DOE/ID-10878
Revision 0
July 2001

U.S. Department of Energy
Idaho Operations Office

INEEL CERCLA Disposal Facility – Drawings (Title I)

INEEL
Home of Science and Engineering Solutions
Idaho National Engineering and Environmental Laboratory

DOE/ID-10878
Revision 0

INEEL CERCLA Disposal Facility – Drawings (Title I)

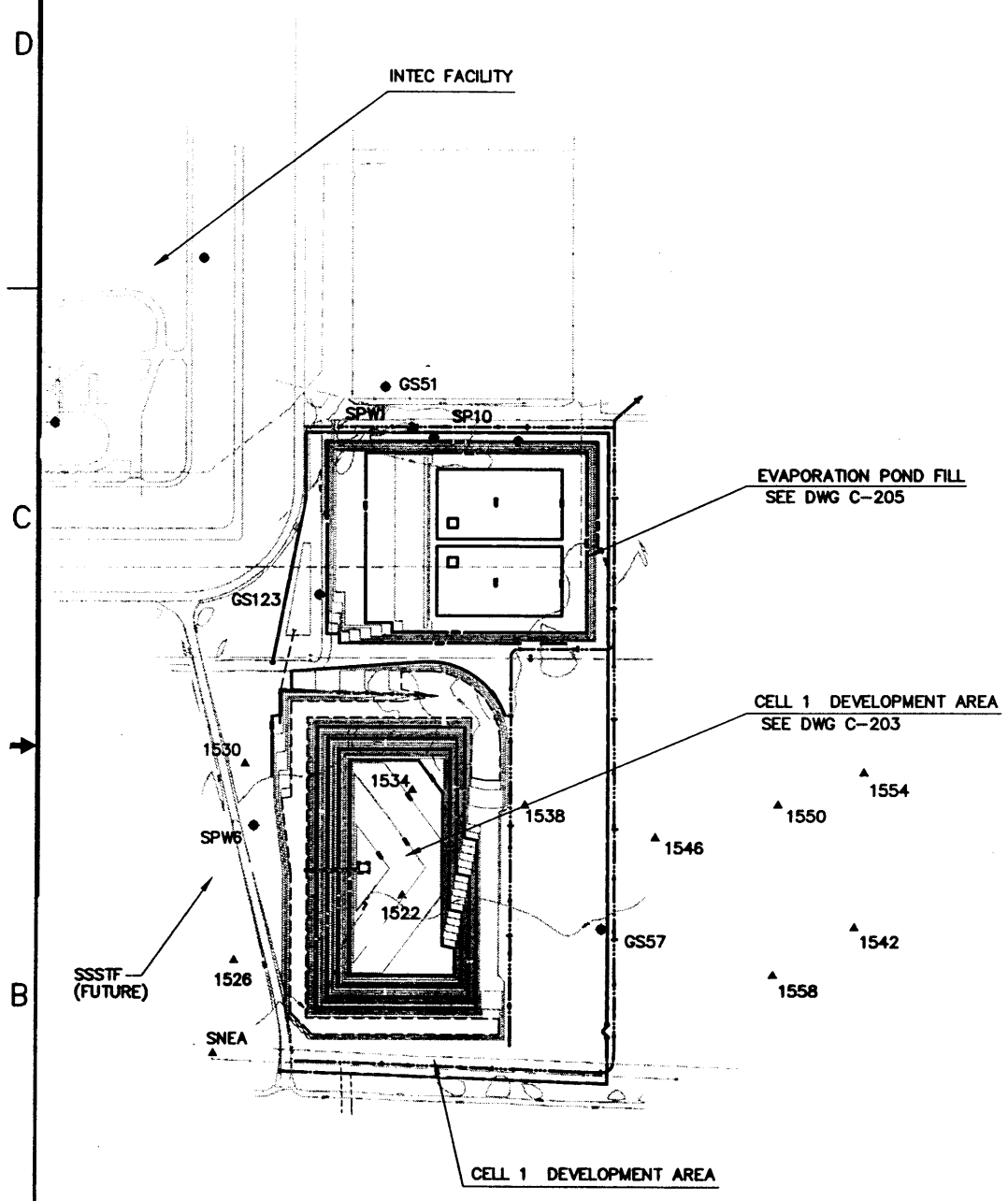
July 2001

Prepared for the
U.S. Department of Energy
Idaho Operations Office

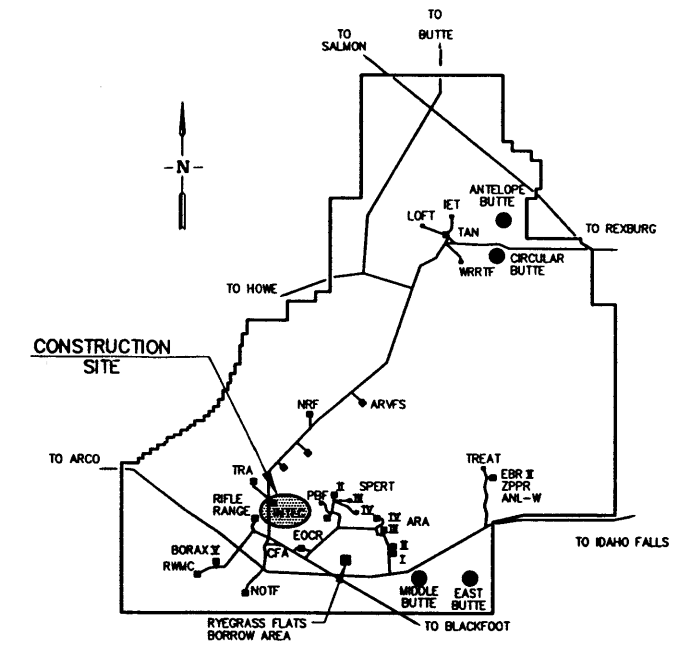
REVISIONS		
REV	DESCRIPTION	EFFECTIVE DATE:
0	TITLE I DESIGN	9 JULY 2001

INEEL CERCLA DISPOSAL FACILITY
TITLE I DESIGN DRAWINGS

30% COMPLETE



LOCATION MAP
NTS



SITE MAP
NTS

DRAWING INDEX

SHEET NO.	A-E DWG NO.	REV	DRAWING TITLE
1 OF 1	G-201	0	TITLE SHEET, DRAWING INDEX, AND SITE LOCATION MAPS
1 OF 1	G-202	0	ABBREVIATIONS, LEGEND, AND GENERAL NOTES
1 OF 1	C-203	0	CELL 1 FINAL GRADING PLAN
1 OF 1	C-205	0	EVAPORATION POND AREA FINAL GRADING PLAN
1 OF 1	H-201	0	CELL 1 GEOSYNTHETICS LINER SYSTEMS PLAN
1 OF 1	H-202	0	EVAPORATION PONDS GEOSYNTHETICS LINER SYSTEMS PLAN
1 OF 1	H-203	0	CELL 1 LINER SYSTEMS SECTIONS AND DETAILS
1 OF 1	H-204	0	CELL 1 SUMP LINER SYSTEMS SECTIONS AND DETAILS
1 OF 1	H-205	0	EVAPORATION POND LINER SYSTEMS SECTIONS AND DETAILS
1 OF 1	P-201	0	LEACHATE SYSTEM P&ID
1 OF 1	L-201	0	LEACHATE PIPING PLAN
1 OF 1	A/S-201	0	CREST PAD BUILDING PLAN AND ELEVATIONS
1 OF 1	A/S-203	0	TRUCK LOADING PLAN, SECTIONS AND DETAILS
1 OF 1	E-202	0	ELECTRICAL SCHEDULES AND ONE-LINE DIAGRAMS
1 OF 1	C-301	0	CELL 2 EXCAVATION PLAN
1 OF 1	C-302	0	CELL 2 FINAL GRADING PLAN
1 OF 1	C-303	0	CELL 2 SECTIONS AND DETAILS
1 OF 1	C-304	0	FINAL COVER PLAN
1 OF 1	C-305	0	FINAL COVER SECTIONS DETAILS

NOTES:

1. THE DIMENSIONS, CONFIGURATION, AND LAYOUT OF THE ICDF FEATURES DEPICTED IN THIS DRAWING ARE FOR INFORMATIONAL PURPOSES ONLY. SEE DRAWINGS G-201 THROUGH EC-202 FOR LAYOUT, GRADING, AND EROSION CONTROL CONSTRUCTION REQUIREMENTS.
2. SEE DRAWING G-202 FOR TABLE OF SURVEY CONTROL POINTS SHOWN.

PRELIMINARY NOT FOR CONSTRUCTION

INEEL (Idaho National Engineering & Environmental Laboratory) BECHTEL BWXT IDAHO, LLC

CH2MHILL MONTGOMERY WATSON

INEEL CERCLA DISPOSAL FACILITY (ICDF)
TITLE SHEET, DRAWING INDEX, AND SITE LOCATION MAPS

SUBCONTRACT NO.	S01-588058
REQUESTER:	
DESIGN:	J DEHNER
DRAWN:	R MORGAN
PROJECT NO.	
SPEC CODE	
FOR REVIEW/APPROVAL SIGNATURES SEE DAR NO.	DAR
EFFECTIVE DATE:	

SIZE	CAGE CODE	INDEX CODE NUMBER (AREA / TYPE / CL / ORG)	DWG-	REV
D		B21 / 0100 / 02	G-201	0
SCALE: NONE			CPP SHEET 1 of 1	

REVISIONS		
REV	DESCRIPTION	EFFECTIVE DATE:
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LEGEND

▲1538	SURVEY CONTROL POINT	X	LAYOUT CONTROL POINT
GS51	MONITORING WELL		EXISTING POWER POLE
4920	EXISTING GROUND CONTOUR		EXISTING POLE MOUNTED SIGN
—4920—	FINISH GRADE CONTOUR		GRADE/SLOPE DIRECTION
	EXISTING OVERHEAD POWER		EXISTING DRAINAGE DITCH
	EXISTING FENCE		
—x—	NEW FENCE		
	EXISTING BURIED SERVICE WASTE LINE		
	EXISTING ROAD		
N 693,000 E 295,000	PROJECT COORDINATES SEE NOTE 1		
	PREPARED SUBGRADE		
	COMPACTED CLAY		
	GEOCOMPOSITE		
	GEOSYNTHETIC CLAY LINER		
	GRAVEL		
	OPERATIONS LAYER		

GENERAL NOTES

1. PROJECT COORDINATES ARE BASED ON NAD27 IDAHO EAST ZONE STATE PLANE, CORRECTED FOR ELEVATION AND GRID. VERTICAL DATUM IS NGVD29. TO CONVERT PROJECT COORDINATES TO STATE PLANE, DIVIDE PROJECT COORDINATES BY 1.00024057
2. SUBCONTRACTOR AND SUPPLIER PRIMARY ACCESS TO SITE VIA LINCOLN BLVD AND SECONDARY HAUL ROAD CONNECTING TO INTEC WEST PERIMETER ROAD.
3. SUBCONTRACTOR PARKING AREA IS SHOWN ON SHEET 3. NO OVERNIGHT PARKING ALLOWED IN THIS AREA. EQUIPMENT PARKING AND SERVICING TO BE PERFORMED IN STAGING AREA SHOWN ON SHEET 3.

SURVEY CONTROL TABLE

WELL NO./ SURVEY CONTROL POINT	PROJECT NORTHING	PROJECT EASTING	NGVD29 ELEV	DESCRIPTION
GS51	692,503.870	296,413.440	4918.74	USGS 51 WELL BRASS CAP
GS57	691,919.716	294,942.147	4922.50	USGS 57 WELL BRASS CAP
GS123	692,687.214	295,850.627	4919.22	USGS 123 WELL BRASS CAP
SP10	692,376.984	296,278.547	4917.89	SWPP 10 WELL BRASS CAP
SPW1	692,431.900	296,303.240	4917.84	PW1 WELL BRASS CAP
SPW6	692,863.690	295,222.085	4920.59	PW6 WELL BRASS CAP
SNEA	692,976.235	294,598.713	4922.12	SNEAK REBAR W/YELLOW CAP
1522	692,460.216	295,031.327	4921.96	SPT-2 BRASS CAP
1526	692,917.904	294,853.695	4921.63	SPT-1 BRASS CAP
1530	692,888.161	295,389.972	4919.28	CHEMB-1 BRASS CAP
1534	692,433.242	295,318.933	4921.24	GSB-1 BRASS CAP
1538	692,127.506	295,277.940	4920.93	CHEMB-2 BRASS CAP
1542	691,235.020	294,947.685	4923.10	CHEMB-3 BRASS CAP
1546	691,774.790	295,190.788	4921.91	SPT-3 BRASS CAP
1550	691,441.621	295,281.496	4922.06	GSB-2 BRASS CAP
1554	691,209.551	295,369.285	4922.68	SPT-5 BRASS CAP
1558	691,455.055	294,816.564	4923.17	SPT-4 BRASS CAP

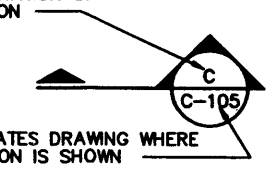
ABBREVIATIONS

@	AT
APPROX	APPROXIMATE
BLVD	BOULEVARD
CERCLA	COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT
DBL	DOUBLE
DWG	DRAWING
ELEV	ELEVATION
EXIST	EXISTING
FT	FOOT/FEET
HDPE	HIGH DENSITY POLYETHYLENE
I.E.	INVERT ELEVATION
ICDF	INEEL CERCLA DISPOSAL FACILITY
LCS	LEACHATE COLLECTION SYSTEM
LDS	LEACHATE DETECTION SYSTEM
LCRS	LEACHATE COLLECTION RECOVERY SYSTEM
LDRS	LEACHATE DETECTION RECOVERY SYSTEM
MFR	MANUFACTURER
MIN	MINIMUM
NO	NUMBER
NTS	NOT TO SCALE
O.C.	ON CENTER
PC	POINT OF CURVATURE
PT	POINT OF TANGENCY
R	RADIUS
REF	REFERENCE
RD	ROAD
S.F.	SQUARE FOOT/FEET
SSSTF	STAGING, STORAGE, SIZING, AND TREATMENT FACILITY
TEMP	TEMPORARY
THK	THICK/THICKNESS
TYP	TYPICAL

SECTION AND DETAIL DESIGNATION

POINT AT WHICH SECTION OR DETAIL IS TAKEN

LETTER INDICATES DESIGNATION OF SECTION



INDICATES DRAWING WHERE SECTION IS SHOWN

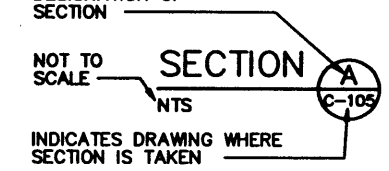
NUMBER INDICATES DESIGNATION OF DETAIL

INDICATES DRAWING WHERE DETAIL IS SHOWN. — INDICATES DETAIL IS SHOWN ON SAME DRAWING AS TAKEN, TYP.

POINT AT WHICH SECTION OR DETAIL IS SHOWN

LETTER INDICATES DESIGNATION OF SECTION

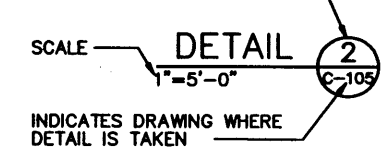
NOT TO SCALE



INDICATES DRAWING WHERE SECTION IS TAKEN

NUMBER INDICATES DESIGNATION OF DETAIL

SCALE



INDICATES DRAWING WHERE DETAIL IS TAKEN

PRELIMINARY NOT FOR CONSTRUCTION

INEEL — Idaho National Engineering & Environmental Laboratory — BECHTEL BWXT IDAHO, LLC

CH2MHILL — MONTGOMERY WATSON

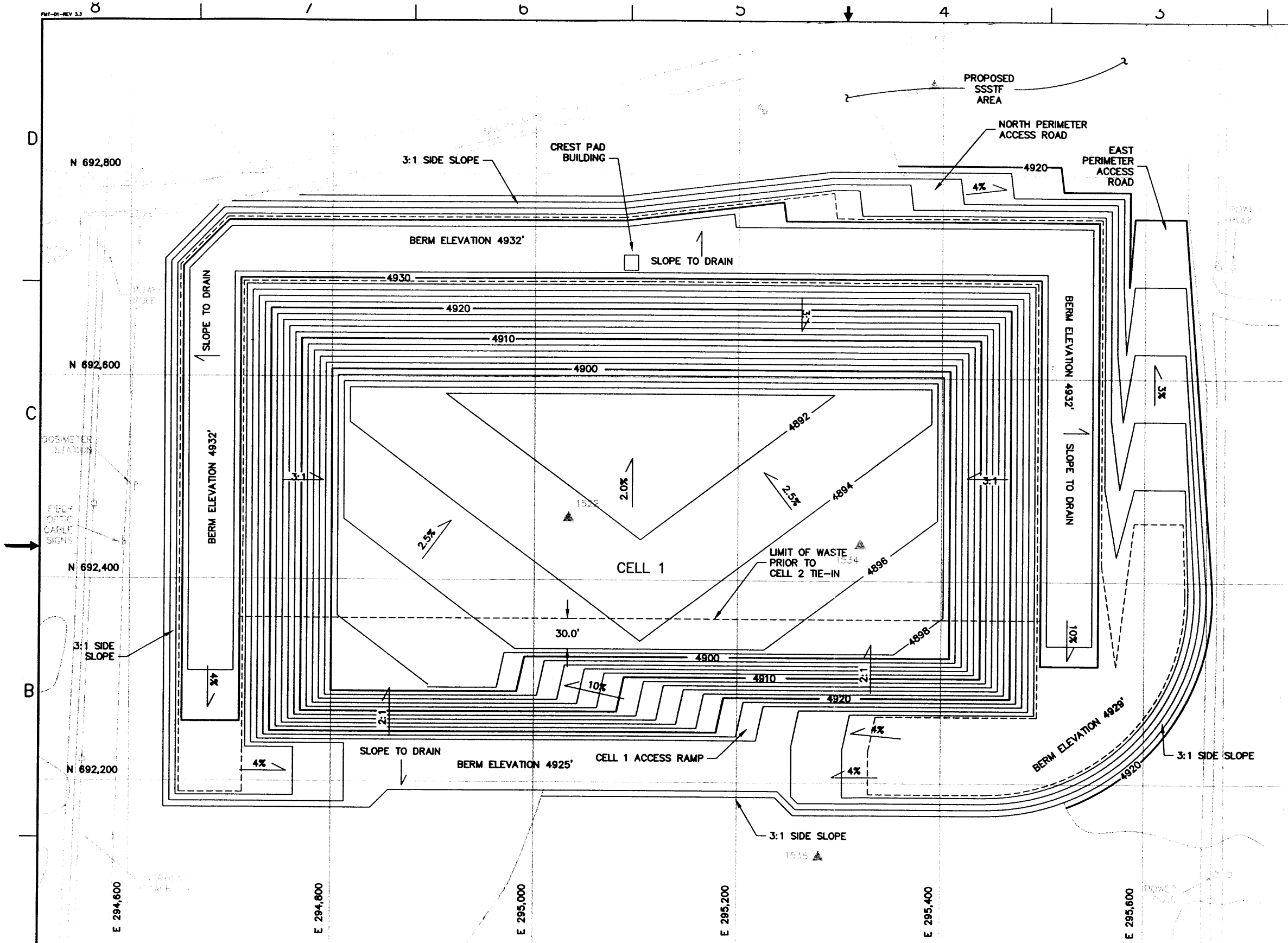
INEEL CERCLA DISPOSAL FACILITY (ICDF)
ABBREVIATIONS, LEGEND
AND GENERAL NOTES

SUBCONTRACT NO.	S01-588058
REQUESTER:	
DESIGN:	J DEHNER
DRAWN:	R MORGAN
PROJECT NO.	
SPEC CODE	
FOR REVIEW/APPROVAL SIGNATURES SEE DAR NO.	DAR
EFFECTIVE DATE:	

SIZE	CAGE CODE	INDEX CODE NUMBER AREA	TYPE	CL	ORIG	DWG-	REV
D		B21	0100	01		G-202	0

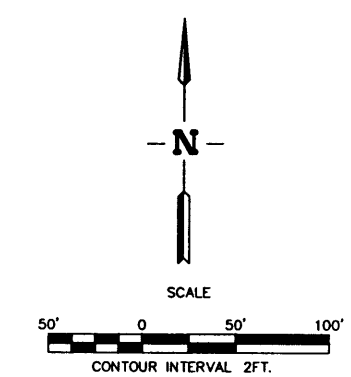
SCALE: NONE — CPP — SHEET 1 of 1

REVISIONS		
REV	DESCRIPTION	EFFECTIVE DATE:
0	TITLE I DESIGN	9 JULY 2001



NOTES:

1. FINAL GRADES SHOWN REPRESENT TOP OF THE OPERATIONS LAYER SURFACE.
2. SLOPE TO DRAIN AREAS SHALL BE A MINIMUM OF 1%.



PRELIMINARY NOT FOR CONSTRUCTION

INEEL

CH2MHILL MONTGOMERY WATSON

INEEL CERCLA DISPOSAL FACILITY (ICDF)

CELL 1
FINAL GRADING PLAN

SUBCONTRACT NO.	S01-588058
REQUESTER:	
DESIGN:	PHILIP CROUSE
DRAWN:	JANET BEVER
PROJECT NO.	
SPEC CODE	
FOR REVIEW/APPROVAL SIGNATURES SEE DAR NO.	DAR
EFFECTIVE DATE:	

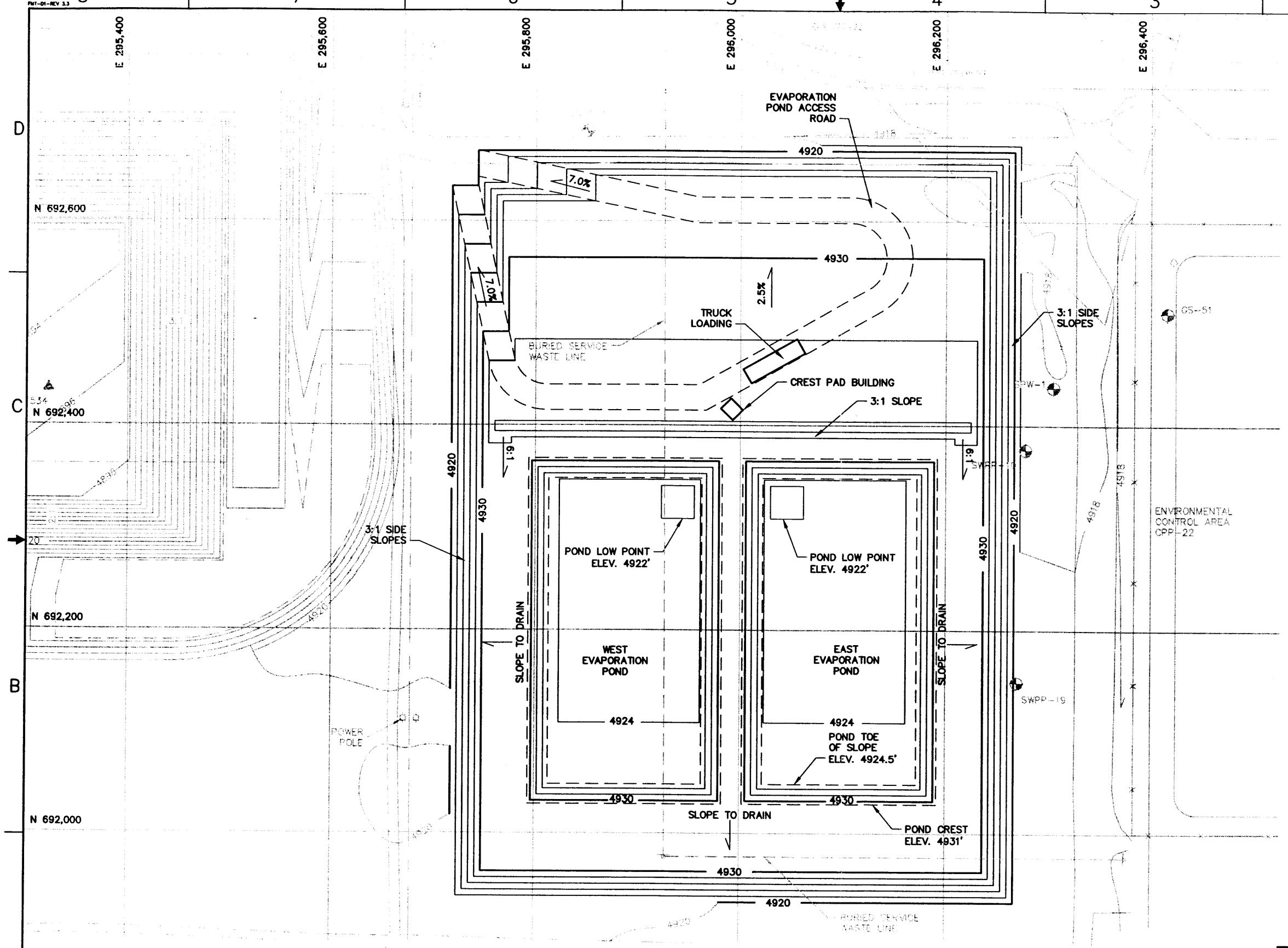
SIZE	CAGE CODE	INDEX CODE NUMBER (AREA / TYPE / CL / DISC)	DWG-	REV
D		B21 / 0100 / 02	C-203	0
SCALE: AS SHOWN			CPP SHEET 1 OF 1	

PAGE: 4

REVISIONS		
REV	DESCRIPTION	EFFECTIVE DATE:
0	TITLE I DESIGN	9 JULY 2001

NOTES:

1. FINAL GRADES SHOWN REPRESENT TOP OF THE ACCESS ROAD GRADE FOR PADS AND ROAD AREAS; TOP OF UPPER GEOMEMBRANE FOR PONDS.
2. SLOPE TO DRAIN AREAS SHALL BE A MINIMUM OF 1%.



N

SCALE

50' 0 50' 100'

CONTOUR INTERVAL 2FT.

PRELIMINARY NOT FOR CONSTRUCTION

INEEL

CH2MHILL MONTGOMERY WATSON

INEEL CERCLA DISPOSAL FACILITY (ICDF)

EVAPORATION POND AREA
FINAL GRADING PLAN

SUBCONTRACT NO.	S01-588058
REQUESTER:	
DESIGN:	PHILIP CROUSE
DRAWN:	JANET BEVER
PROJECT NO.	
SPEC CODE	
FOR REVIEW/APPROVAL SIGNATURES SEE DAR NO.	DAR
EFFECTIVE DATE:	

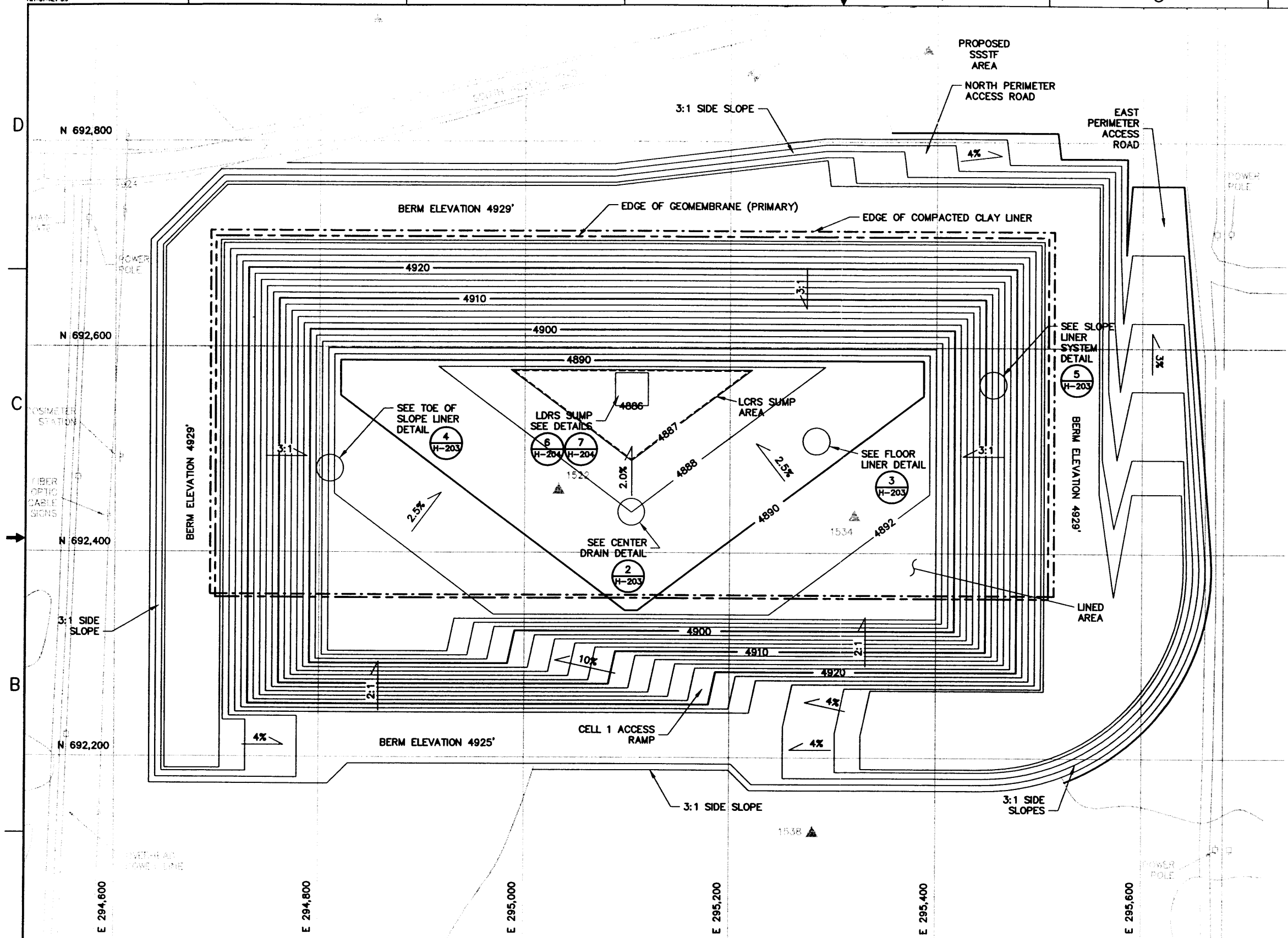
SIZE	CAGE CODE	INDEX CODE NUMBER (AREA / TYPE / Q / ORG)	DWG-	REV
D		B21 / 0100 / 02	C-205	0

SCALE: AS SHOWN CPP SHEET 1 OF 1

REVISIONS		
REV	DESCRIPTION	EFFECTIVE DATE:
0	TITLE I DESIGN	9 JULY 2001

NOTE:

1. GRADES SHOWN ARE TO TOP OF PRIMARY GEOMEMBRANE.



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SCALE

50' 0 50' 100'

CONTOUR INTERVAL 2FT.

PRELIMINARY NOT FOR CONSTRUCTION

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CH2MHILL MONTGOMERY WATSON

INEEL CERCLA DISPOSAL FACILITY (ICDF)

CELL 1 GEOSYNTHETICS LINER SYSTEMS PLAN

SUBCONTRACT NO.	S01-588058
REQUESTER:	
DESIGN:	PHILLIP CROUSE
DRAWN:	JANET BEVER
PROJECT NO.	
SPEC CODE	
FOR REVIEW/APPROVAL SIGNATURES SEE DAR NO.	DAR
EFFECTIVE DATE:	

SIZE	CAGE CODE	INDEX CODE NUMBER (AREA / TYPE / CL / ORG)	DWG-	REV
D		B21 / 0500 / 02	H-201	0
SCALE: AS SHOWN			CPP	SHEET 1 OF 1

REVISIONS		
REV	DESCRIPTION	EFFECTIVE DATE:
0	TITLE I DESIGN	9 JULY 2001

NOTES:

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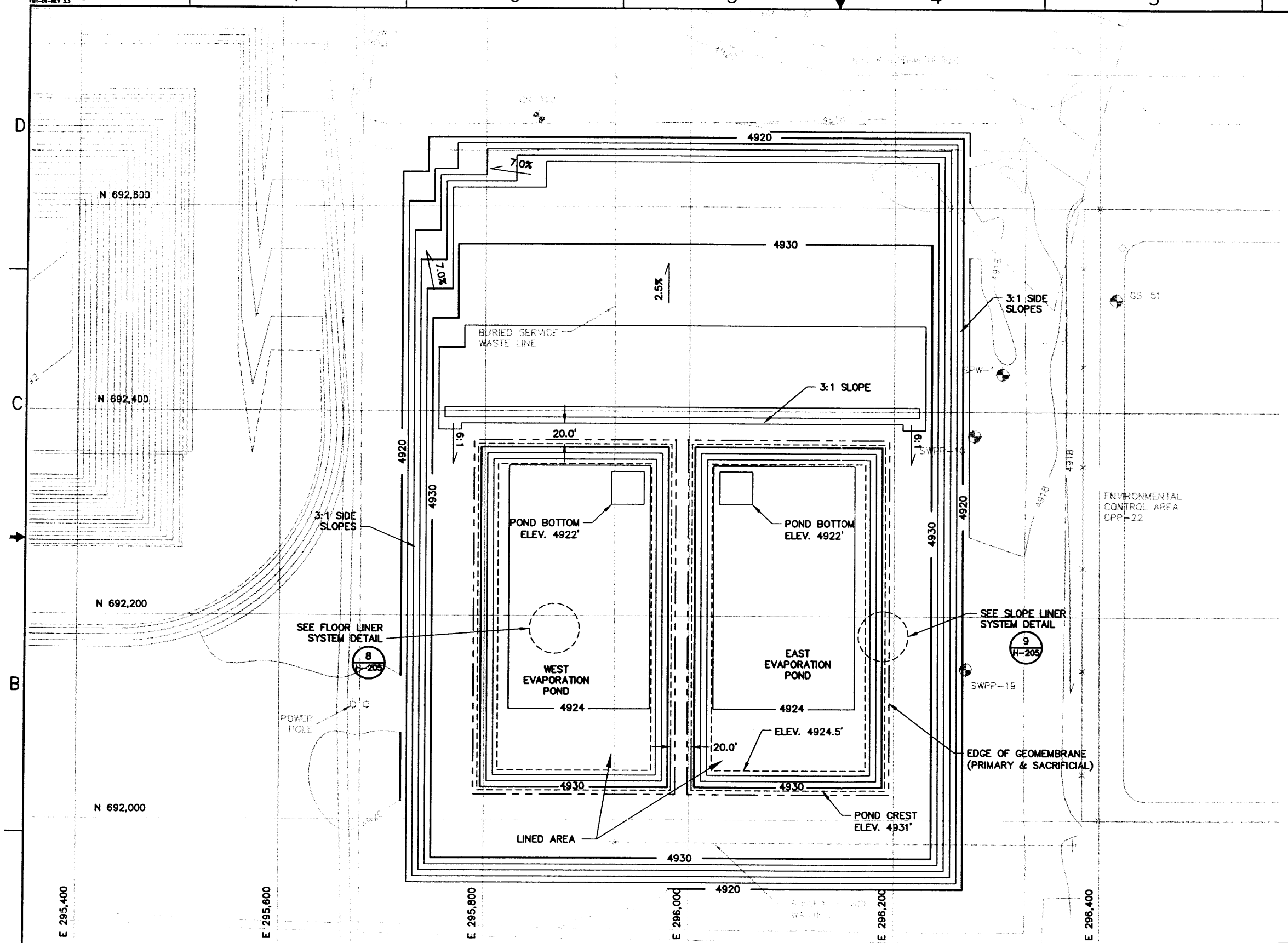

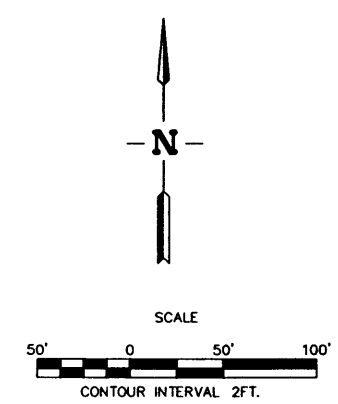

PRELIMINARY NOT FOR CONSTRUCTION

INEEL (Idaho National Engineering & Environmental Laboratory) BECHTEL BWXT IDAHO, LLC

CH2MHILL MONTGOMERY WATSON

INEEL CERCLA DISPOSAL FACILITY (ICDF)

EVAPORATION POND GEOSYNTHETICS LINER SYSTEMS PLAN

SUBCONTRACT NO.	S01-588058
REQUESTER:	
DESIGN:	PHILLIP CROUSE
DRAWN:	JANET BEVER
PROJECT NO.	
SPEC CODE	
FOR REVIEW/APPROVAL SIGNATURES SEE DAR NO.	DAR
EFFECTIVE DATE:	

SIZE	CAGE CODE	INDEX CODE NUMBER (AREA / TYPE / CL / ORG)	DWG-	REV
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SCALE: AS SHOWN			CPP	SHEET 1 OF 1

PAGE: 7

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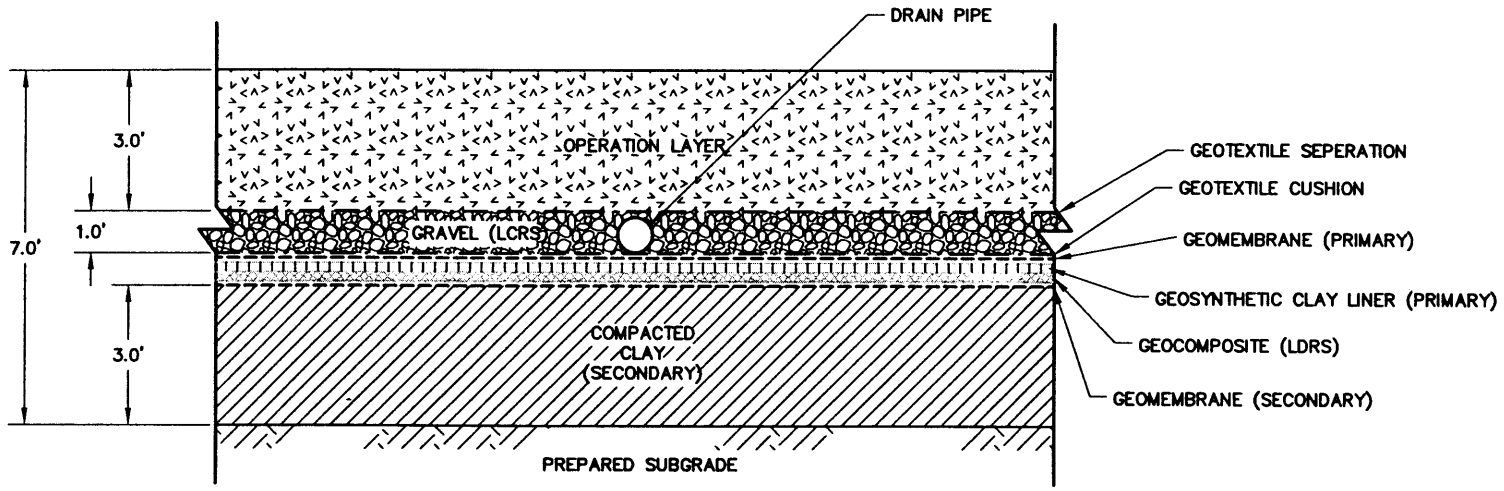
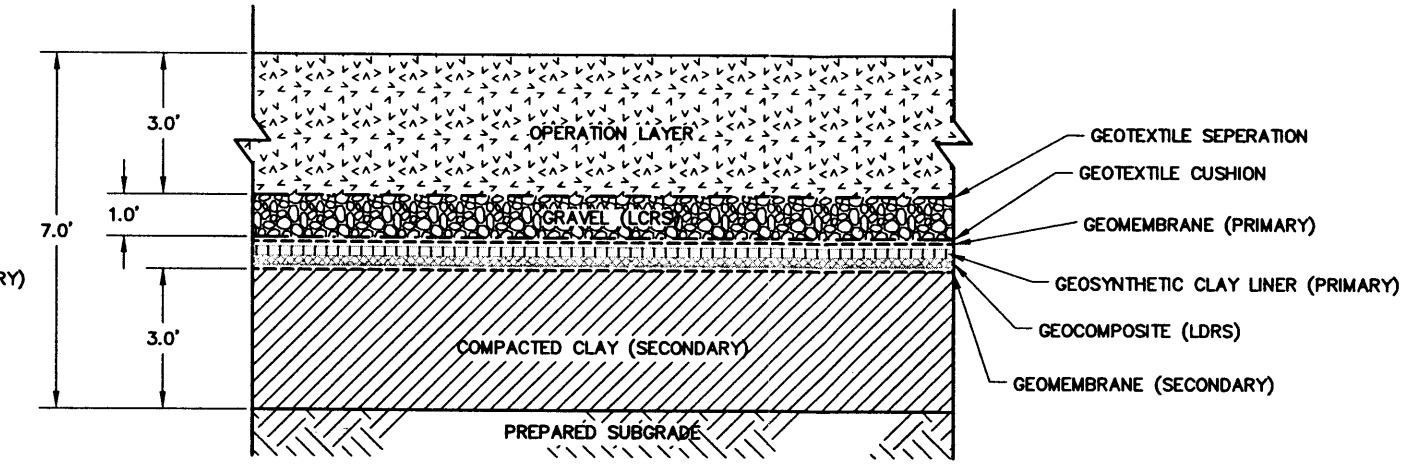
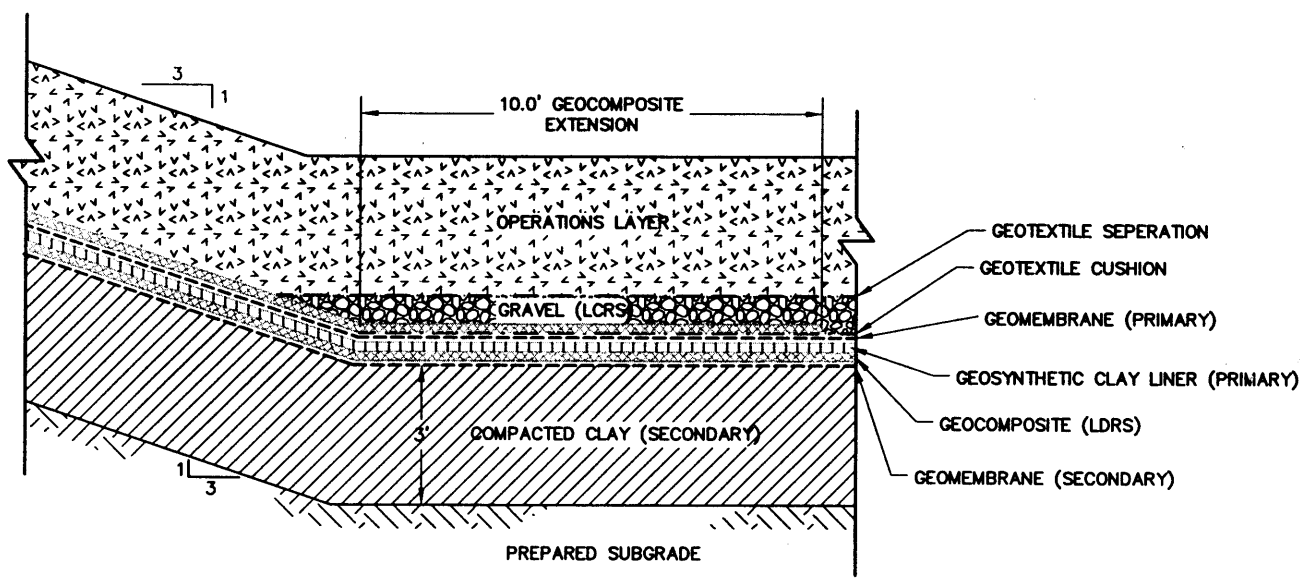
0	TITLE I DESIGN	9 JULY 2001



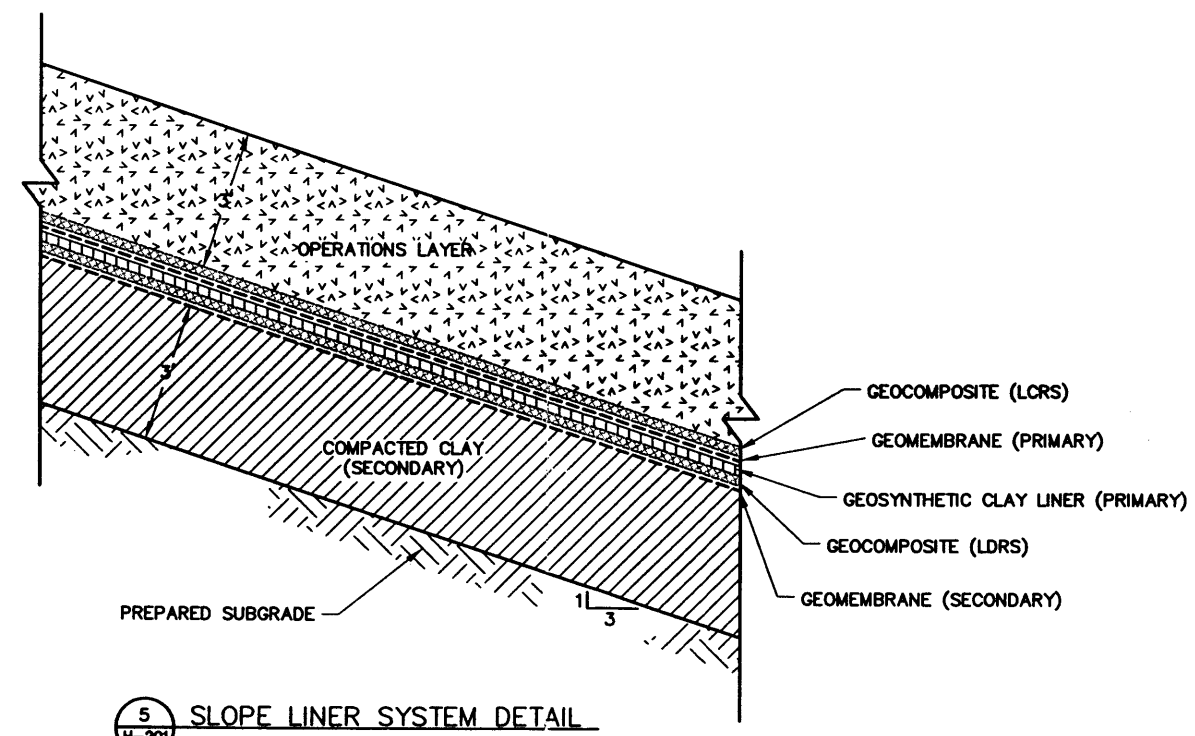
2 / H-201 ICDF CENTER DRAIN DETAIL



3 / H-201 FLOOR LINER SYSTEM DETAIL



4 / H-201 TOE OF SLOPE LINER SYSTEM DETAIL



5 / H-201 SLOPE LINER SYSTEM DETAIL

PRELIMINARY NOT FOR CONSTRUCTION

INEEL Idaho National Engineering & Environmental Laboratory BECHTEL BWXT IDAHO, LLC

CH2MHILL MONTGOMERY WATSON

INEEL CERCLA DISPOSAL FACILITY (ICDF)

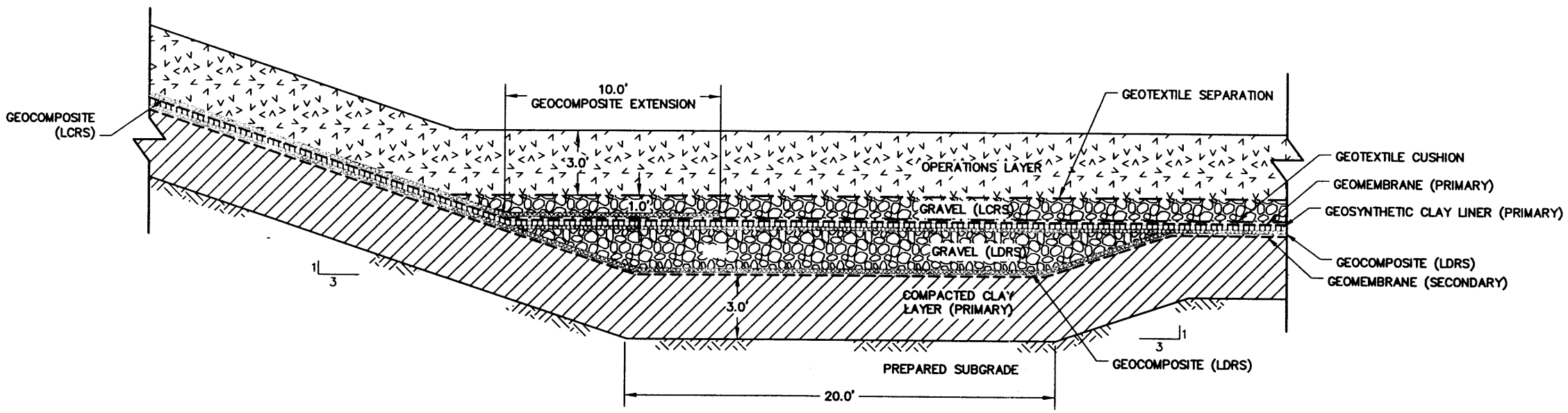
CELL 1 LINER SYSTEMS
SECTIONS AND DETAILS

SUBCONTRACT NO.	S01-588058
REQUESTER:	
DESIGN:	PHILLIP CROUSE
DRAWN:	JANET BEVER
PROJECT NO.	
SPEC CODE	
FOR REVIEW/APPROVAL SIGNATURES SEE DAR NO.	DAR
EFFECTIVE DATE:	

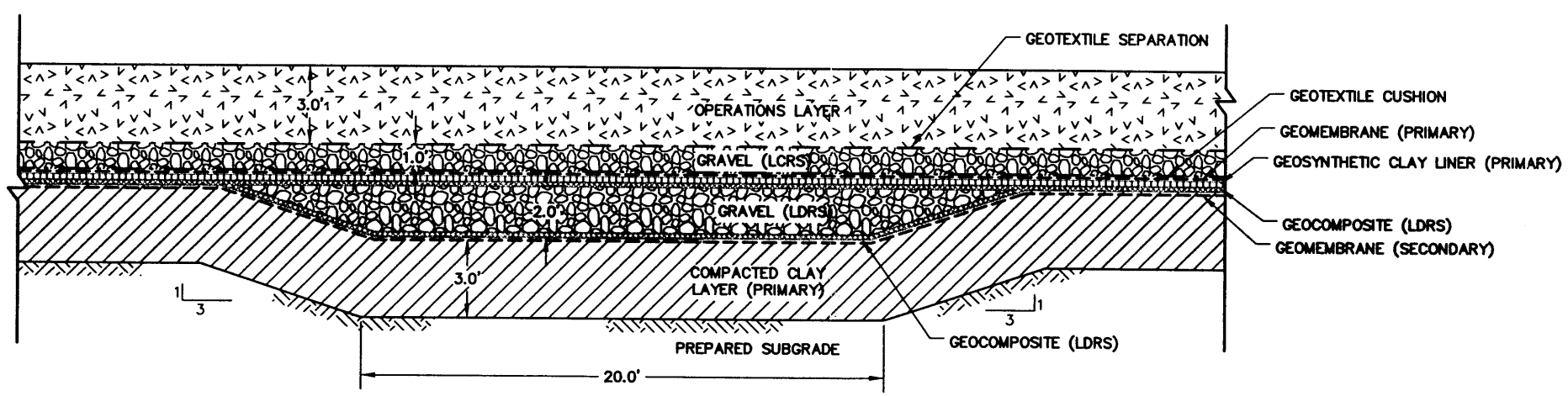
SIZE	CAGE CODE	INDEX CODE NUMBER AREA	TYPE	Q	ORIG	DWG-	REV
D		B21	0100	02		H-203	0

SCALE: AS SHOWN CPP SHEET 1 OF 1

REVISIONS		
REV	DESCRIPTION	EFFECTIVE DATE:
0	TITLE I DESIGN	9 JULY 2001



6 / H-201 ICDF LDRS SUMP NORTH – SOUTH CROSS-SECTION



7 / H-201 ICDF LDRS SUMP EAST – WEST CROSS-SECTION

PRELIMINARY NOT FOR CONSTRUCTION

INEEL (Idaho National Engineering & Environmental Laboratory) LOCKHEED MARTIN IDAHO, LLC

CH2MHILL MONTGOMERY WATSON

INEEL CERCLA DISPOSAL FACILITY (ICDF)

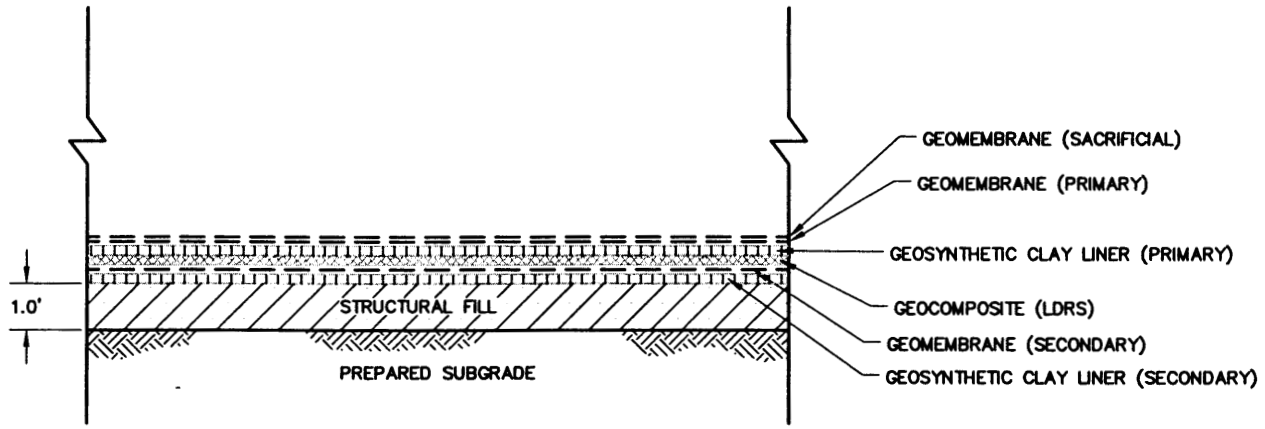
CELL1 SUMP LINER SYSTEMS SECTIONS AND DETAILS

SUBCONTRACT NO.	S01-588058
REQUESTER:	
DESIGN:	PHILLIP CROUSE
DRAWN:	JANET BEVER
PROJECT NO.	
SPEC CODE	
FOR REVIEW/APPROVAL SIGNATURES SEE DAR NO.	DAR
EFFECTIVE DATE:	

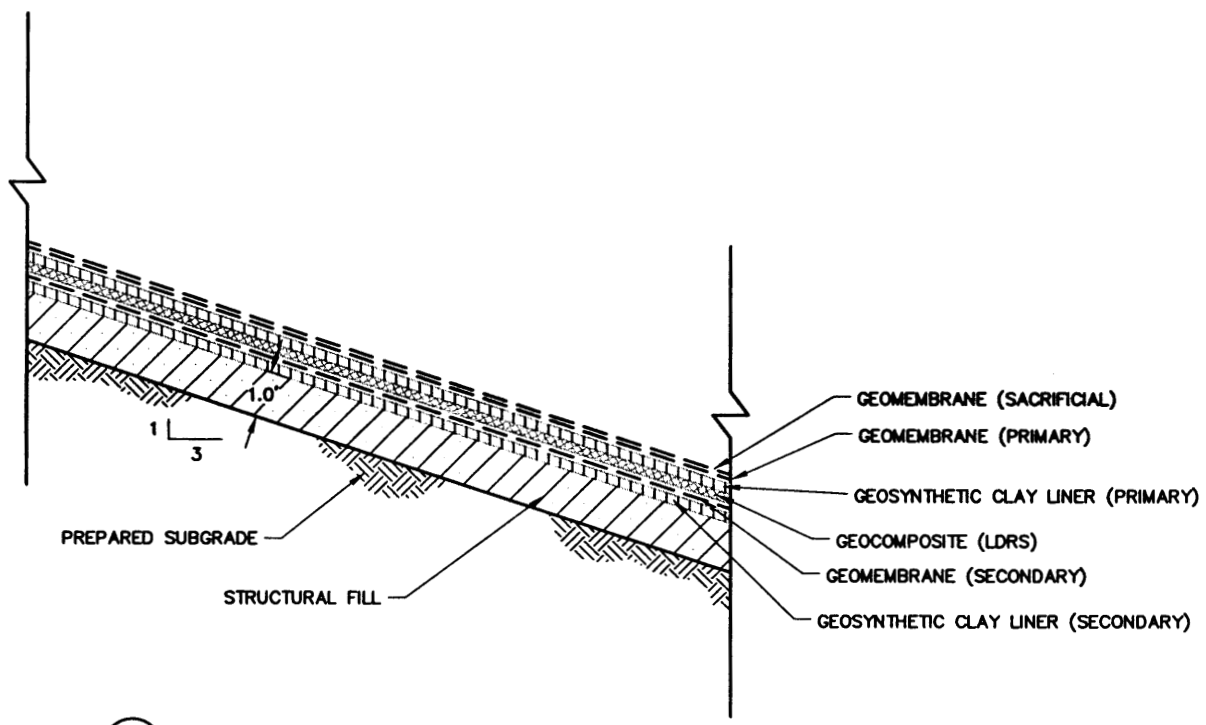
SIZE	CAGE CODE	INDEX CODE NUMBER: AREA	TYPE	CL	ORIG	DWG-	REV
D		B21	0100	02		H-204	0

SCALE: AS SHOWN CPP SHEET 1 OF 1

REVISIONS		
REV	DESCRIPTION	EFFECTIVE DATE:
0	TITLE I DESIGN	9 JULY 2001



8 H-205 FLOOR LINER SYSTEM DETAIL



9 H-205 SLOPE LINER SYSTEM DETAIL

PRELIMINARY NOT FOR CONSTRUCTION

INEEL

SUBCONTRACT NO. S01-588058	CH2MHILL / MONTGOMERY WATSON
REQUESTER:	INEEL CERCLA DISPOSAL FACILITY (ICDF)
DESIGN: PHILLIP KROUSE	EVAPORATION POND LINER SYSTEMS SECTIONS AND DETAILS
DRAWN: JANET BEVER	
PROJECT NO.	
SPEC CODE	
FOR REVIEW/APPROVAL SIGNATURES SEE DAR NO. DAR	SIZE D; CAGE CODE; INDEX CODE NUMBER AREA B21 TYPE 0100 G 02 ORG; DWG- H-205; REV 0
EFFECTIVE DATE:	SCALE: AS SHOWN; CPP; SHEET 1 OF 1