NOTES	DATE	BY	CHKD
4				
3				
2	REVISED TO SHOW NEW OWNERSHIP	9/04	WDS	FK
1	ADD GCL & ELIMINATE PRIM. CLAY ON SIDE SLOPES	11/96	KLC	JPP
0	ISSUED FOR PERMIT MOD. REPORT	11/94	JGN	PGC

SCALE: SEE BAR SCALE
DESIGN BY: TEL (TERRAMATRIX)
DRAWN BY: JGN (TERRAMATRIX)
CHECK BY: PGC (TERRAMATRIX)
PROJECT No. 603
FILE NAME: DEERTRAIL-19.DWG

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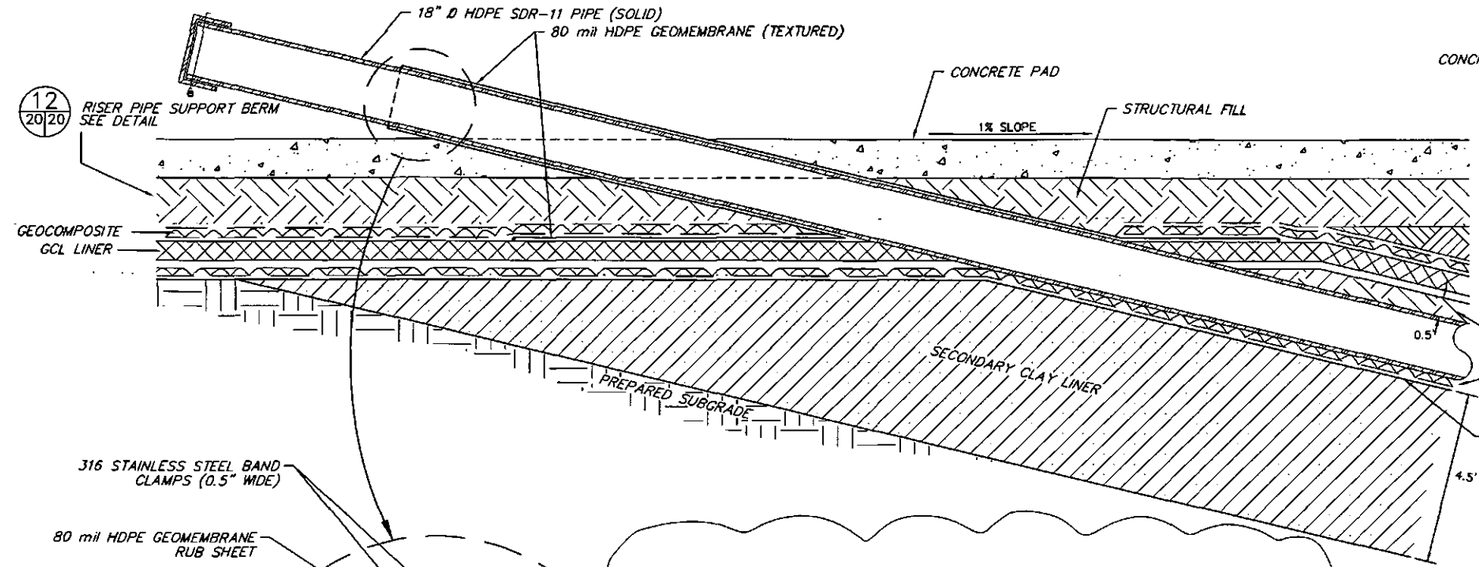
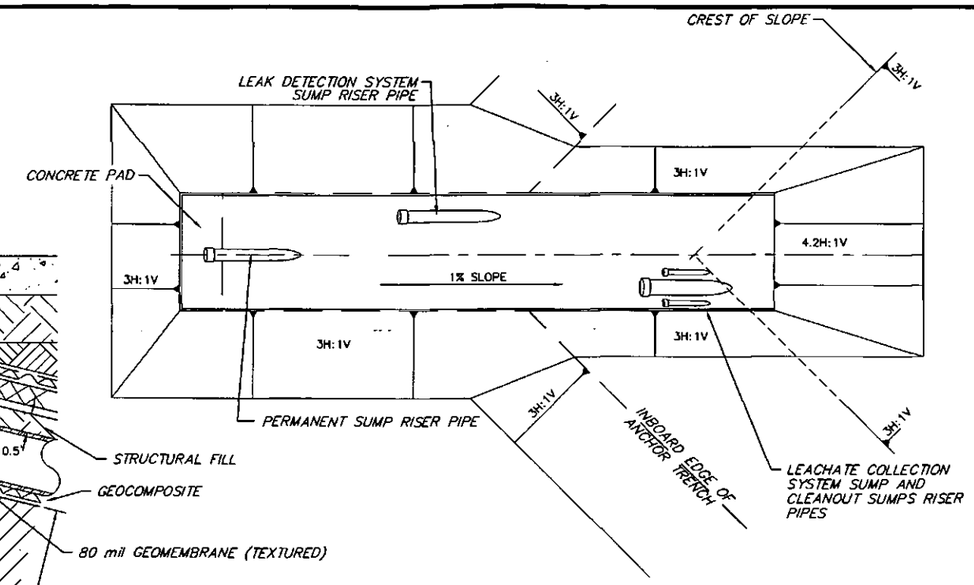
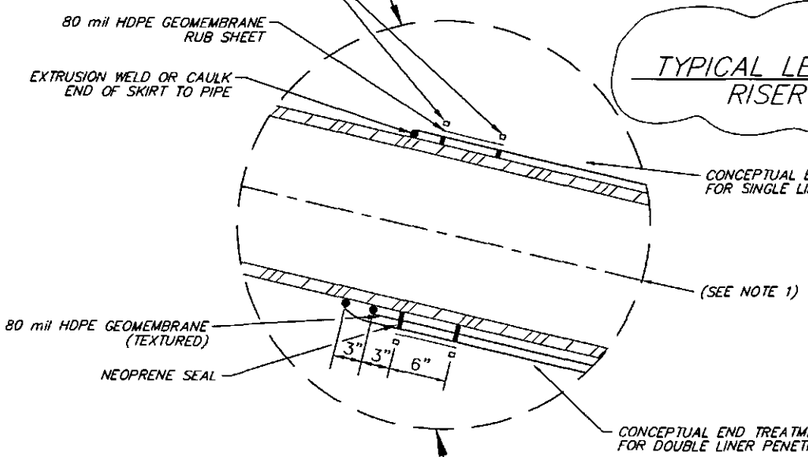
PROJECT: CONCEPTUAL SITE DEVELOPMENT PLAN
DRAWING TITLE: TYPICAL LINER SYSTEM DETAILS

SHEET: 1 OF 1
DRAWING No.: 19
REV. 2





TYPICAL LEAK DETECTION SYSTEM SUMP RISER PIPE LINER PENETRATION (11 20 20)



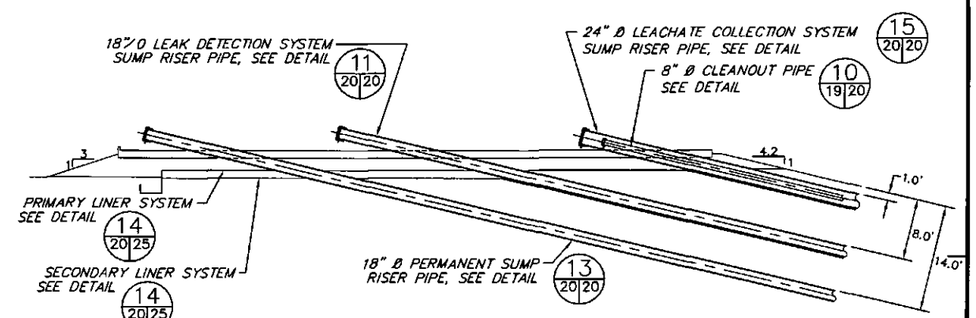
0 2'
SCALE IN FEET

NOTES:

1.) ACTUAL LINER END TREATMENT DETAILS SHALL BE DESIGNED BY GEOMEMBRANE INSTALLER AND SUBMITTED ON SHOP DRAWINGS.

2.) DETAILS ARE SHOWN TO THE SCALE NOTED EXCEPT FOR THE GEOSYNTHETICS: THESE ARE SHOWN AT AN EXAGGERATED SCALE FOR CLARITY.

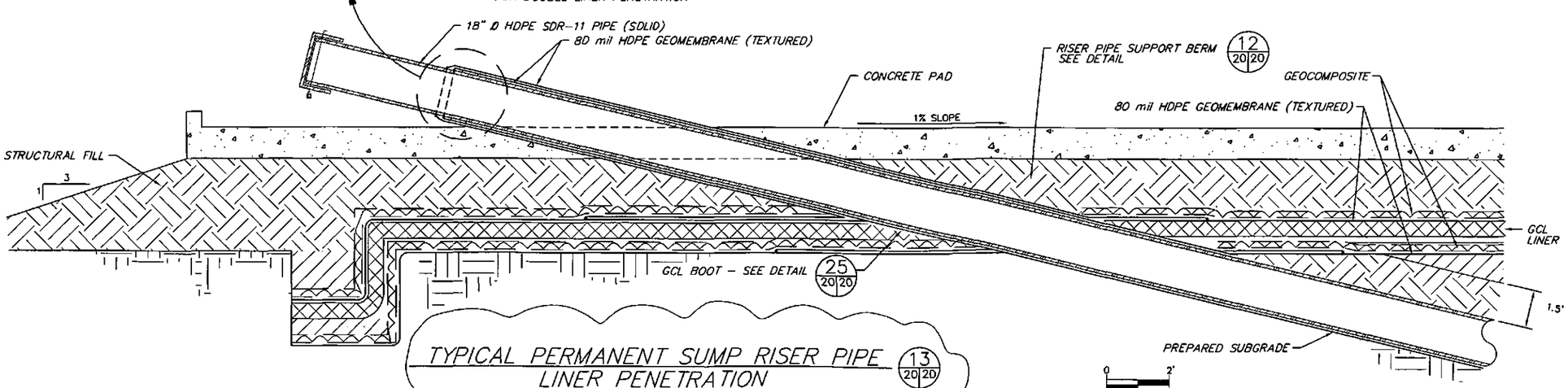
3.) ALL DIMENSIONS ARE TYPICAL (EXCEPT SOIL LINER THICKNESS) AND COULD VARY IN FINAL DESIGN CONSTRUCTION DRAWINGS.



TYPICAL PLAN AND PROFILE RISER AND CLEANOUT PIPE SUPPORT BERM (12 16 20)

0 10'
SCALE IN FEET

A 6 6
DETAIL/SECTION NUMBER
DRAWING No. WHERE DETAIL/SECTION IS REFERENCED
DRAWING No. WHERE DETAIL/SECTION IS SHOWN



TYPICAL PERMANENT SUMP RISER PIPE LINER PENETRATION (13 20 20)

0 2'
SCALE IN FEET

Rev. No.	NOTES	DATE	BY	CHKD
4				
3				
2				
1	REVISED TO SHOW NEW OWNERSHIP	9/04	WDS	FK
0	ISSUED FOR PERMIT MOD. REPORT	11/94	JGN	PGC

SCALE: SEE BAR SCALE
DESIGN BY: TEL (TERRAMATRIX)
DRAWN BY: JGN (TERRAMATRIX)
CHECK BY: PGC (TERRAMATRIX)
PROJECT No. 603
FILE NAME: DEERTRAIL-20A.DWG

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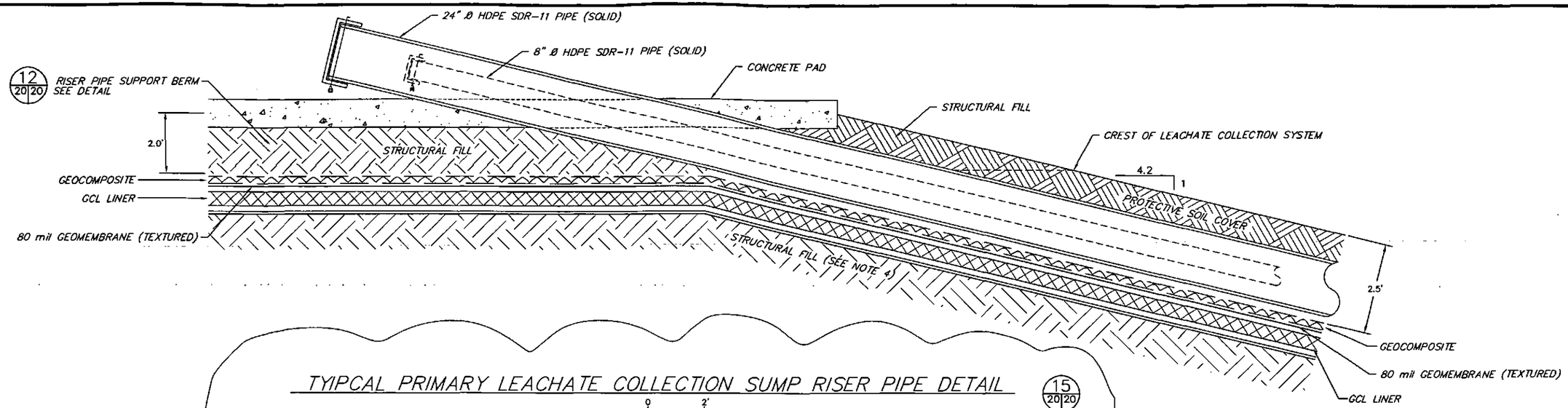
PROJECT: CONCEPTUAL SITE DEVELOPMENT PLAN

DRAWING TITLE: TYPICAL - SUMP DETAILS AND CROSS-SECTIONS

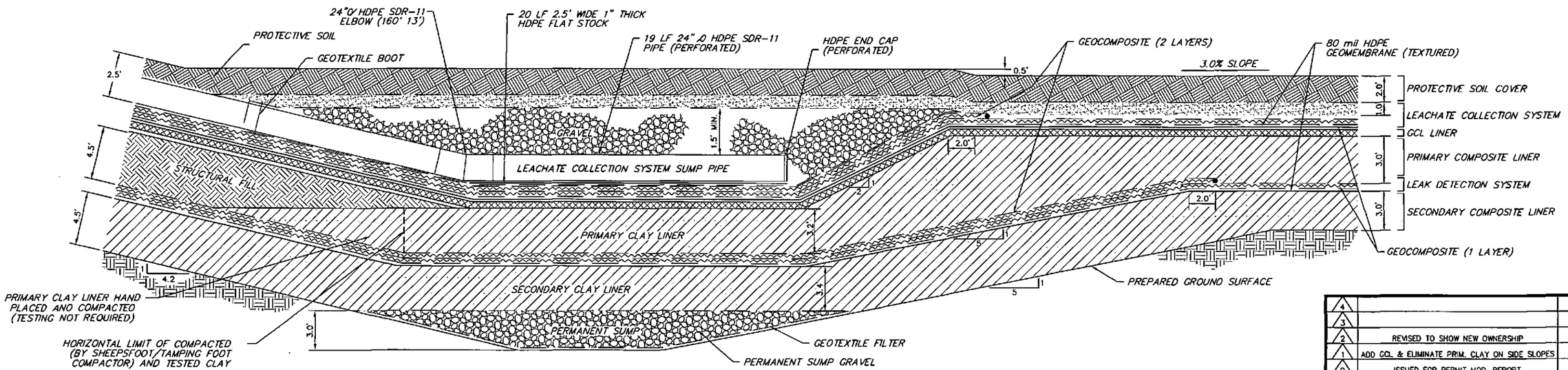
SHEET: 1 OF 4
DRAWING No.: 20
REV. 1



TYIPCAL PRIMARY LEACHATE COLLECTION SUMP RISER PIPE DETAIL

15
20 20

0 2'
SCALE IN FEET



TYPICAL LEACHATE COLLECTION SUMP SECTION

E
20 20

0 4'
SCALE IN FEET

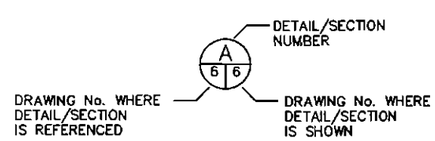
NOTES:

1.) DETAILS ARE SHOWN TO THE SCALE NOTED EXCEPT FOR THE GEOSYNTHETICS; THESE ARE SHOWN AT AN EXAGGERATED SCALE FOR CLARITY.

2.) LOWER LINER COMPONENTS NOT SHOWN.

3.) ALL DIMENSIONS ARE TYPICAL (EXCEPT SOIL LINER THICKNESS) AND COULD VARY IN FINAL DESIGN CONSTRUCTION DRAWINGS.

4.) SECTIONS CUT ALONG SIDE SLOPE RISER PIPE TRENCH, THEREFORE, STRUCTURAL FILL BACKFILL FOR PIPES IS SHOWN BELOW PRIMARY AND SECONDARY CLAY LINERS.



Rev. No.	NOTES	DATE	BY	CHKD
4				
3				
2	REVISED TO SHOW NEW OWNERSHIP	9/04	WDS	FK
1	ADD GCL & ELIMINATE PRIM. CLAY ON SIDE SLOPES	11/96	KLC	JPP
0	ISSUED FOR PERMIT MOD. REPORT	11/94	JGN	PGC

SCALE: SEE BAR SCALE

DESIGN BY: TEL (TERRAMATRIX)

DRAWN BY: JGN (TERRAMATRIX)

CHECK BY: PGC (TERRAMATRIX)

PROJECT No. 603

FILE NAME: DEERTRAIL-20B.DWG

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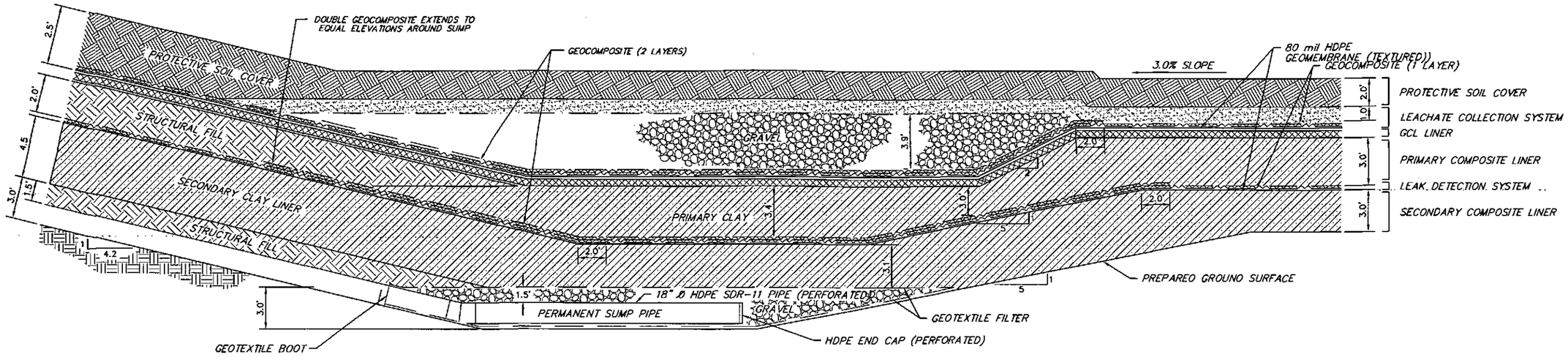
PROJECT: CONCEPTUAL SITE DEVELOPMENT PLAN

DRAWING TITLE: TYPICAL – SUMP DETAILS AND CROSS-SECTIONS

SHEET: 2 OF 4

DRAWING No.: 20

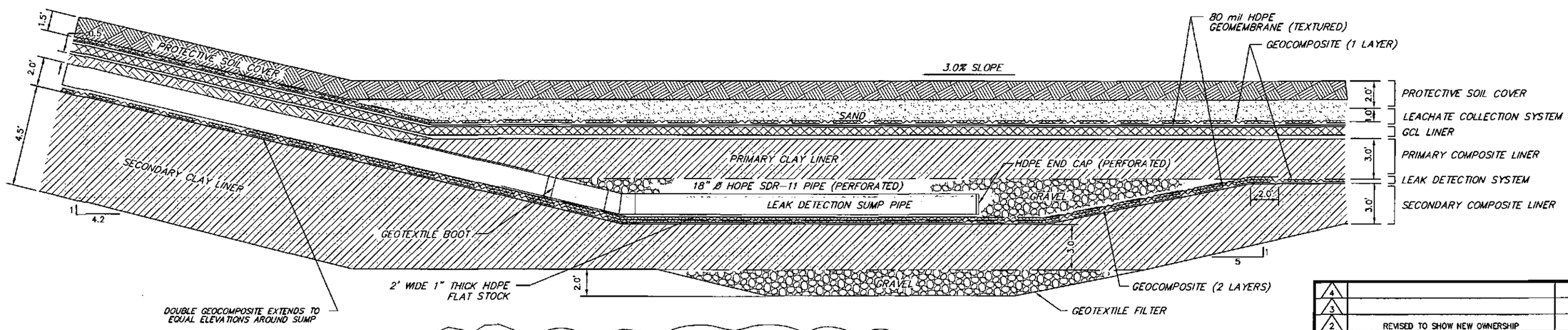
REV. 2



TYPICAL PERMANENT SUMP SECTION

F/20

NOT TO SCALE



TYPICAL LEAK DETECTION SUMP SECTION

G/20

NOT TO SCALE

NOTES:

1.) DETAILS ARE SHOWN TO THE SCALE NOTED EXCEPT FOR THE GEOSYNTHETICS; THESE ARE SHOWN AT AN EXAGGERATED SCALE FOR CLARITY.

2.) ALL DIMENSIONS ARE TYPICAL (EXCEPT SOIL LINER THICKNESS) AND COULD VARY IN FINAL DESIGN CONSTRUCTION DRAWINGS.

A / 6 6

DETAIL/SECTION NUMBER

DRAWING No. WHERE DETAIL/SECTION IS REFERENCED

DRAWING No. WHERE DETAIL/SECTION IS SHOWN

Rev. No.	NOTES	DATE	BY	CHKD
4				
3				
2	REVISED TO SHOW NEW OWNERSHIP	9/04	WDS	FK
1	ADD GCL & ELIMINATE PRIM. CLAY ON SIDE SLOPES	11/96	KLC	JPP
0	ISSUED FOR PERMIT MOD. REPORT	11/94	JGN	PGC

SCALE: SEE BAR SCALE

DESIGN BY: TEL (TERRAMATRIX)

DRAWN BY: JGN (TERRAMATRIX)

CHECK BY: PGC (TERRAMATRIX)

PROJECT No. 603

FILE NAME: DEERTRAIL-20C.DWG

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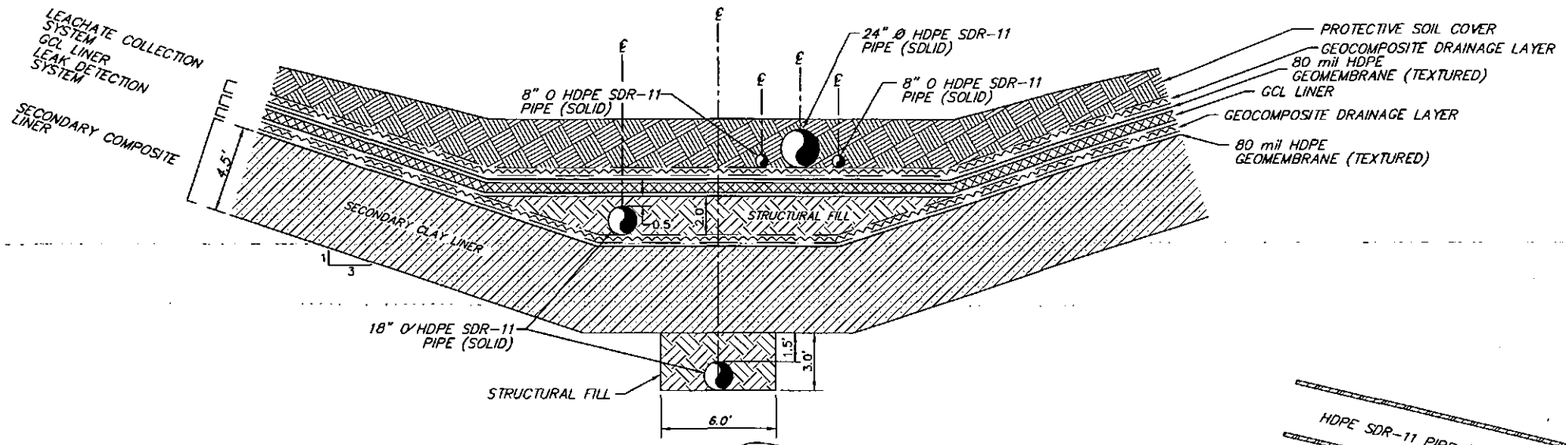
PROJECT: CONCEPTUAL SITE DEVELOPMENT PLAN

DRAWING TITLE: TYPICAL – SUMP DETAILS AND CROSS-SECTIONS

SHEET: 3 OF 4

DRAWING No.: 20

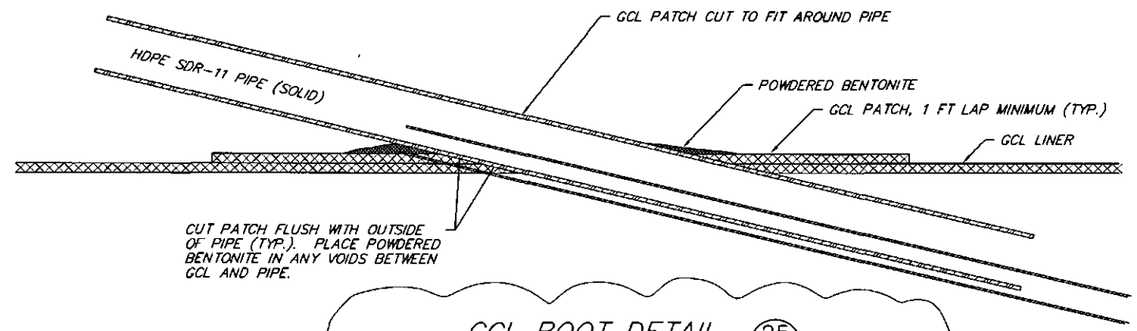
REV. 2



TYPICAL RISER PIPES SECTION ON SIDE SLOPE

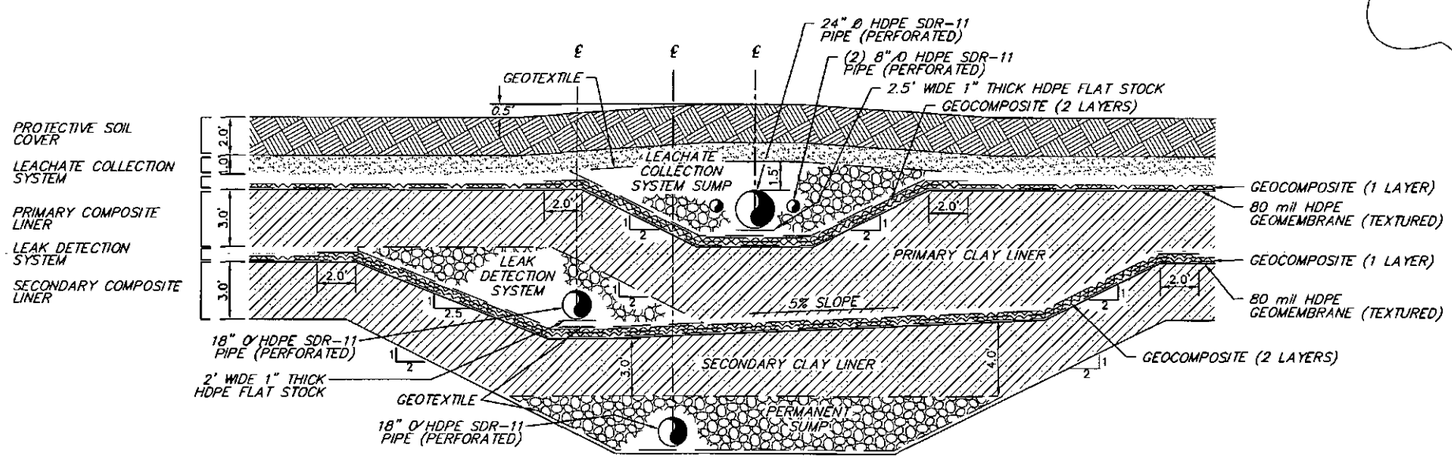
H / 20

0 4'
SCALE IN FEET



GCL BOOT DETAIL N.T.S.

25 / 20 20



TYPICAL SUMPS SECTION ON BASE OF CELL

1 / 20

0 4'
SCALE IN FEET

NOTES:

1.) DETAILS ARE SHOWN TO THE SCALE NOTED EXCEPT FOR THE GEOSYNTHETICS; THESE ARE SHOWN AT AN EXAGGERATED SCALE FOR CLARITY.

2.) ALL DIMENSIONS ARE TYPICAL (EXCEPT SOIL LINER THICKNESS) AND COULD VARY IN FINAL DESIGN CONSTRUCTION DRAWINGS.

A / 6 6

DETAIL/SECTION NUMBER

DRAWING No. WHERE DETAIL/SECTION IS REFERENCED

DRAWING No. WHERE DETAIL/SECTION IS SHOWN

Rev. No.	NOTES	DATE	BY	CHKD
4				
3				
2	REVISED TO SHOW NEW OWNERSHIP	9/04	WDS	FK
1	ADD GCL TO LINER SYSTEM	11/96	TWS	PGC
0	ISSUED FOR PERMIT MOD. REPORT	11/94	JGN	PGC

SCALE: SEE BAR SCALE

DESIGN BY: TEL (TERRAMATRIX)

DRAWN BY: JGN (TERRAMATRIX)

CHECK BY: PGC (TERRAMATRIX)

PROJECT No. 603

FILE NAME: DEERTRAIL-200.DWG

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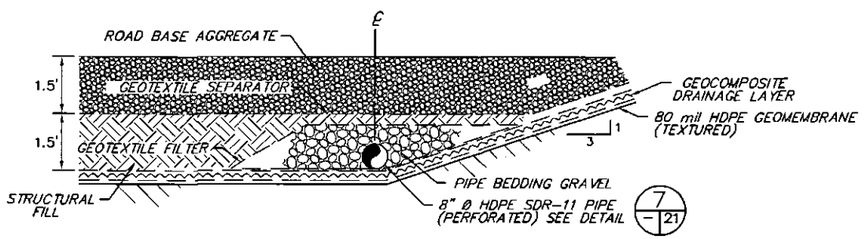
PROJECT: CONCEPTUAL SITE DEVELOPMENT PLAN

DRAWING TITLE: TYPICAL – SUMP DETAILS AND CROSS-SECTIONS

SHEET: 4 OF 4

DRAWING No.: 20

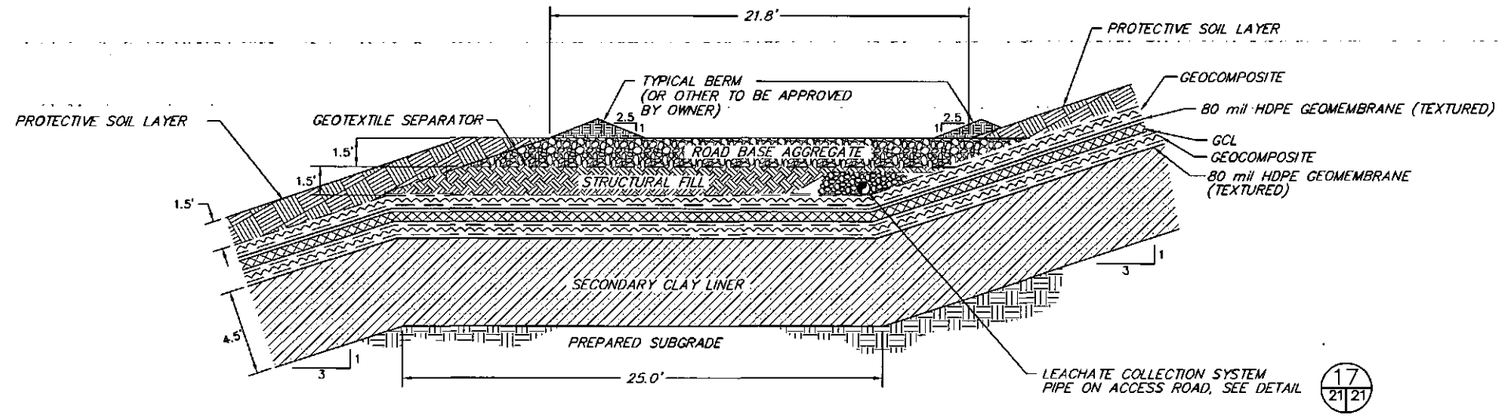
REV. 2



TYPICAL LEACHATE COLLECTION SYSTEM PIPE ON ACCESS ROAD DETAIL

17 / 21 21

0 2'
SCALE IN FEET



TYPICAL ACCESS RAMP DETAIL

16 / 21

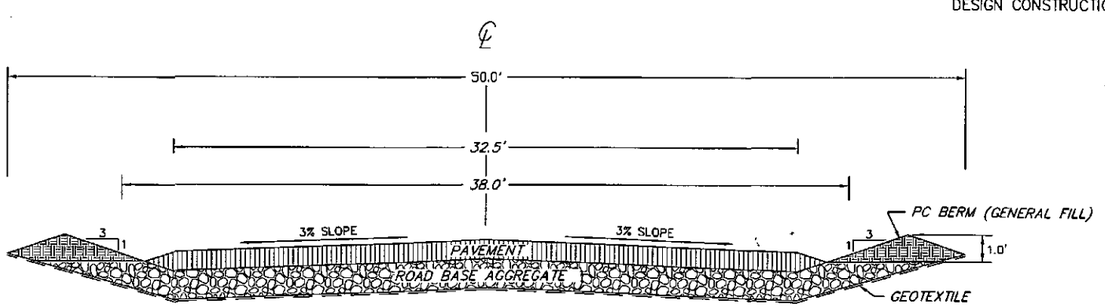
0 4'
SCALE IN FEET
(SEE NOTE 1, 2, AND 3)

NOTES:

1.) DETAILS ARE SHOWN TO THE SCALE NOTED EXCEPT FOR THE GEOSYNTHETICS; THESE ARE SHOWN AT AN EXAGGERATED SCALE FOR CLARITY.

2.) MATERIAL SPECIFICATIONS ARE PROVIDED IN THE GENERAL SPECIFICATIONS AND THE SUPPLEMENTAL SPECIFICATIONS.

3.) ALL DIMENSIONS ARE TYPICAL (EXCEPT SOIL LINER THICKNESS) AND COULD VARY IN FINAL DESIGN CONSTRUCTION DRAWINGS.



TYPICAL HAUL ROAD CROSS SECTION

J / 21 21

NOT TO SCALE

DETAIL/SECTION NUMBER

A / 6 6

DRAWING No. WHERE DETAIL/SECTION IS REFERENCED

DRAWING No. WHERE DETAIL/SECTION IS SHOWN

Rev. No.	NOTES	DATE	BY	CHKD
4				
3				
2	REVISED TO SHOW NEW OWNERSHIP	9/04	WDS	FK
1	ADD GCL & ELIMINATE PRIM. CLAY ON SIDE SLOPES	11/96	KLC	JPP
0	ISSUED FOR PERMIT MOD. REPORT	11/94	JGN	PGC

SCALE: SEE BAR SCALE

DESIGN BY: TEL (TERRAMATRIX)

DRAWN BY: JGN (TERRAMATRIX)

CHECK BY: PGC (TERRAMATRIX)

PROJECT No. 603

FILE NAME: DEERTRAIL-21.DWG

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PROJECT: CONCEPTUAL SITE DEVELOPMENT PLAN

DRAWING TITLE: TYPICAL ACCESS RAMP DETAILS

SHEET: 1 OF 1

DRAWING No.: 21

REV. 2

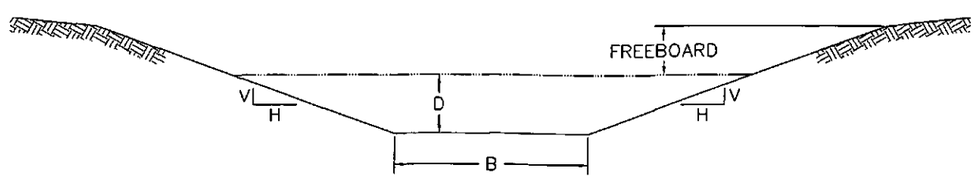
PERMANENT UC STORMWATER CHANNEL DESIGN ANALYSIS

CHANNEL	TRIBUTARY AREA (acres)	TRIBUTARY CHANNEL	TOTAL TRIBUTARY AREA (acres)	8.2" EVENT DESIGN FLOW (cfs)	BOTTOM SLOPE (%)	SHAPE	BOTTOM WIDTH B (ft.)	SIDE SLOPE H:V	FLOW VELOCITY n=0.035 (fps)	FLOW DEPTH n=0.06 (ft.)	ACTUAL DESIGN CHANNEL DEPTH (ft.)	FREEBOARD n=0.06 (ft.)	FROUDE NUMBER n=0.035
UC-1A *	3.5	---	3.5	28	1.10	VEE	---	4:1	3.5	1.7	4.1	2.4	.73 (Subcritical)
UC-1B *	6.4	UC-1,17	16.0	95	0.50	VEE	---	4:1	3.5	3.2	4.1	0.9	.54 (Subcritical)
UC-2 *	18.2	UC-1B,12	45.3	247	0.50	VEE	---	4:1	4.5	4.6	4.7	0.9	.58 (Subcritical)
UC-3 *	13.9	---	13.9	72	0.75	VEE	---	4:1	3.8	2.7	3.7	1.0	.64 (Subcritical)
UC-4 *	34.5	---	34.5	155	0.75	VEE	---	4:1	4.6	3.6	4.6	1.0	.68 (Subcritical)
UC-5 *	2.1	UC-3,4	50.5	220	0.80	VEE	---	5:1	4.9	3.7	4.7	1.0	.64 (Subcritical)
UC-6 *	24.0	UC-2,5,19	123.0	401	1.00	VEE	---	16:1	4.7	2.8	4.3	1.5	.77 (Subcritical)
UC-7 *	38.8	UC-6,20,14	175.8	621	0.76	VEE	---	16:1	4.7	3.5	4.8	1.3	.69 (Subcritical)
UC-8 *	4.7	---	4.7	37	1.20	VEE	---	4:1	3.9	1.9	3.3	1.7	.65 (Subcritical)
UC-9A *	5.2	UC-8,15B	21.8	121	0.70	VEE	---	4:1	4.2	3.3	4.6	1.3	.77 (Subcritical)
UC-9B *	5.6	UC-9A,18	34.8	156	0.70	VEE	---	4:1	4.5	3.6	4.8	1.2	.64 (Subcritical)
UC-10 *	15.0	UC-9B,16B	62.3	204	0.50	TRAPEZOID	12	4:1	4.1	3.1	3.4	0.3	.57 (Subcritical)
UC-11	5.1	---	5.1	35	2.20	VEE	---	7.5	4.1	1.3	1.6	0.3	.98 (Subcritical)
UC-12 *	6.0	UC-11	11.1	64	0.40	VEE	---	4:1	2.9	2.9	3.1	0.3	.48 (Subcritical)
UC-13	2.5	---	2.5	20	2.20	VEE	---	4:1	4.1	1.4	1.7	0.2	.58 (Subcritical)
UC-14 *	9.3	UC-13	11.8	80	0.60	VEE	---	4:1	3.6	2.9	3.4	0.5	.48 (Subcritical)
UC-15A	4.5	---	4.5	35	0.70	VEE	---	4:1	3.1	2.1	2.4	0.3	.99 (Subcritical)
UC-15B	7.4	UC-15A	11.9	84	2.00	VEE	---	9:1	4.7	1.7	2.0	0.3	.60 (Subcritical)
UC-16A	9.6	---	9.6	68	0.50	VEE	---	4:1	3.2	2.8	3.1	0.3	.53 (Subcritical)
UC-16B	2.9	UC-16A	12.5	81	1.80	VEE	---	6:1	4.9	2.0	2.3	0.3	.96 (Subcritical)
UC-17	6.1	---	6.1	46	1.40	VEE	---	4:1	4.3	2.0	2.3	0.3	.84 (Subcritical)
UC-18	7.4	---	7.4	57	2.00	VEE	---	6:1	4.7	1.7	2.0	0.3	.58 (Subcritical)
UC-19	3.2	---	3.2	25	0.70	VEE	---	4:1	2.9	1.8	2.1	0.3	.58 (Subcritical)
UC-20	2.2	---	2.2	18	2.10	VEE	---	4:1	4.0	1.3	1.6	0.3	.96 (Subcritical)

TEMPORARY PC STORMWATER CHANNEL DESIGN ANALYSIS

CHANNEL	TRIBUTARY AREA (acres)	TRIBUTARY CHANNEL	TOTAL TRIBUTARY AREA (acres)	8.2" EVENT DESIGN FLOW (cfs)	BOTTOM SLOPE (%)	SHAPE	BOTTOM WIDTH B (ft)	SIDE SLOPE H:V	FLOW VELOCITY n=0.035 (fps)	FLOW DEPTH n=0.06 (ft)	ACTUAL DESIGN CHANNEL DEPTH (ft)	FREEBOARD n=0.06 (ft.)	FROUDE NUMBER n=0.035
PC-1 *	5.6	PC 1.1	9.5	68	0.20	TRAP.	12	3:1	2.3	2.3	3.5	1.2	.35 (Subcritical)
PC-1.1 *	3.9	---	3.9	33	0.50	VEE	---	3:1	2.9	2.4	3.0	0.6	.51 (Subcritical)
PC-2 *	1.3	HAUL RD B	2.4	18	0.50	VEE	---	3:1	2.5	1.9	2.3	0.4	.49 (Subcritical)
PC-3 *	1.6	---	1.6	15	0.4	VEE	---	3:1	2.2	1.9	2.3	0.4	.44 (Subcritical)
PC-4 *	0.3	PC-3	1.8	17	1.80	VEE	---	3:1	3.9	1.5	1.9	0.4	.89 (Subcritical)
HAUL ROAD A	1.3	---	1.3	10	1.1	VEE	---	3:1 / 33.3:1	3.0 **	0.5 **	1.0	0.5	.86 (Subcritical)
HAUL ROAD B	1.3	---	1.1	9	1.0	VEE	---	3:1 / 33/3:1	3.0 **	0.5 **	1.0	0.5	.82 (Subcritical)

NOTE:
* EXISTING STRUCTURE
** Mannings N = 0.025



TYPICAL CHANNEL SECTION
NOT TO SCALE

Rev. No.	NOTES	DATE	BY	CHKD
4				
3				
2	REVISED TO SHOW NEW OWNERSHIP	9/04	WDS	FK
1	REVISED DITCH 16B	7/95	JGN	TEL
0	ISSUED FOR PERMIT MOD. REPORT	11/94	JGN	PGC

SCALE: SEE BAR SCALE
DESIGN BY: TEL (TERRAMATRIX)
DRAWN BY: JGN (TERRAMATRIX)
CHECK BY: PGC (TERRAMATRIX)
PROJECT No. 603
FILE NAME: DEERTRAIL-22A.DWG

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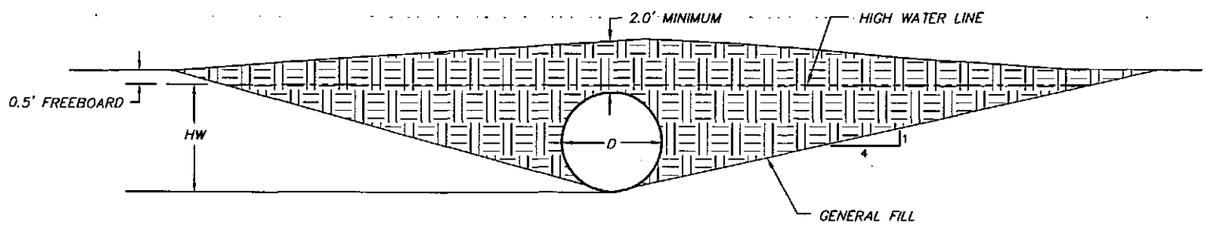
PROJECT: CONCEPTUAL SITE DEVELOPMENT PLAN
DRAWING TITLE: *TYPICAL - SURFACE WATER DETAILS*

SHEET: 1 OF 2
DRAWING No.: 22
REV. 2

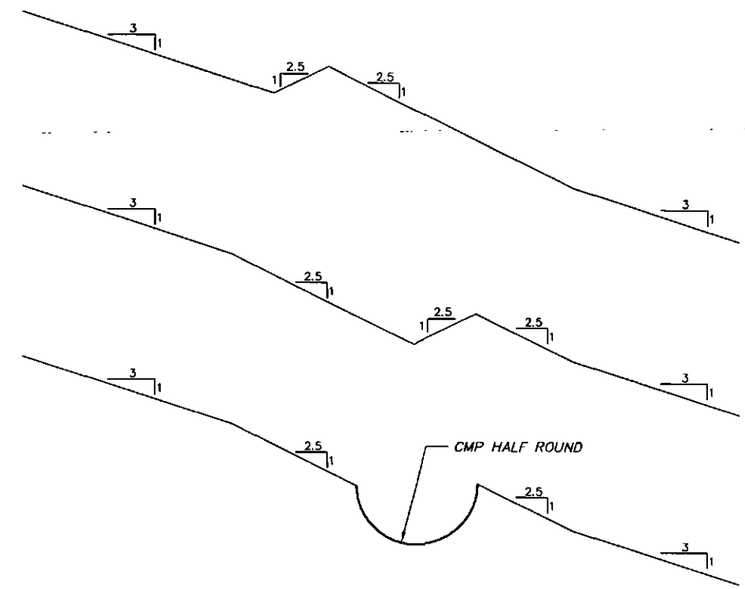


STORMWATER CULVERT DESIGN ANALYSIS									
Culvert	Tributary Channel	8.2" Event Design Flow (cfs)	Inlet Condition	Slope (%)	Length (Feet)	# /Design Size (Inches)	HW/D	Actual #/Size (Inches)	Outlet Rip Rap Protection (Feet)
UC-1	UC-1B	95	Rip Rap Headwall	0.5	125	2/36	1.5		10
UC-2 (*)	UC-1B,12	160	Concrete Headwall	0.9	190	1/72	0.9	1/72	20
UC-5 (*)	UC-3,4	224	Concrete Headwall	0.8	70	3/48	1.1	3/48	20
UC-7 (*)	UC-14,20	93	Concrete Drop Inlet	3.7	660	1/48	1.3	1/48	50
Temporary (*) Road Crossing	UC-9B, 16-B	156	Projecting	0.5	40	2/48	1.1	2/48	10
PC-1 (*)	PC-1	49	Concrete Headwall	0.2	70	1/48	0.8	2/48	10
PC-1.1 (*)	PC-1.1	33	Concrete Headwall	3.4	70	1/36	1.0	2/36	10
PC-2 (*)	PC-2	18	Concrete Drop Inlet	0.1	469	1/24	1.4	1/24	---
PC-3 (*)	PC-3	7	RipRap	0.5	100	1/24	0.7	1/24	10
PC-1A (*)	PC-1	68	Concrete Drop Inlet	0.5	400	1/65x40	1.0	2/65x40	---

NOTE: (*) EXISTING CULVERT

TYPICAL CULVERT CROSS-SECTION AND DESIGN ANALYSIS

NOT TO SCALE



TYPICAL CONTOUR DITCH ALTERNATIVES SECTION AND DETAIL

23
25 22

SCALE
0 1' 2'

DETAIL/SECTION NUMBER
A
6 6
DRAWING No. WHERE DETAIL/SECTION IS REFERENCED
DRAWING No. WHERE DETAIL/SECTION IS SHOWN

Rev. No.	NOTES	DATE	BY	CHKD
4				
3				
2	REVISED TO SHOW NEW OWNERSHIP	9/04	WDS	FK
1	DRAFT 1	11/94	JGN	PGC
0	DRAFT	10/94	TWS	PGC

SCALE: SEE BAR SCALE
DESIGN BY: TEL (TERRAMATRIX)
DRAWN BY: JGN (TERRAMATRIX)
CHECK BY: PGC (TERRAMATRIX)
PROJECT No. 603
FILE NAME: DEERTRAIL-22B.DWG

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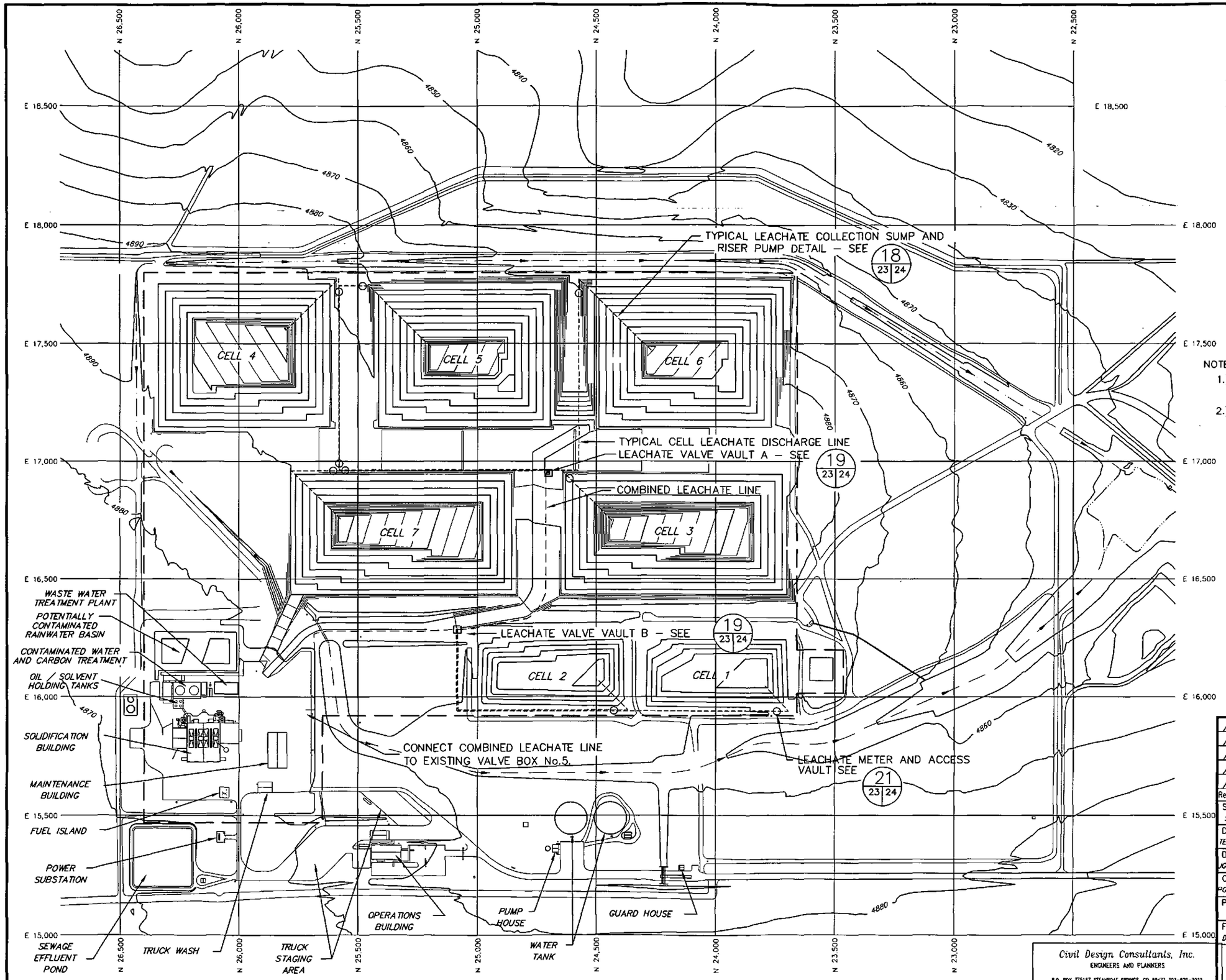
PROJECT: CONCEPTUAL SITE DEVELOPMENT PLAN
DRAWING TITLE: TYPICAL - SURFACE WATER DETAILS

SHEET: 2 OF 2
DRAWING No.: 22
REV. 2



LEGEND

- SURFACE WATER DRAINAGE
- 4820 — ELEVATION OF EXISTING GRADE (FEET) BASED ON 1991 TOPOGRAPHY)
- COMPLIANCE BOUNDARY
- LEACHATE DISCHARGE LINE (DOUBLE WALL)
- □ LEACHATE VALVE VAULT
- ○ LEACHATE METER AND ACCESS VAULT

NOTE:

1.) ALL DIMENSIONS, GRADES AND LOCATIONS SHOWN ARE TYPICAL.

2.) FINAL DESIGN DIMENSIONS, GRADES AND LOCATIONS TO BE COMPILED IN CONSTRUCTION DRAWINGS AND SUBMITTED TO CDPHE PRIOR TO CONSTRUCTION.

A / 6 6 — DETAIL/SECTION NUMBER

DRAWING No. WHERE DETAIL/SECTION IS REFERENCED

DRAWING No. WHERE DETAIL/SECTION IS SHOWN

SCALE

200' 0 200' 400'

CONTOUR INTERVAL 2' AND 10'

Rev. No.	NOTES	DATE	BY	CHKD
4				
3				
2				
1	REVISED TO SHOW NEW OWNERSHIP	9/04	WDS	FK
0	ISSUED FOR PERMIT MOD. REPORT	11/94	JGN	PGC

SCALE: SEE BAR SCALE

DESIGN BY: TEL (TERRAMATRIX)

DRAWN BY: JGN (TERRAMATRIX)

CHECK BY: PGC (TERRAMATRIX)

PROJECT No. 603

FILE NAME: DEERTRAIL-23.DWG

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PROJECT: CONCEPTUAL SITE DEVELOPMENT PLAN

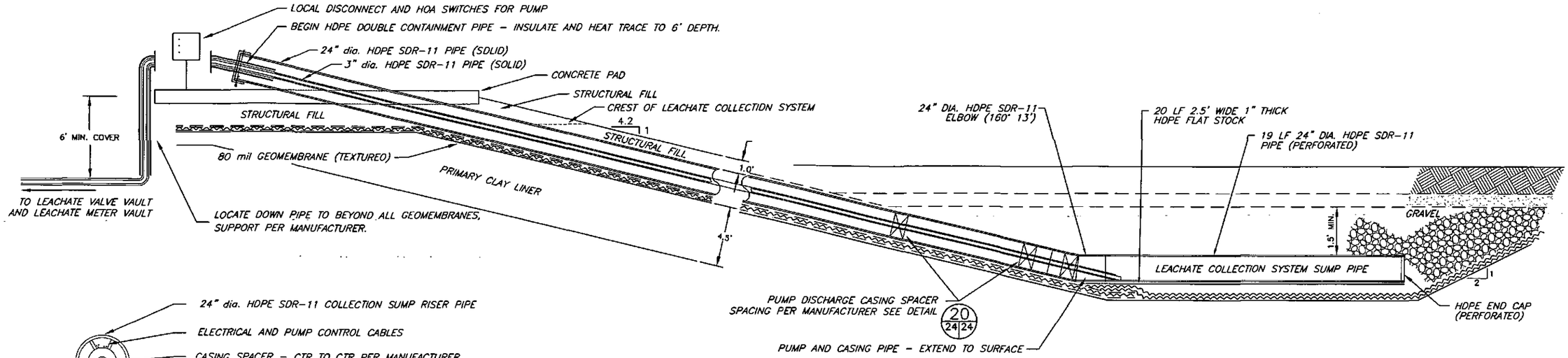
DRAWING TITLE: TYPICAL LEACHATE PUMPING SYSTEM LAYOUT

SHEET: 1 OF 1

DRAWING No.: 23

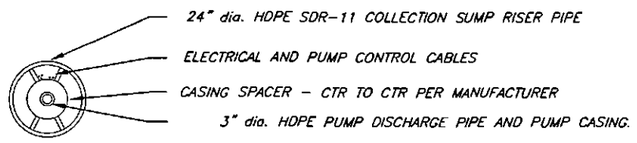
REV. 1

Civil Design Consultants, Inc.
ENGINEERS AND PLANNERS
P.O. BOX 775167 STEAMBOAT SPRINGS, CO 80477 303-879-3022



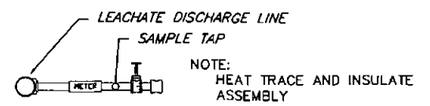
TYPICAL LEACHATE COLLECTION SUMP AND RISER PIPE PUMP DETAIL (18/23/24)

NOT TO SCALE



TYPICAL PUMP DISCHARGE CASING SPACER DETAIL (20/24/24)

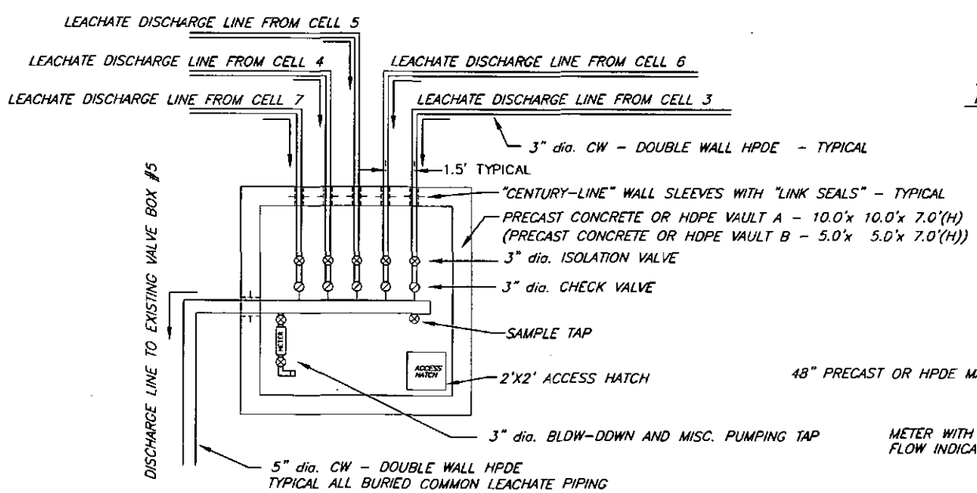
NOT TO SCALE

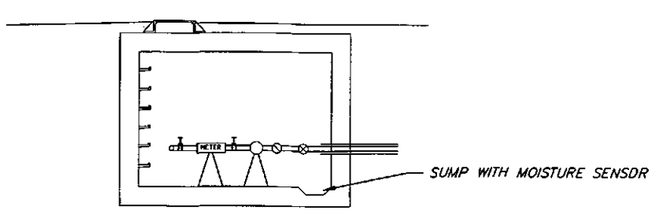


NOTE:
HEAT TRACE AND INSULATE ASSEMBLY

TYPICAL PUMPING TAP WITH QUICK COUPLER DETAIL (22/24/24)

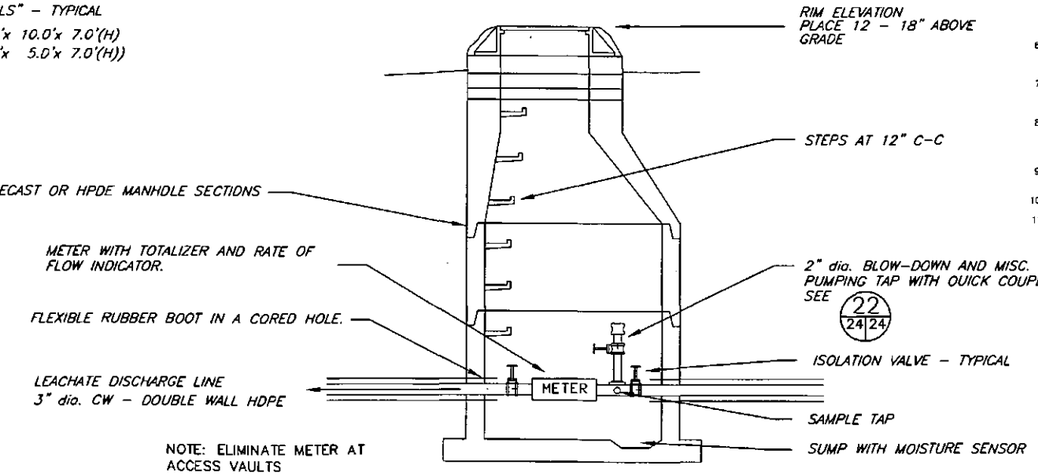
NOT TO SCALE





TYPICAL LEACHATE VALVE VAULT DETAIL AND SECTION (19/23/24)

NOT TO SCALE



TYPICAL LEACHATE METER AND ACCESS VAULT SECTION (21/23/24)

NOT TO SCALE

A / 6 | 6
DETAIL/SECTION NUMBER
DRAWING No. WHERE DETAIL/SECTION IS REFERENCED
DRAWING No. WHERE DETAIL/SECTION IS SHOWN

NOTES:

1.) ALL BURIED LEACHATE DISCHARGE PIPING / FITTINGS SHALL BE SCHEDULE 9, DOUBLE CONTAINMENT HDPE MEETING ASTM D3350; INSTALL PER MANUFACTURERS WRITTEN SPECIFICATIONS; "GUARDIAN" DOUBLE CONTAINMENT SYSTEMS OR APPROVED EQUAL.

2.) PLACE #12 DETECTION WIRE ON TOP OF ALL BURIED CW AND PCW DISCHARGE PIPES; EXPOSE WIRE AT EACH VAULT. SPLICES ARE TO BE MADE WITH BRASS WIRE NUTS AND SECURELY TAPED. TEST TO PROVE CONTINUITY AFTER INSTALLATION.

3.) ALL INSTALLATIONS SHALL BE IN ACCORDANCE WITH CDPHE REGULATIONS.

4.) INSULATE AND HEAT TRACE ALL EXPOSED DISCHARGE PIPING TO A DEPTH OF 6' BELOW FINISH GRADE AVOID FREEZING.

5.) PRIMARY LEACHATE COLLECTION PUMP TO BE "GRUNDFOS" STAINLESS STEEL SUBMERSIBLE PUMP; MODEL 13S5100-5, OR APPROVED EQUAL. PROVIDE LEACHATE LEVEL DETECTION PROBES TO ENERGIZE PUMP: B/W/ CONTROL TYPE LH W/3 SS ELECTRODES, OR EQUAL. OUTFIT PUMP WITH 6" HDPE CASING AND 3" HDPE DISCHARGE PIPING EXTENDED TO THE SURFACE. SUPPORT PUMP, CASING AND DISCHARGE LINE INSIDE RISER PIPE WITH CASING SPACERS BY "CASCADE", "PSI", "APS" OR APPROVED EQUAL. PROVIDE FOR DRAIN-BACK OF PUMP RISER PIPE DURING PERIODS OF NON-USE TO MINIMIZE FREEZING POTENTIAL.

6.) LEACHATE VALVE VAULTS TO BE PRECAST CONCRETE OR HDPE SUITABLE FOR LIQUID CONTAINMENT ALL PENETRATIONS SHALL BE WITH CIP "CENTURY-LINE" WALL SLEEVES AND "LINK-SEALS" OR EQUAL.

7.) PROVIDE SIMILAR LEACHATE RISER PIPE PUMPING SYSTEM FOR LEAK DETECTION SYSTEM AND PERMANENT SUMP SYSTEMS. PUMPS SHALL BE "GRUNDFOS" MODEL 25S07-05 OR APPROVED EQUAL. ACTIVATION OF PUMPS SHALL BE BY "HAND".

8.) PROVIDE "BLOW-DOWN AND CONNECTION TAP" ON HORIZONTAL RUN OF EACH LEACHATE COLLECTION DISCHARGE LINE – SEE DETAIL. "TAP" IS TO ALLOW CONNECTION OF THE DISCHARGE LINE FROM PERMANENT SUMP AND LEAK DETECTION SUMPS AND TO PROVIDE A POINT TO "BLOW-DOWN" THE LINES TO REMOVE LEACHATE. HEAT TRACE AND INSULATE TO AVOID FREEZING.

9.) AT FINAL DESIGN CONFIRM REQUIRED PUMP MODEL AND HORSEPOWER AND CONSIDER REDUCING DIAMETER OF RISER PIPE FROM 24" TO 8", 10" OR 12" DIAMETER.

10.) ALL DIMENSIONS, GRADES AND LOCATIONS SHOWN ARE TYPICAL.

11.) FINAL DESIGN DIMENSIONS, GRADES AND LOCATIONS TO BE COMPILED IN DESIGN CONSTRUCTION DRAWINGS AND SUBMITTED TO CDPHE PRIOR TO CONSTRUCTION.

Rev. No.	NOTES	DATE	BY	CHKD
4				
3				
2				
1	REVISED TO SHOW NEW OWNERSHIP	9/04	WDS	FK
0	ISSUED FOR PERMIT MOD. REPORT	11/94	JGN	PGC

SCALE: SEE BAR SCALE
DESIGN BY: TEL (TERRAMATRIX)
DRAWN BY: JGN (TERRAMATRIX)
CHECK BY: PGC (TERRAMATRIX)
PROJECT No. 603
FILE NAME: DEERTRAIL-24.DWG

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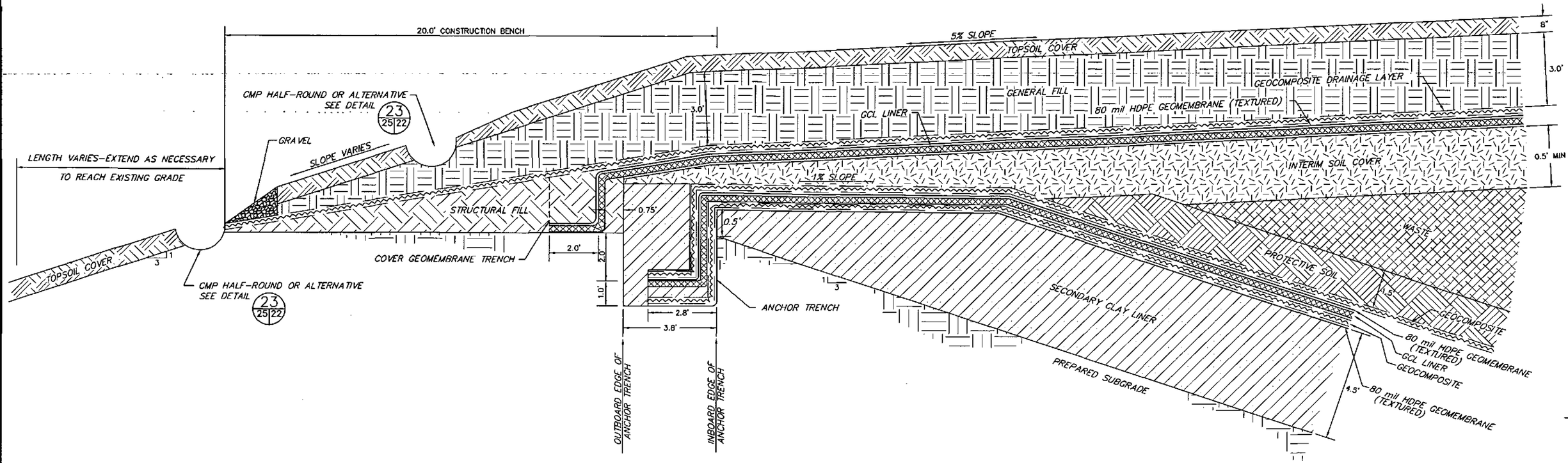
PROJECT: CONCEPTUAL SITE DEVELOPMENT PLAN
DRAWING TITLE: TYPICAL LEACHATE PUMPING SYSTEM DETAILS

Civil Design Consultants, Inc.
ENGINEERS AND PLANNERS
P.O. BOX 775167 STEAMBOAT SPRINGS, CO 80477 303-879-3022

SHEET: 1 OF 1
DRAWING No.: 24
REV. 1



TYPICAL COVER LINER DETAIL (3/13|25)

NOT TO SCALE

NOTES:

1.) DETAILS ARE SHOWN TO THE SCALE NOTED EXCEPT FOR THE GEOSYNTHETICS; THESE ARE SHOWN AT AN EXAGGERATED SCALE FOR CLARITY.

2.) ALL DIMENSIONS ARE TYPICAL (EXCEPT SOIL LINER THICKNESS) AND COULD VARY IN FINAL DESIGN CONSTRUCTION DRAWINGS.

A / 6|6

DETAIL/SECTION NUMBER

DRAWING No. WHERE DETAIL/SECTION IS REFERENCED

DRAWING No. WHERE DETAIL/SECTION IS SHOWN

Rev. No.	NOTES	DATE	BY	CHKD
4				
3				
2	REVISED TO SHOW NEW OWNERSHIP	9/04	WDS	FK
1	ADD GCL & ELIMINATE FRUM. CLAY ON SIDE SLOPES	11/96	KLC	JPP
0	ISSUED FOR PERMIT MOD. REPORT	11/94	JGN	PGC

SCALE: SEE BAR SCALE

DESIGN BY: TEL (TERRAMATRIX)

DRAWN BY: JGN (TERRAMATRIX)

CHECK BY: PGC (TERRAMATRIX)

PROJECT No. 603

FILE NAME: DEERTRAIL-25.DWG

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PROJECT: CONCEPTUAL SITE DEVELOPMENT PLAN

DRAWING TITLE: TYPICAL COVER CROSS-SECTIONS AND DETAILS

SHEET: 1 OF 1

DRAWING No.: 25

REV. 2