Department of Energy

Ohio Field Office
Fernald Area Office
P. O. Box 538705
Cincinnati, Ohio 45253-8705
(513) 648-3155

2576

OCT 21 1999

Mr. James A. Saric, Remedial Project Manager
U.S. Environmental Protection Agency
Region V-SRF-5J
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

DOE-0059-00

Mr. Tom Schneider, Project Manager
Ohio Environmental Protection Agency
401 East 5th Street
Dayton, Ohio 45402-2911

Dear Mr. Saric and Mr. Schneider:

TRANSMITTAL OF THE SEPTEMBER 1999 MONTHLY REPORT FOR IMPACTED MATERIAL PLACEMENT AT THE ON-SITE DISPOSAL FACILITY

Enclosed for your information is the September 1999 Monthly Report for Impacted Material Placement at the On-Site Disposal Facility (OSDF). The following information is included:

- Air monitoring sampling data - September 1999 readings from the OSDF, Southern Waste Units (SWU), and Sewage Treatment Plant (STP)

- Placement graphs
  - Daily Soil to Debris Ratio
  - September Cat 1 Soil Placement with projected October placement
  - September Debris Placement with projected October placement
  - September Total Placement with projected October placement
  - September Above Grade Debris Placement with projected October placement
  - September At or Below Grade Debris Placement with projected October placement

- Current surface plan views - Cell 1 and Cell 2 plan views showing the current lift of impacted material as of October 1, 1999.

- OSDF cross sections - selected cross sections looking north and west showing placement progress and projections for October 31, 1999.

Recycled and Recyclable

Summary:

Approximately 58,500 in-place cubic yards of impacted material where placed during September 1999. This total soil and debris volume is based on surveyed quantities and exceeds the monthly projected volume. Approximately 125,000 in-place cubic yards of impacted material have been placed from June 8, 1999, through October 1, 1999.

The current surface plans for Cell 1 and Cell 2 show the category of impacted material placed at each grid. The latest lift is noted on the grid along with the quantity of that lift and the date it was placed. Grids with the same lift number will not necessarily contain the same category of material.

Planned placement includes two lifts of Category 2 material followed by an intervening layer. Field conditions, however, do not allow this to happen for all situations. Also, Category 4 grids need to be put into the grid when that material is available. Availability of a specific category of material, drainage issues, and timing of material to the cell all effect the placement of impacted material.

Impacted material was placed in accordance with the Impacted Material Placement Plan in both Cell 1 and Cell 2. Category 5 material was placed in trenches in Cell 1 and 2. The Category 5 placement locations are shown on Cross Sections 6-6' and F-F'. A small amount of Category 3 material was placed in Cell 2 in grid H-8 as shown in Cross Section 8-8'. Also, placement of Category 1 material began between the intercell berm separating Cell 1 and Cell 2, and the impacted material sideslope in Cell 1. Category 1 material was placed within this wedge until an elevation was reached above the intercell berm to facilitate the placement of Category 2 debris material. This placement is shown in Cross Section F-F' and G-G'. Placement in the Cell 1 catchment area continued.

If you have any questions or require additional information, please contact Jay Jalovec at (513) 648-3122.

Sincerely,

Johnny Reising

Johnny W. Reising
Fernald Remedial Action
Project Manager

FEMP:Jalovec

Enclosure

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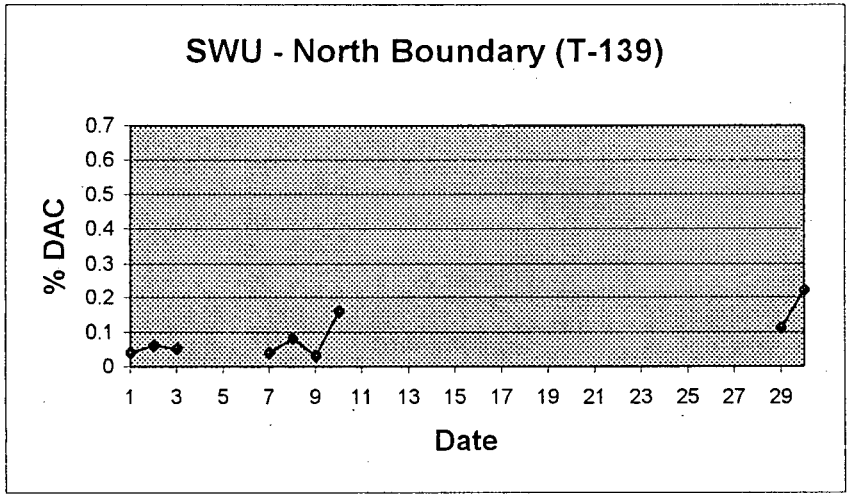
OCT 21 1999

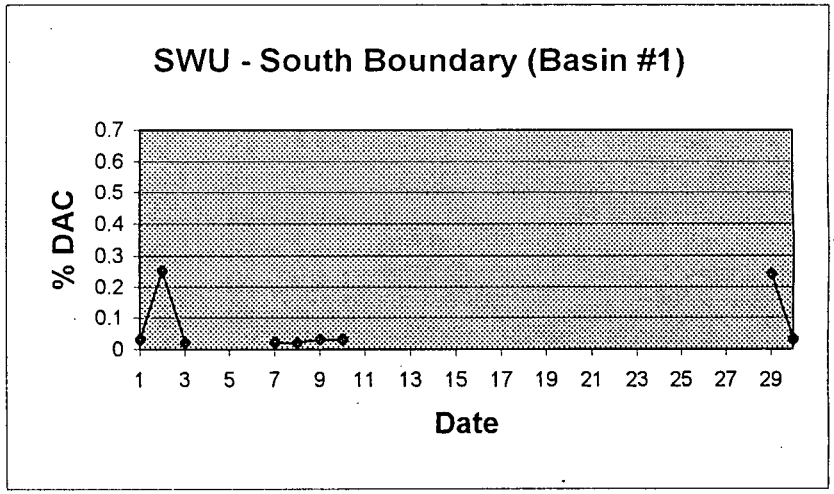
cc w/enclosure:
N. Hallein, EM-42/CLOV
R. J. Janke, OH/FEMP
G. Jablonowski, USEPA-V, SRF-5J
T. Schneider, OEPA-Dayton (three copies of enclosures)
F. Bell, ATSDR
M. Schupe, HSI GeoTrans
R. Vandegrift, ODH
F. Barker, Tetra Tech
AR Coordinator, FDF/78

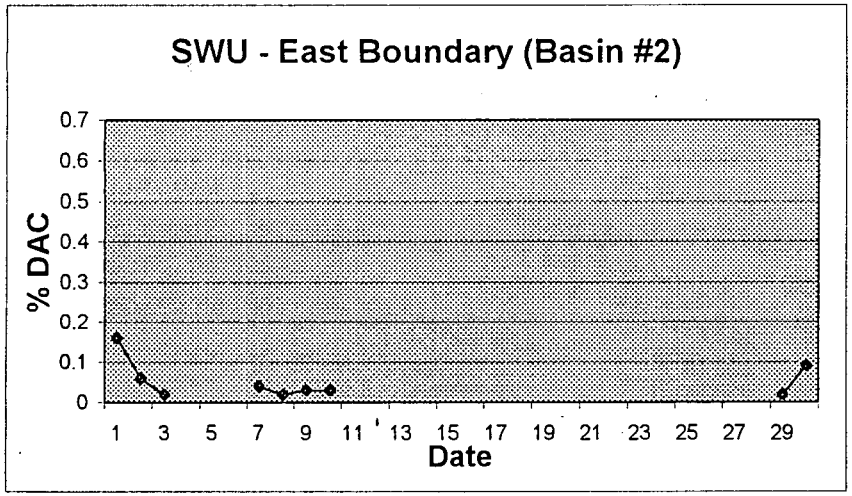
cc w/o enclosure:
J. Reising, OH/FEMP
A. Tanner, OH/FEMP
D. Carr, FDF/52-2
J. Chiou, FDF/52-0
T. Hagen, FDF/65-2
J. Harmon, FDF/90
R. Heck, FDF/2
S. Hinnefeld, FDF/31
A. Klimek, FDF/64
U. Kumthekar, FDF/64
C. Van Arsdale, FDF/64
T. Walsh, FDF/65-2
ECDC, FDF/52-7

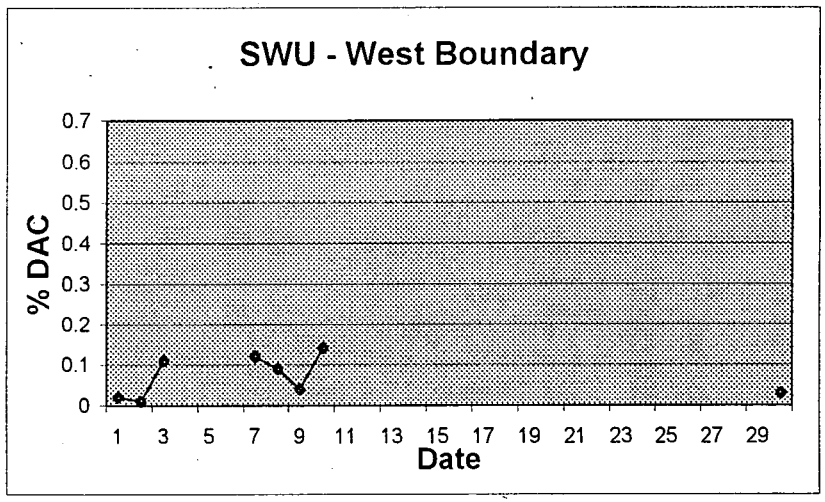
SWU BOUNDARY AIR SAMPLES - SEPTEMBER 1999

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
N. BNDY	0.04	0.06	0.05				0.04	0.08	0.03	0.16																			0.11	0.22
S. BNDY	0.03	0.25	0.02				0.02	0.02	0.03	0.03																			0.24	0.03
E. BNDY	0.16	0.06	0.02				0.04	0.02	0.03	0.03																			0.02	0.09
W. BNDY	0.02	0.01	0.11				0.12	0.09	0.04	0.14																				0.03









Action level for radiological (occupational) air monitoring is 2% DAC. Isotope of concern is U-238; associated DAC is 2E-11 uCi/ml.

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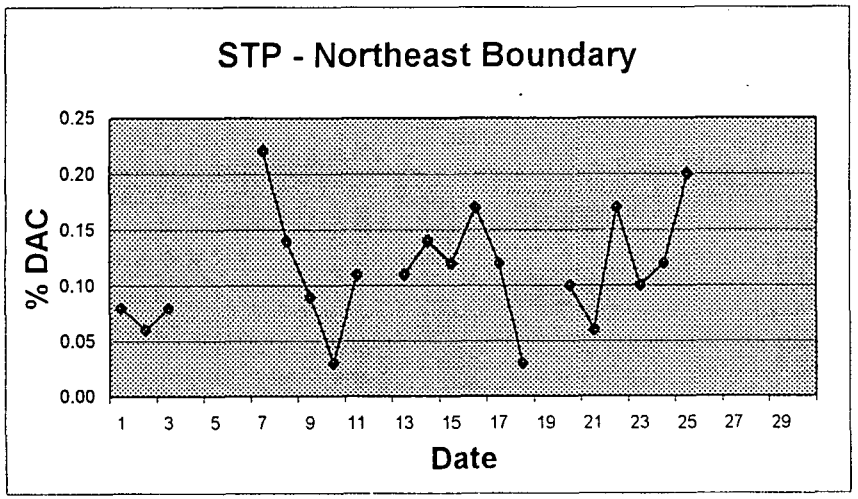
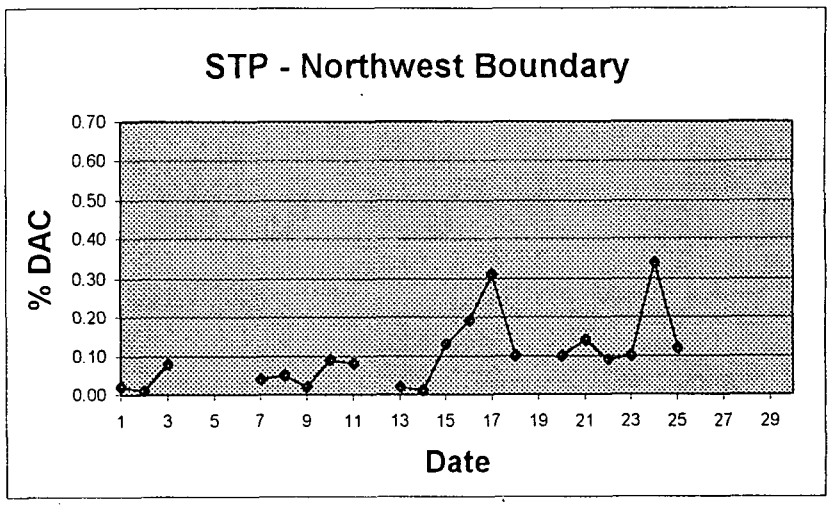
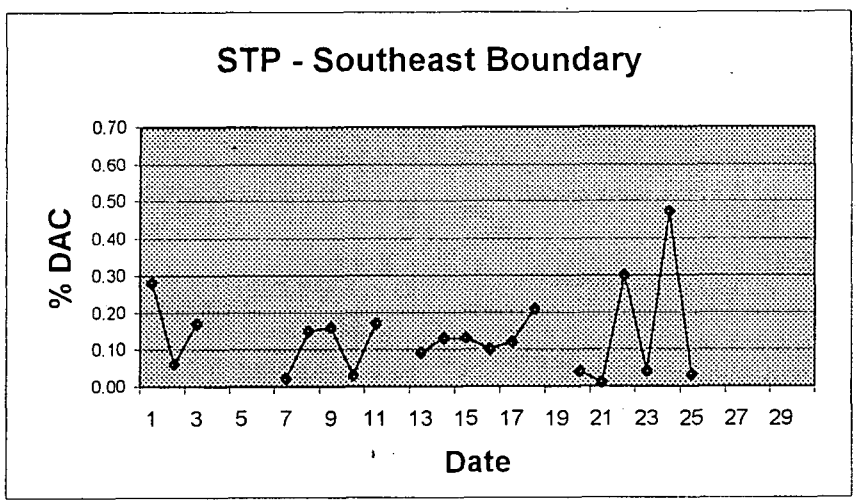
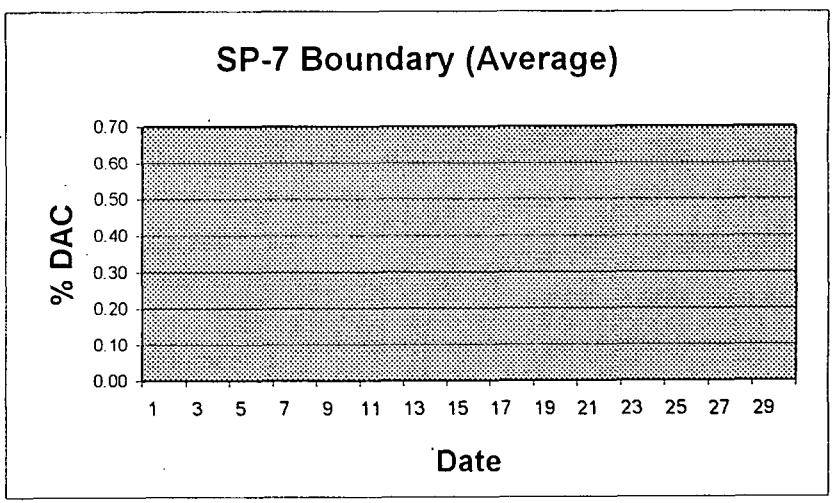
SEWAGE TREATMENT PLANT BOUNDARY AIR SAMPLES - SEPTEMBER 1999

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
N.E. BNDY	0.08	0.06	0.08				0.22	0.14	0.09	0.03	0.11		0.11	0.14	0.12	0.17	0.12	0.03		0.10	0.06	0.17	0.10	0.12	0.20					
N.W. BNDY	0.02	0.01	0.08				0.04	0.05	0.02	0.09	0.08		0.02	0.01	0.13	0.19	0.31	0.10		0.10	0.14	0.09	0.10	0.34	0.12					
S.E. BNDY	0.28	0.06	0.17				0.02	0.15	0.16	0.03	0.17		0.09	0.13	0.13	0.10	0.12	0.21		0.04	0.01	0.30	0.04	0.47	0.03					
SP-7																														









Action level for radiological (occupational) air monitoring is 2% DAC. Isotope of concern is U-238; associated DAC is 2E-11 uCi/ml.

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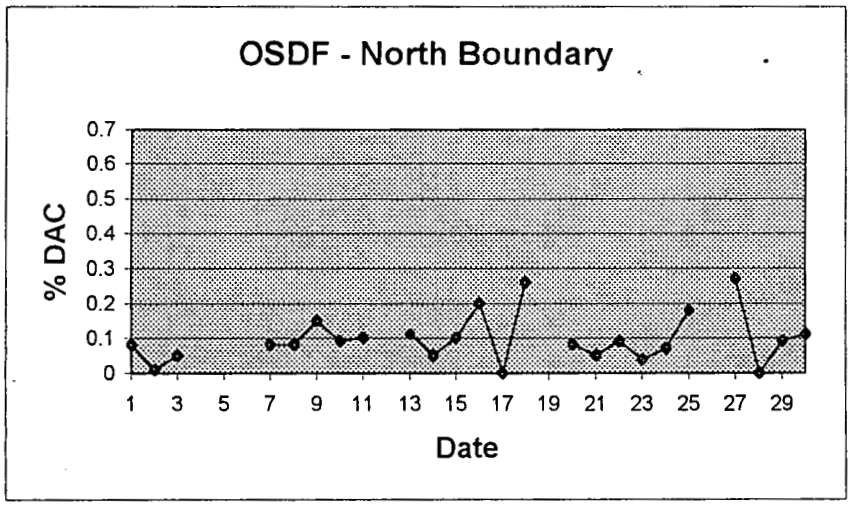
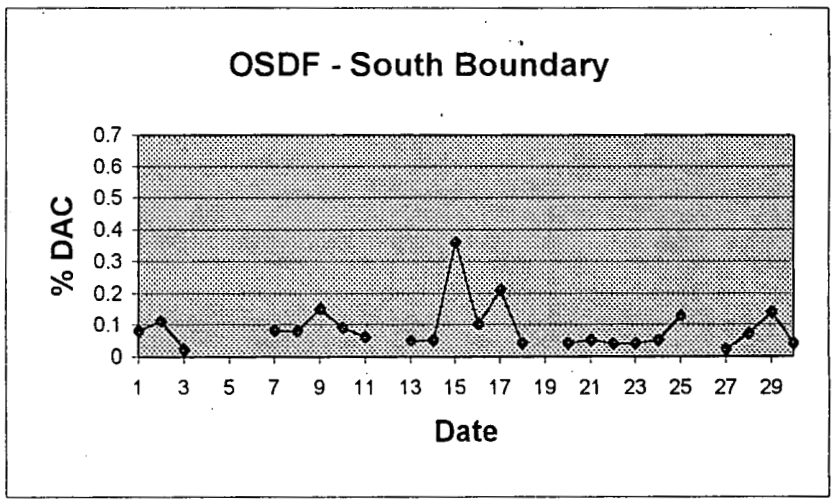
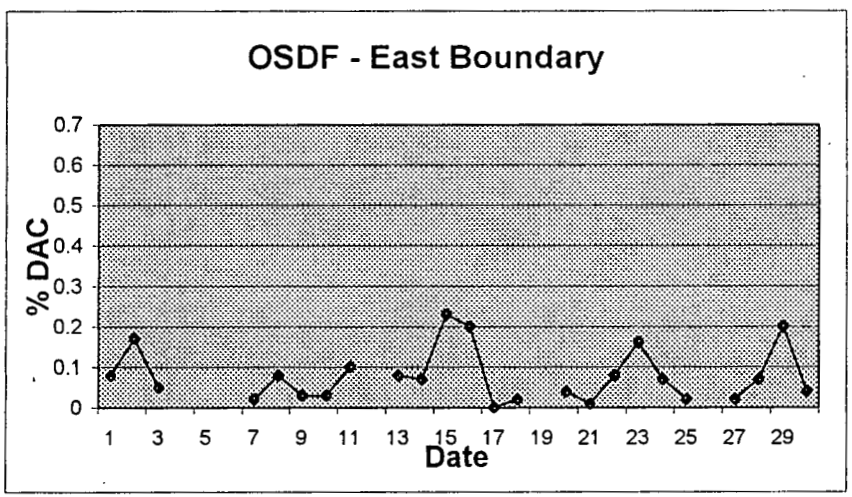
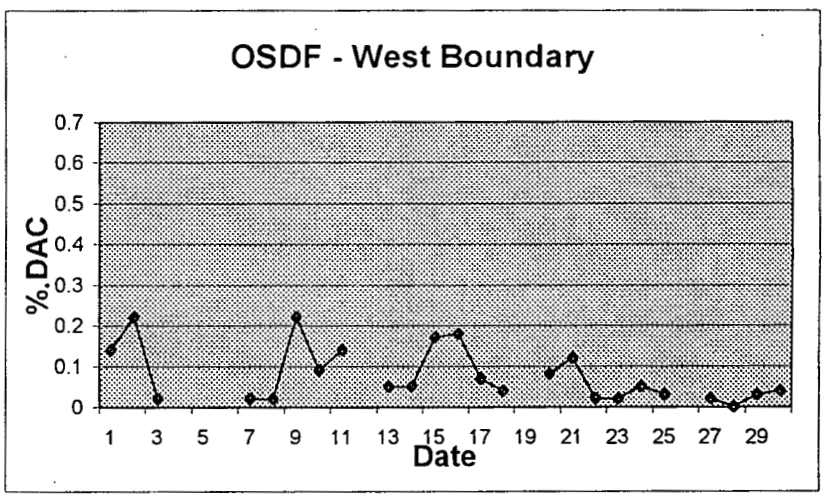
OSDF BOUNDARY AIR SAMPLES - SEPTEMBER 1999

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
N. BNDY	0.08	0.01	0.05				0.08	0.08	0.15	0.09	0.1		0.11	0.05	0.1	0.2	0	0.26		0.08	0.05	0.09	0.04	0.07	0.18		0.27	0	0.09	0.11
S. BNDY	0.08	0.11	0.02				0.08	0.08	0.15	0.09	0.06		0.05	0.05	0.36	0.1	0.21	0.04		0.04	0.05	0.04	0.04	0.05	0.13		0.02	0.07	0.14	0.04
E. BNDY	0.08	0.17	0.05				0.02	0.08	0.03	0.03	0.1		0.08	0.07	0.23	0.2	0	0.02		0.04	0.01	0.08	0.16	0.07	0.02		0.02	0.07	0.2	0.04
W. BNDY	0.14	0.22	0.02				0.02	0.02	0.22	0.09	0.14		0.05	0.05	0.17	0.18	0.07	0.04		0.08	0.12	0.02	0.02	0.05	0.03		0.02	0	0.03	0.04
S. RAMP		0.01					0.17	0.21	0.15							0.11	0.06	0.27		0.04	0.05									









Action level for radiological (occupational) air monitoring is 2% DAC. Isotope of concern is U-238; associated DAC is 2E-11 uCi/ml.

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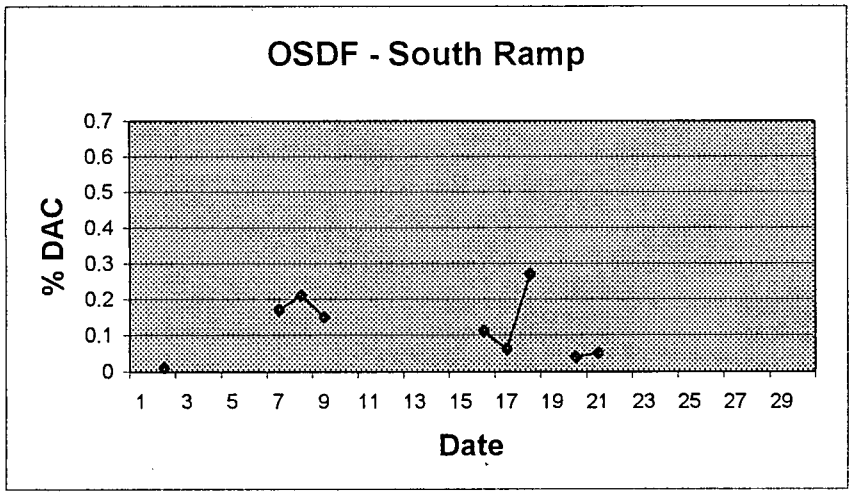
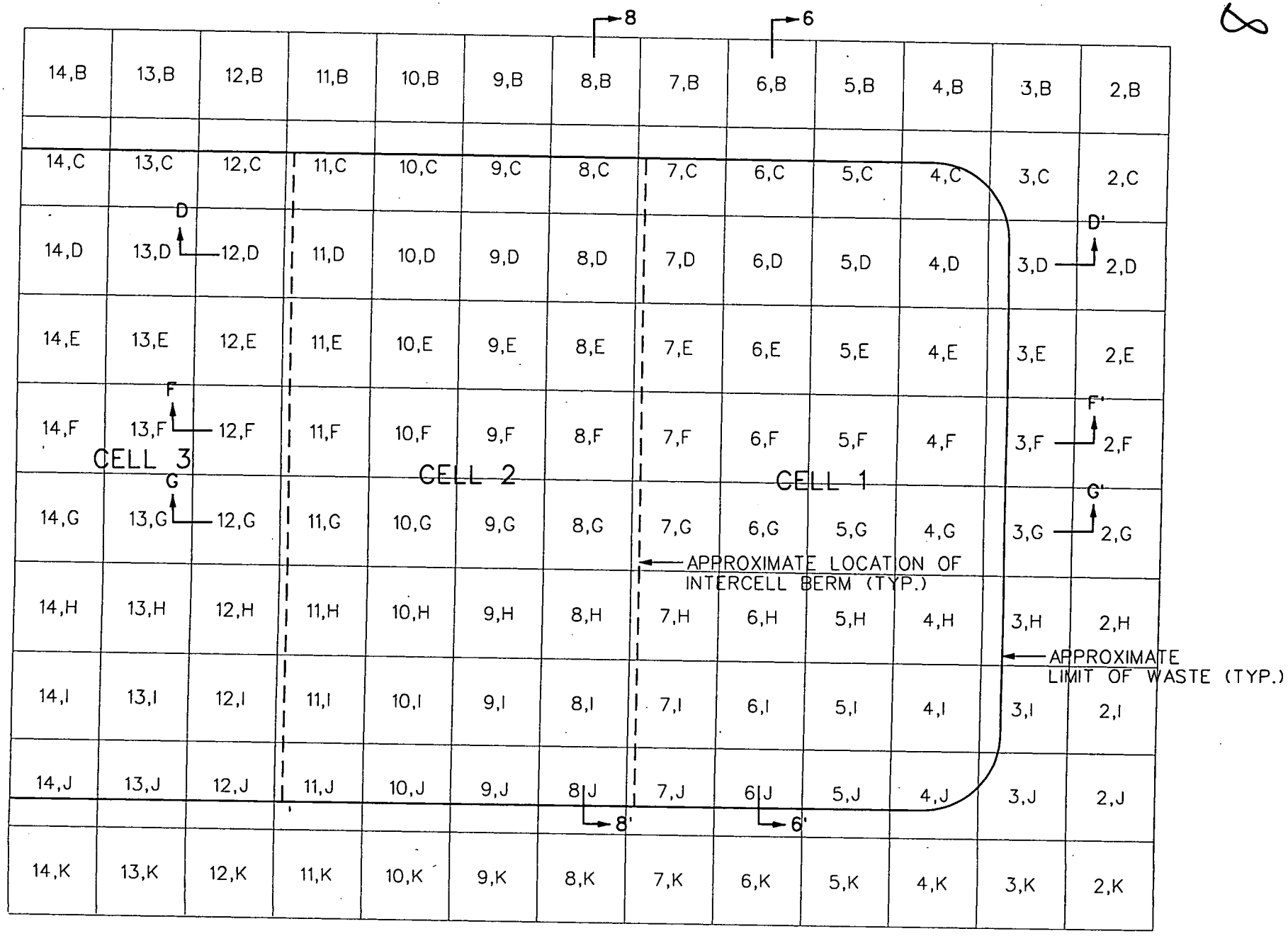


Action level for radiological (occupational) air monitoring is 2% DAC. Isotope of concern is U-238; associated DAC is 2E-11 uCi/ml.

OSDF GRID KEY PLAN



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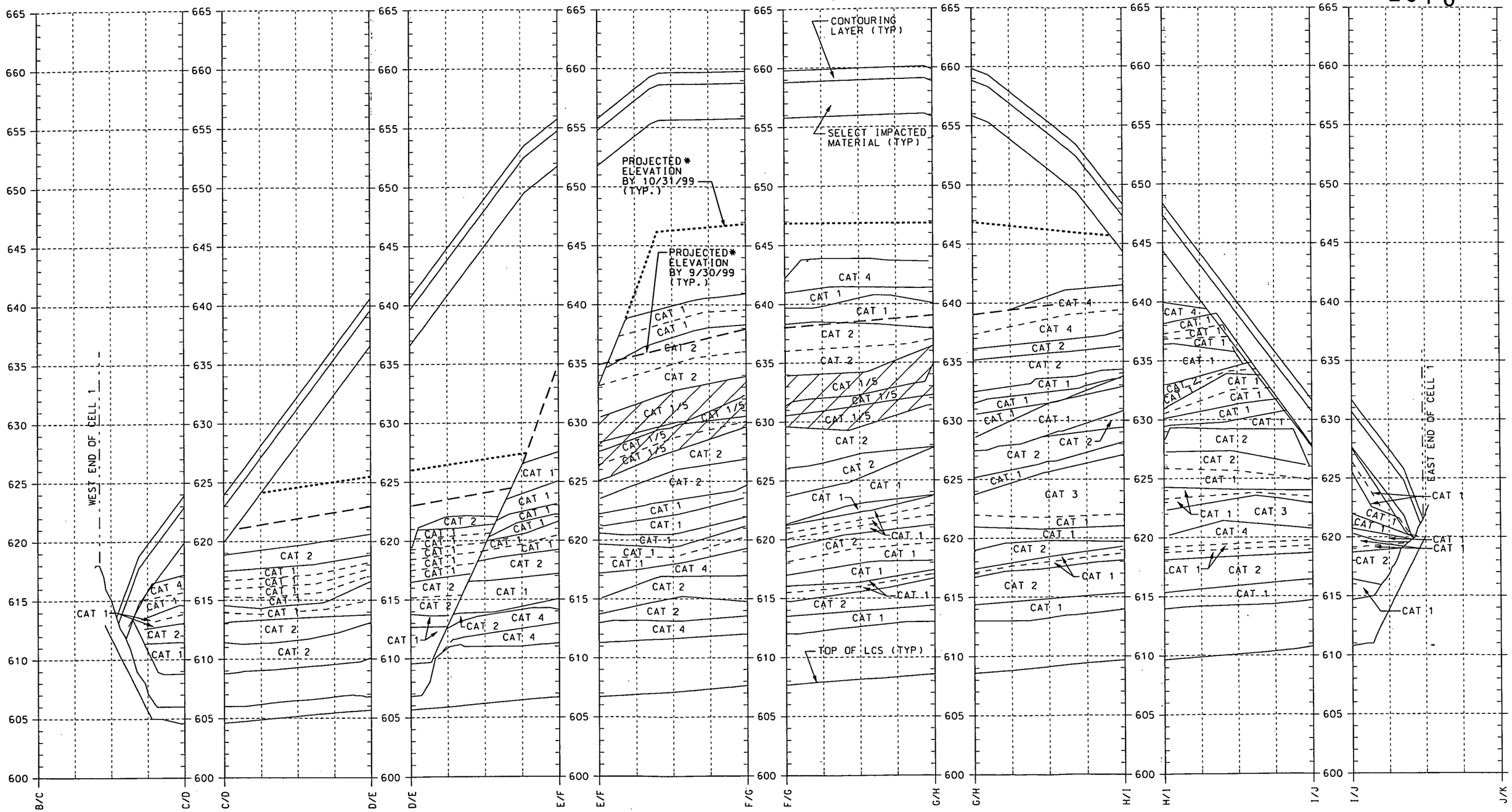
LOOKING NORTH CELL 1

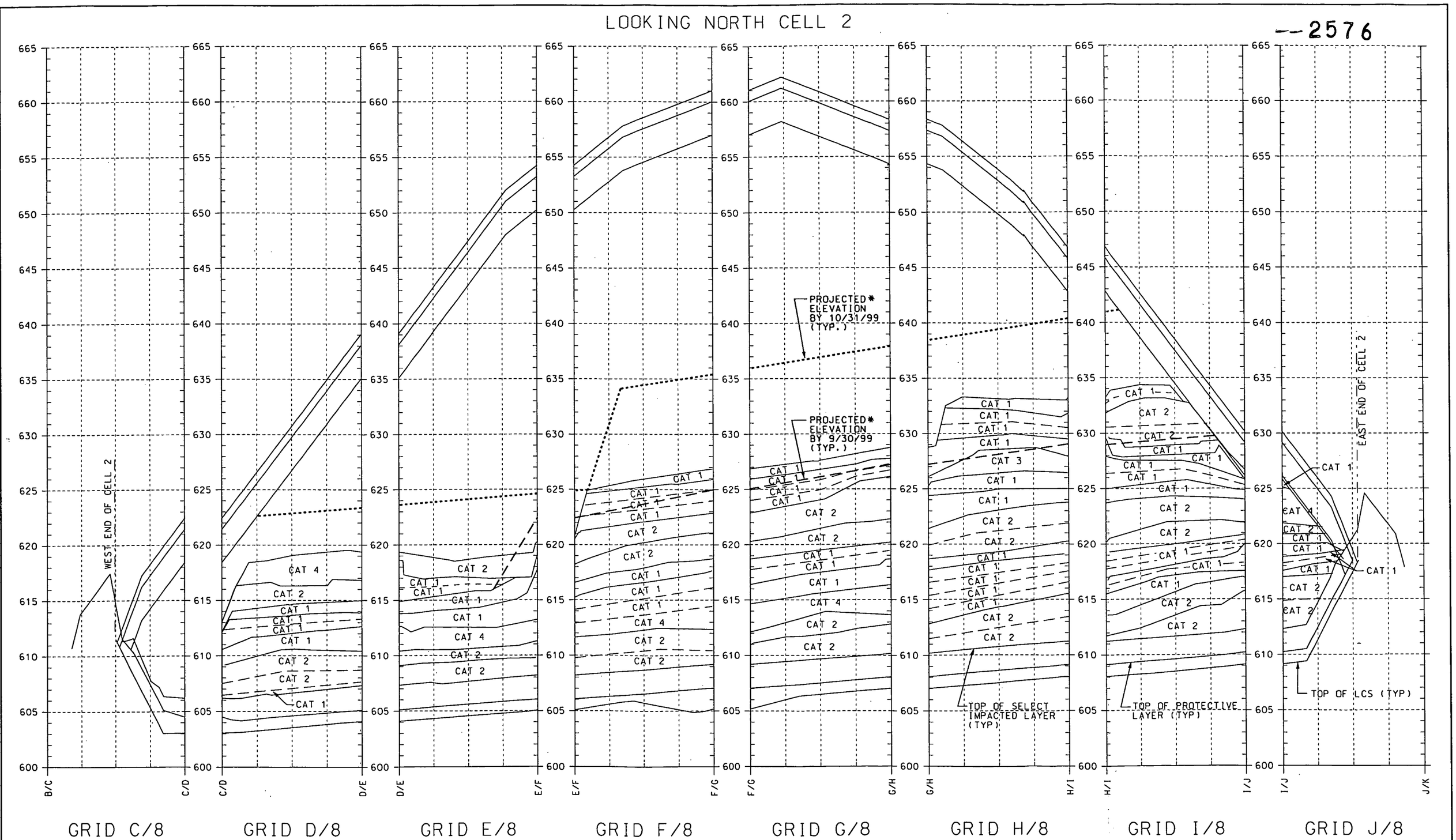


SECTION 6-6'

REVISED 10/4/99 (10/1/99 SURVEY)

* PROJECTED ELEVATIONS ARE BASED ON PROJECTED IMPACTED MATERIAL VOLUMES TO BE PLACED. LOCATION OF IMPACTED MATERIAL PLACEMENT MAY VARY DUE TO FIELD CONDITIONS.

sepsect.dgn



* PROJECTED ELEVATIONS ARE BASED ON PROJECTED IMPACTED MATERIAL VOLUMES TO BE PLACED. LOCATION OF IMPACTED MATERIAL PLACEMENT MAY VARY DUE TO FIELD CONDITIONS.

SECTION 8-8'

REVISED 10/4/99 (10/1/99 SURVEY)

1b

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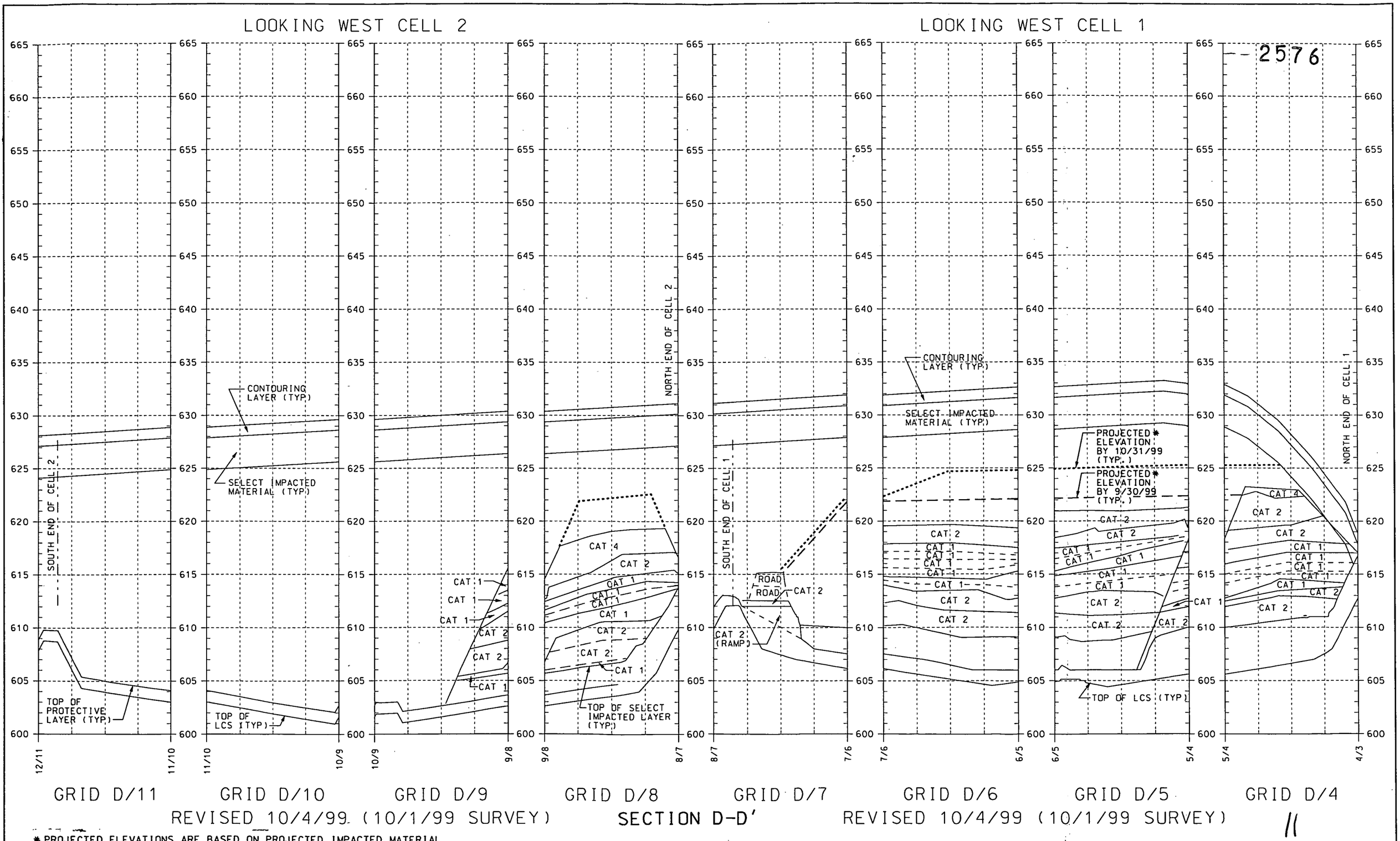

REVISED 10/4/99 (10/1/99 SURVEY)

SECTION D-D'

REVISED 10/4/99 (10/1/99 SURVEY)

11

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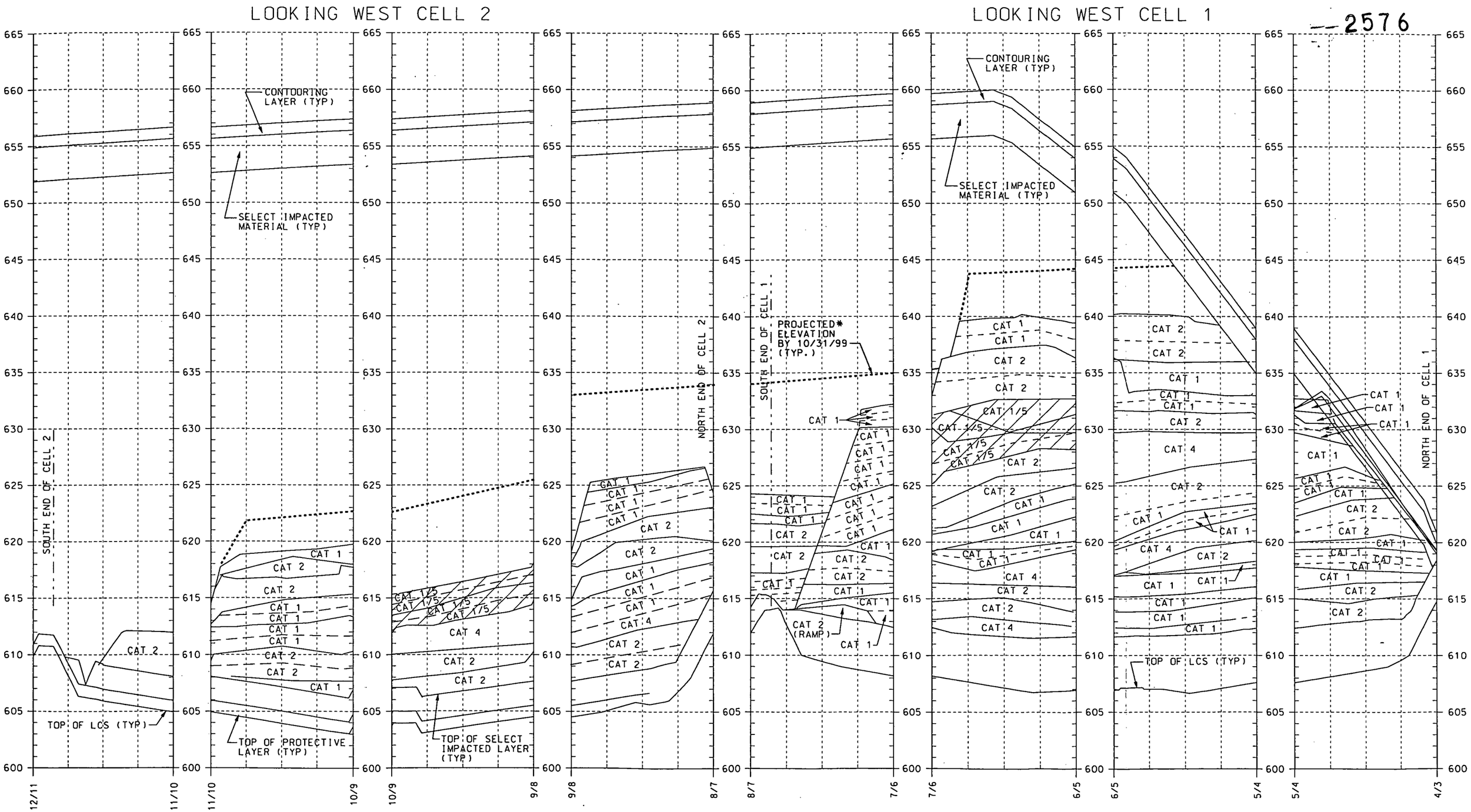

12

* PROJECTED ELEVATIONS ARE BASED ON PROJECTED IMPACTED MATERIAL VOLUMES TO BE PLACED. LOCATION OF IMPACTED MATERIAL PLACEMENT MAY VARY DUE TO FIELD CONDITIONS.

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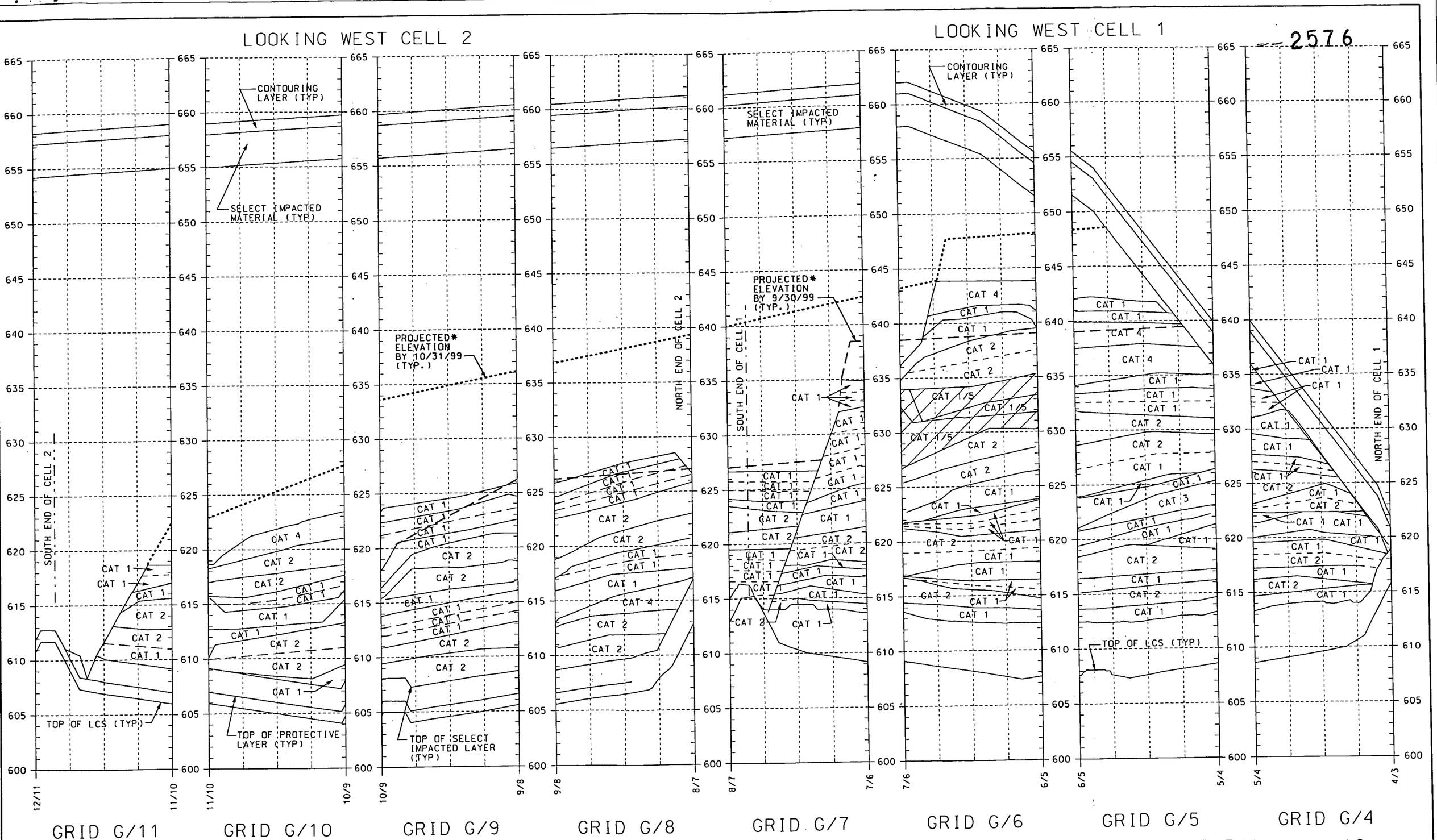


REVISED 10/4/99 (10/1/99 SURVEY)

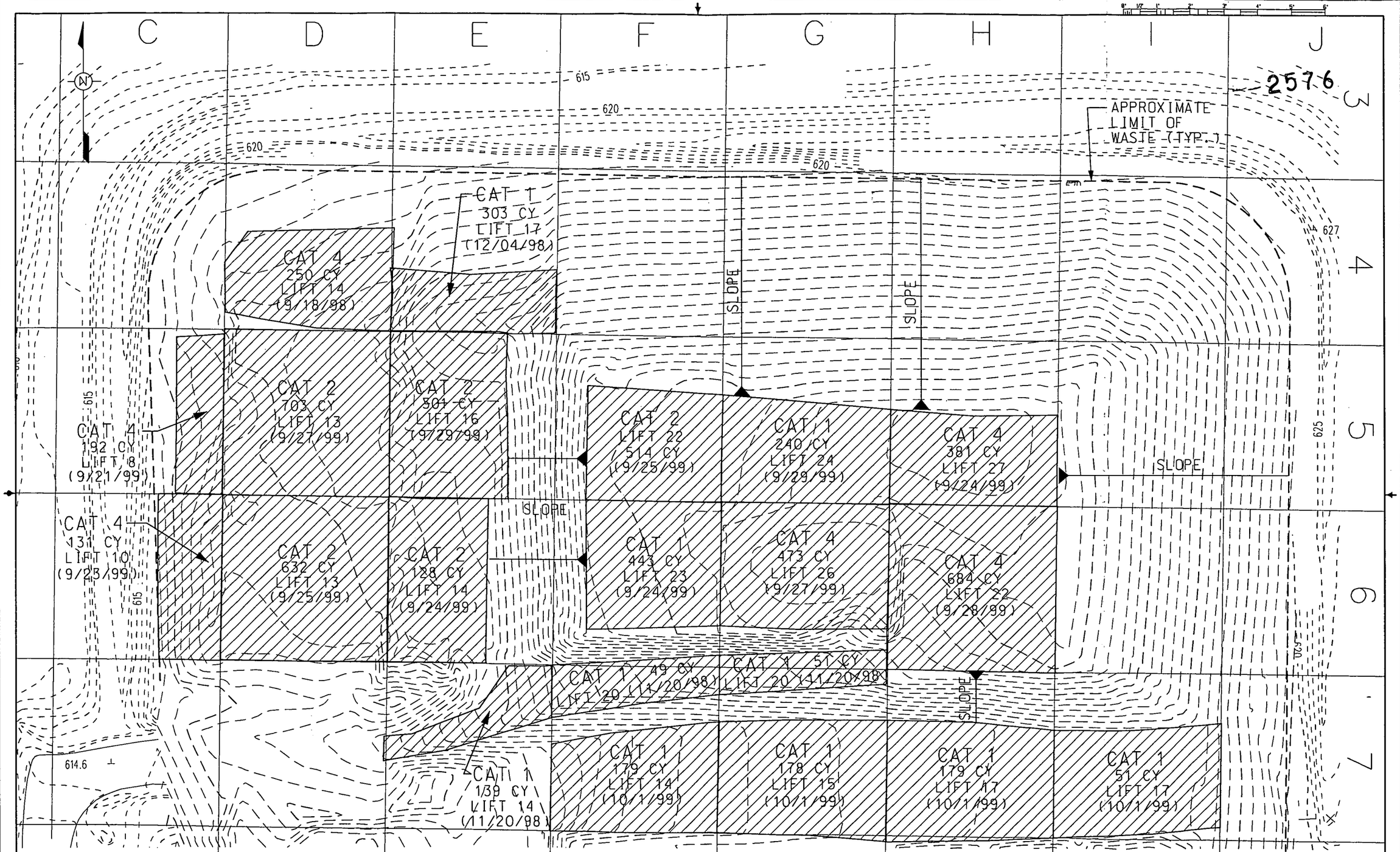
SECTION G-G'

REVISED 10/4/99 (10/1/99 SURVEY)

13

* PROJECTED ELEVATIONS ARE BASED ON PROJECTED IMPACTED MATERIAL VOLUMES TO BE PLACED. LOCATION OF IMPACTED MATERIAL PLACEMENT MAY VARY DUE TO FIELD CONDITIONS.

sepsect.dgn



CELL 1 CURRENT SURFACE PLAN AS OF 10/1/99

NO.	REVISIONS	DATE	DWN. BY	APPD.	NO.	REVISIONS	DATE	DWN. BY	APPD.	REF. DWG. NO.

NOTE: FLUOR DANIEL FERNALD CADD DRAWING. DO NOT REVISE MANUALLY.

CONFIGURATION MANAGEMENT DRAWING — YES / NO

SYSTEMS, STRUCTURES, OR COMPONENTS SHOWN ON THIS DRAWING ARE UNDER CONFIGURATION MANAGEMENT CONTROL. SEE NOTES.

COGNIZANT ENGINEER — DATE

APPROVALS

CIVIL & STR.		SAFETY ENG.	
ELECTRICAL		MAINTENANCE	
ENGINEER		FIRE PROTECT.	
INSTRUMENT		WASTE MANAGE.	
MECHANICAL		SECURITY	
		PROJECTS	
CHECKED			
APPROVED			

Fernald Environmental Management Project

FLUOR DANIEL FERNALD

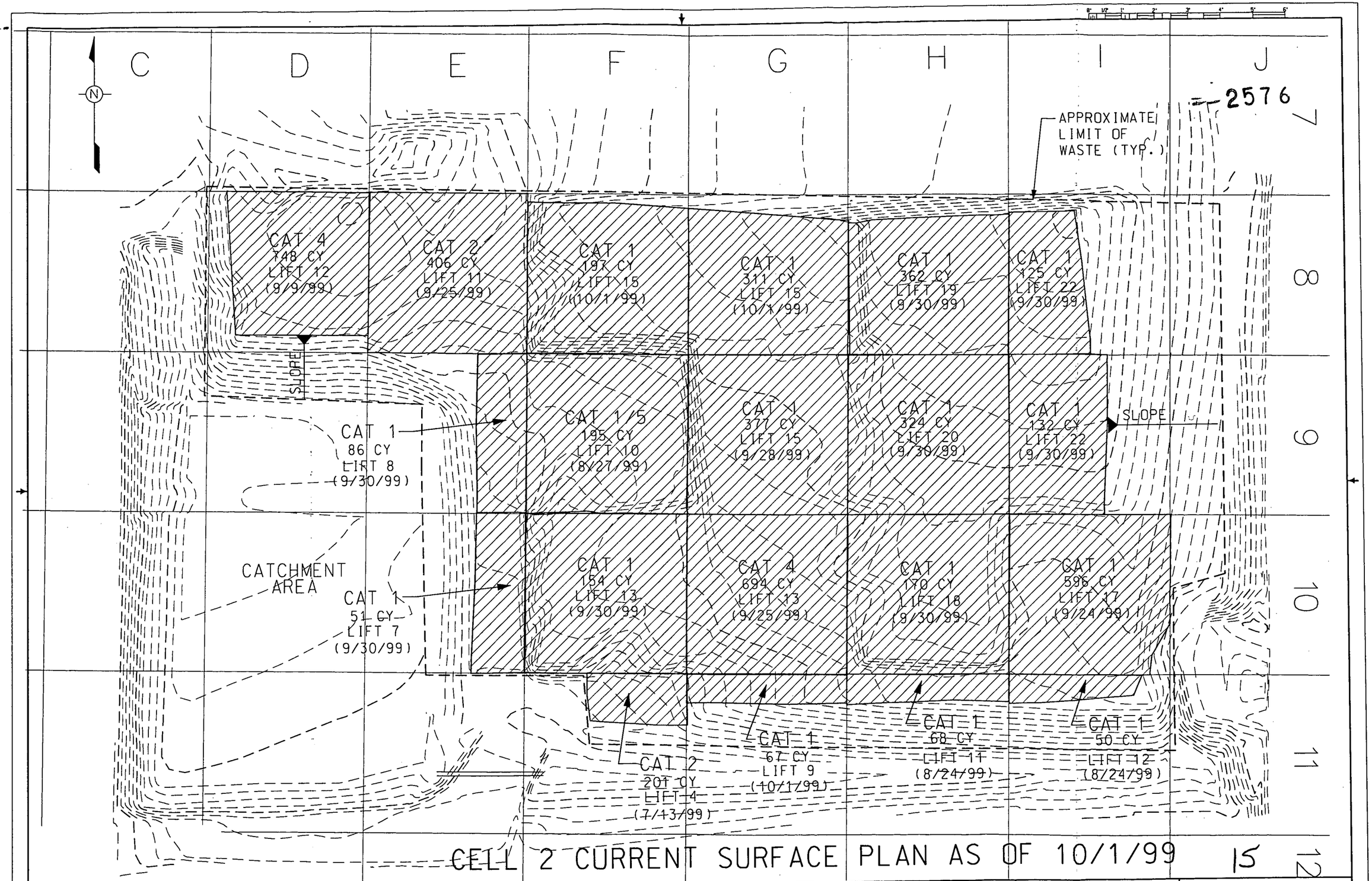
U.S. DEPARTMENT OF ENERGY

CELL 1
TOP LIFT PLAN
CATEGORY PLACEMENT

DATE 10/8/99
DRAWN ORF

FORMAT REVISED 11/5/98 FOF5.DGN
FORMAT REVISED 8/25/98

FILE NAME: lsep.dgn



LEGEND:

SURVEYED AREAS

NO.	REVISIONS	DATE	DWN. BY	APPD.	NO.	REVISIONS	DATE	DWN. BY	APPD.	REF. DWG. NO.

NOTE: FLUOR DANIEL FERNALD CADD DRAWING, DO NOT REVISE MANUALLY.

CONFIGURATION MANAGEMENT DRAWING

EFFECTIVE STRUCTURES OR COMPONENTS REFLECTED ON THIS DRAWING ARE UNDER CONFIGURATION MANAGEMENT CONTROL. SEE NOTES.

COGNIZANT ENGINEER DATE

APPROVALS

CIVIL & STR.		SAFETY ENG.	
ELECTRICAL		MAINTENANCE	
ENGINEER		FIRE PROTECT.	
INSTRUMENT		WASTE MANAGE	
MECHANICAL		SECURITY	
		PROJECTS	
CHECKED			
APPROVED			

Fernald Environmental Management Project

FLUOR DANIEL FERNALD

U.S. DEPARTMENT OF ENERGY

CELL 2
TOP LIFT PLAN
CATEGORY PLACEMENT

DATE 10/8/99
DRAWN DRF

FILE NAME: 2sep.dgn

FORMAT REVISED 11/3/98
FORMAT REVISED 8/29/96 FDFS.DGN

Soils to Debris Ratio

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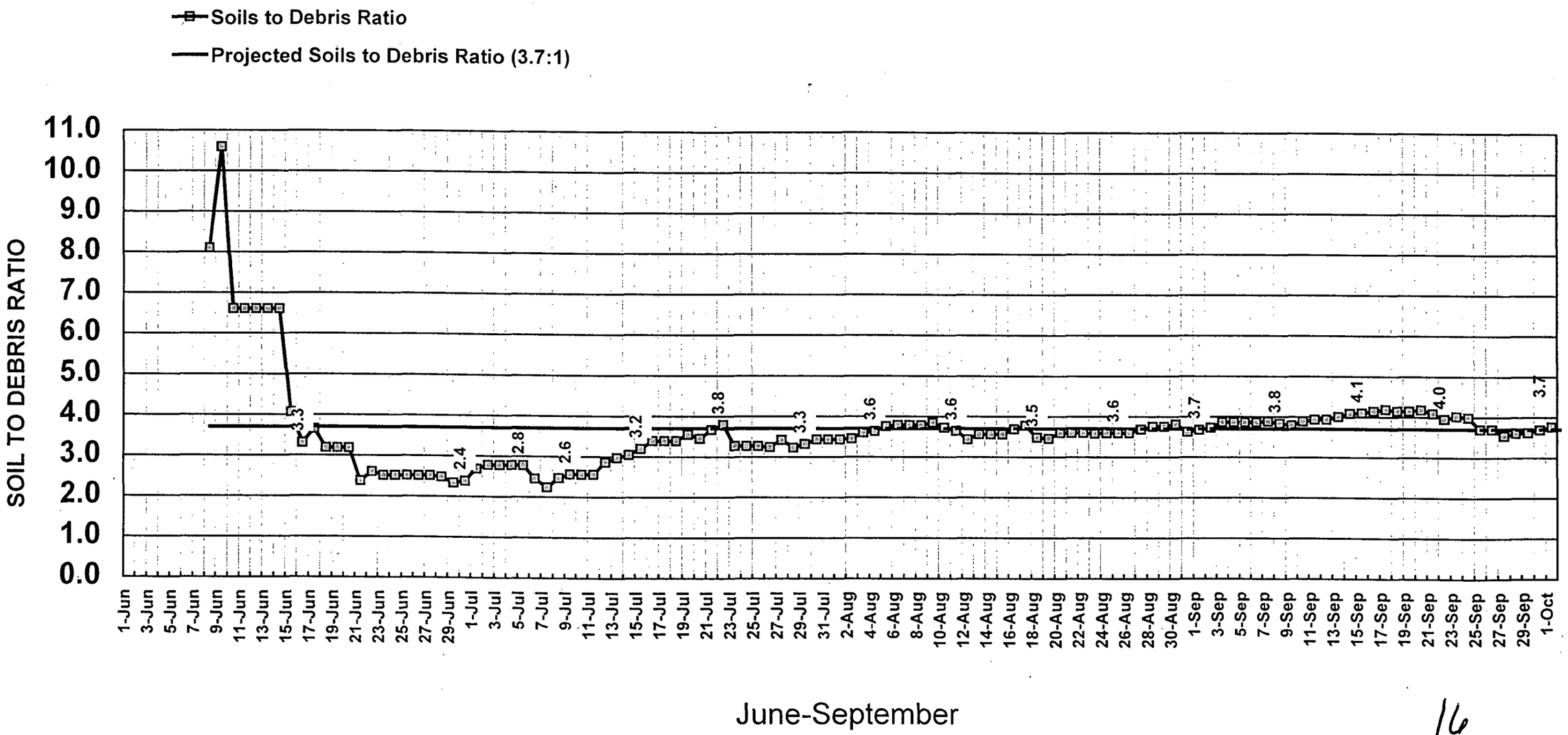

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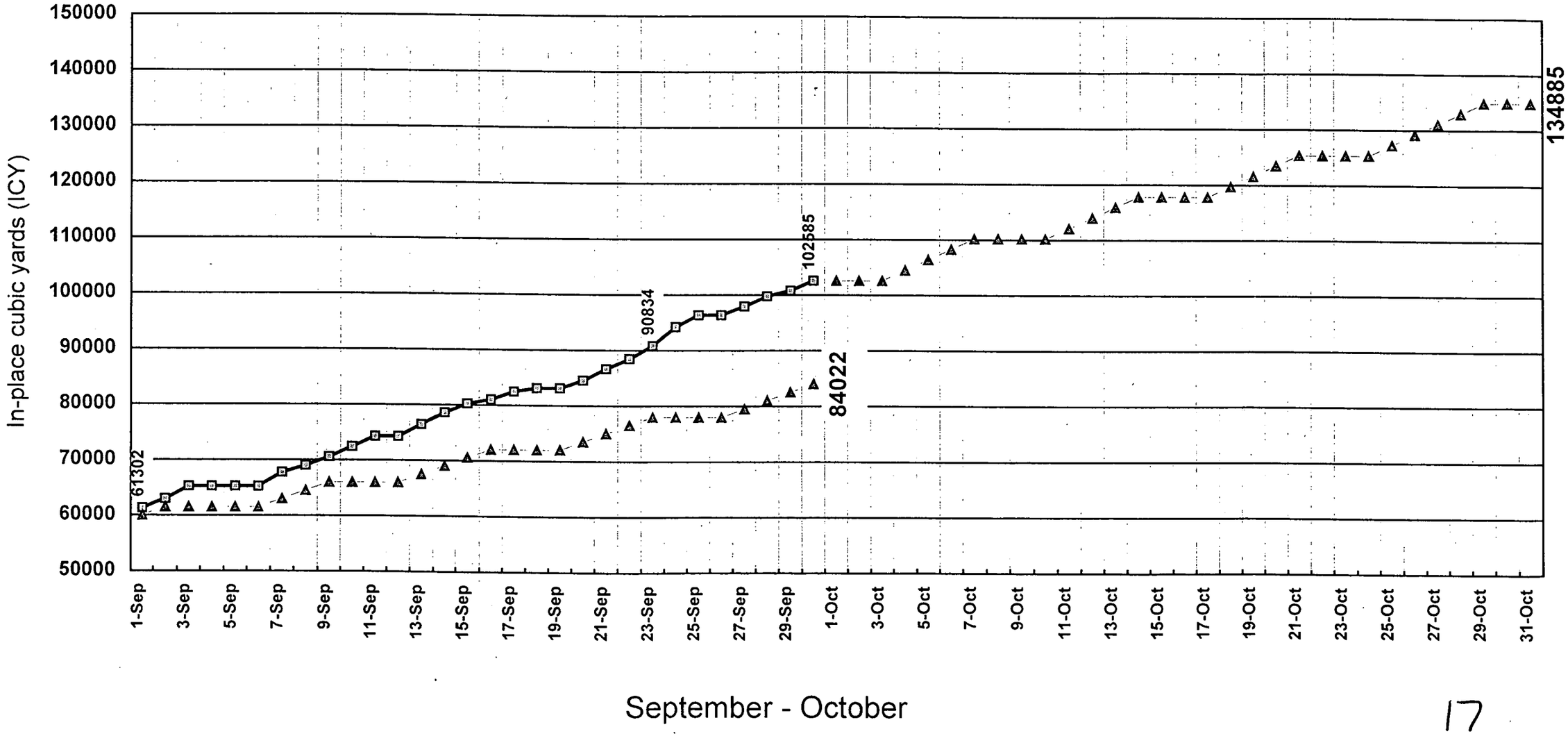
CAT 1 Soil Placement



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Debris Placement

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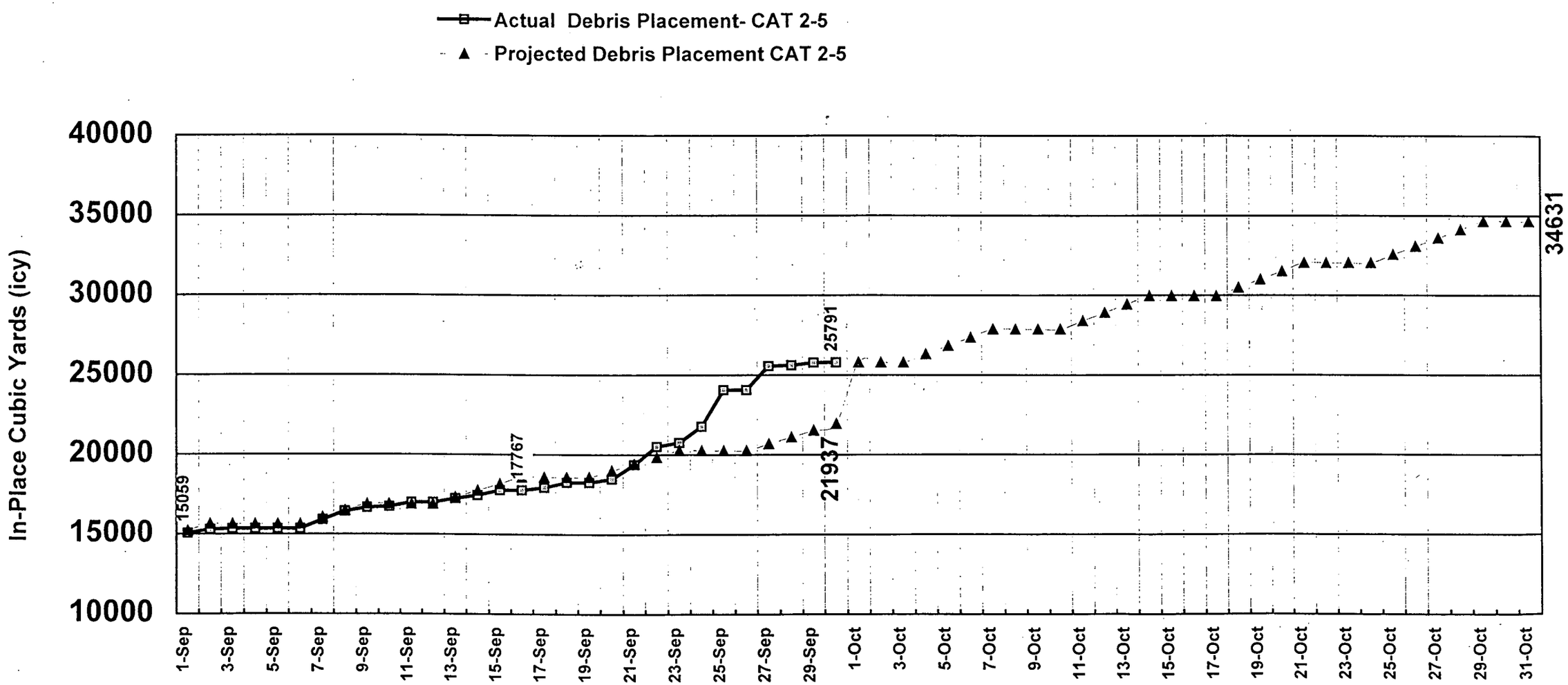

September - October

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Total Soil and Debris Placement (icy)

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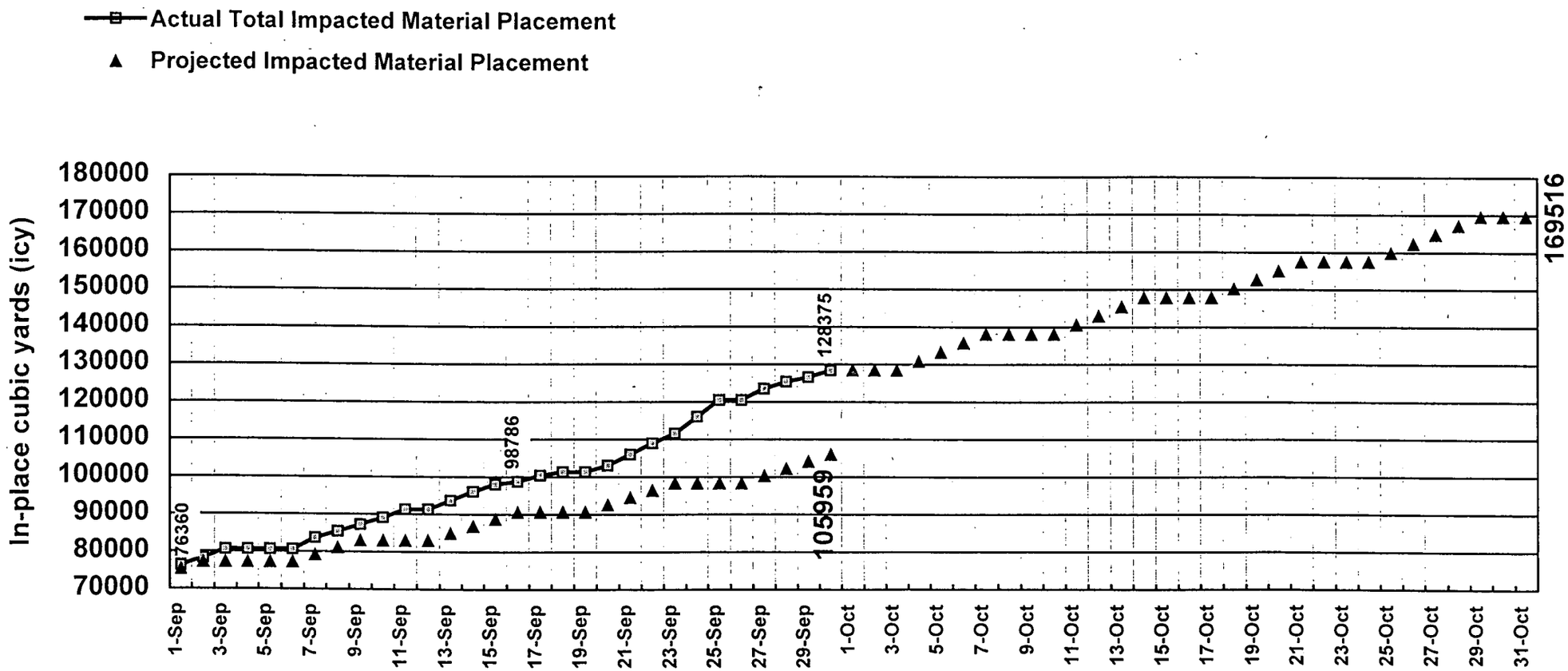

September - October

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D & D (Above Grade) Debris Placement (icy)

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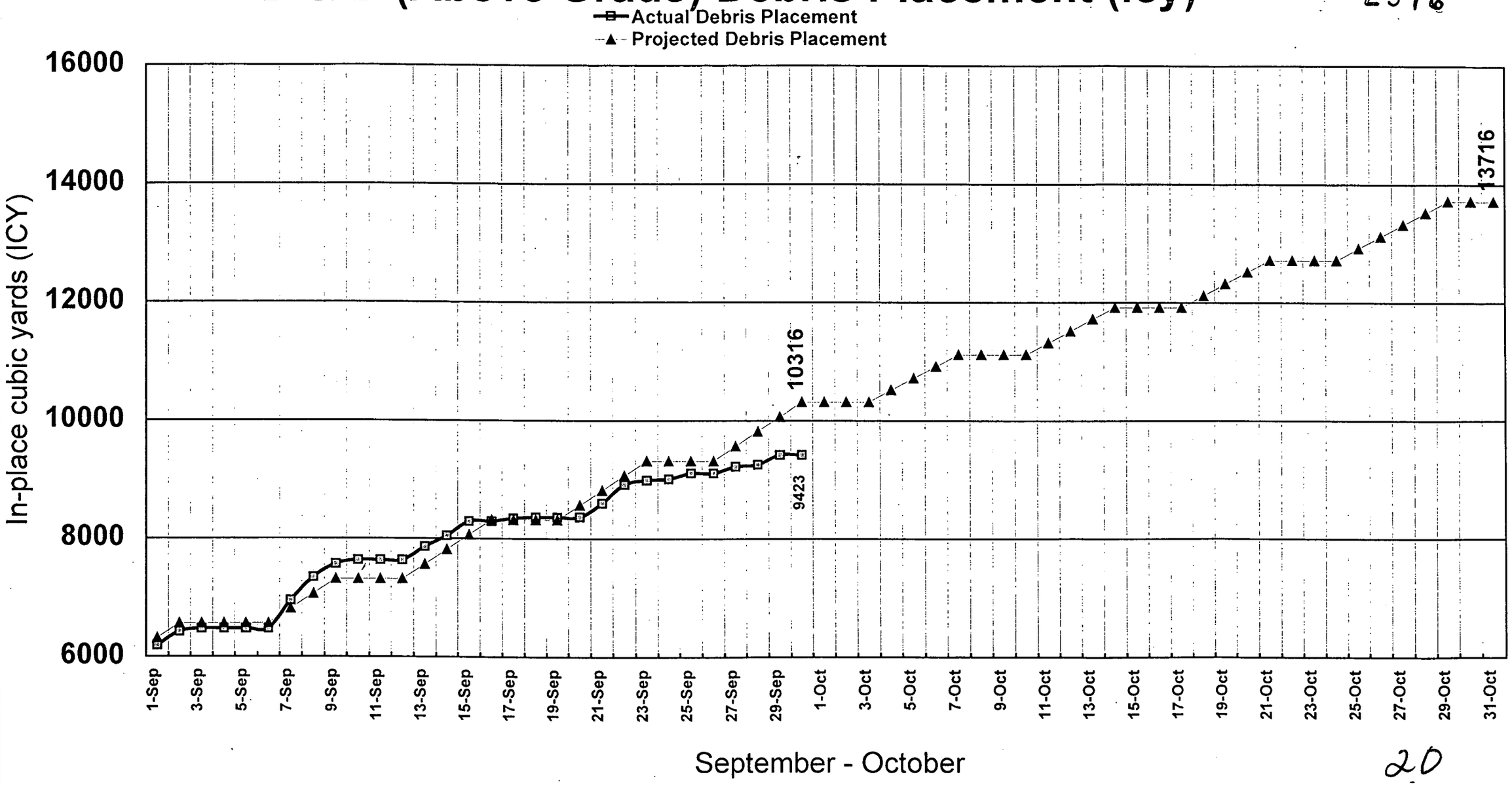

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CAT 2 (At or Below Grade) Debris Placement

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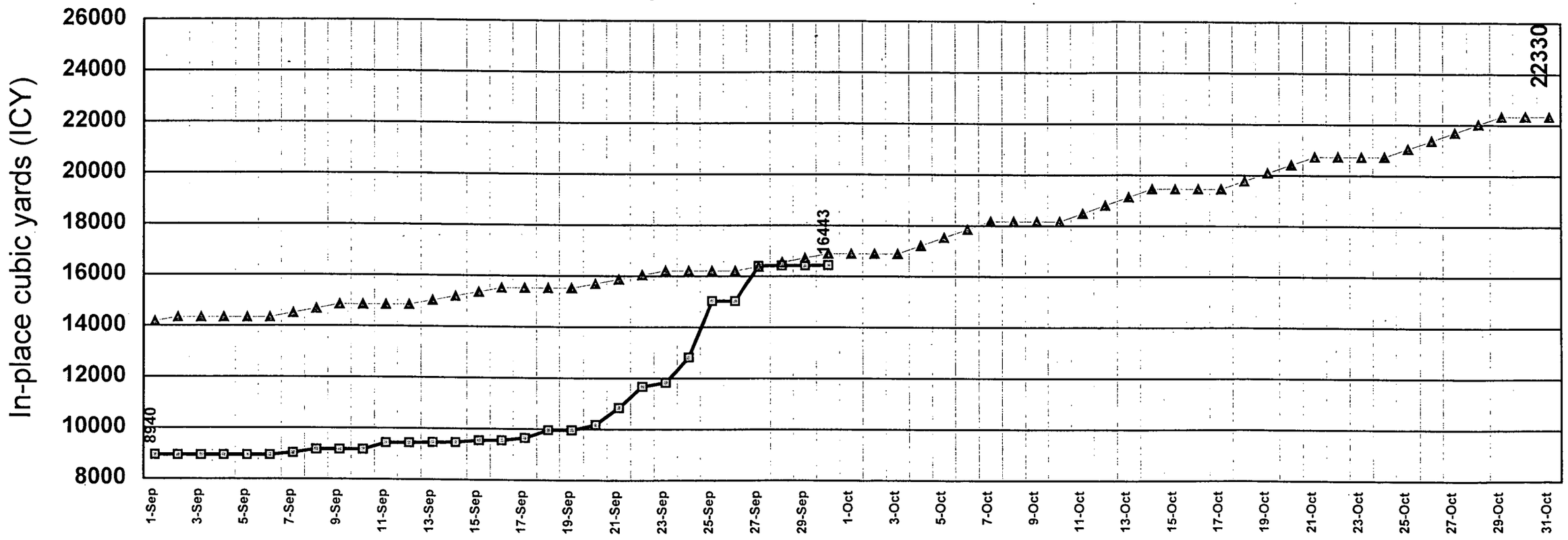

September - October

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CAT 2 BELOW GRADE Chart 1

10/12/99