

PDR-
LPI - Wm-10 (2)
Wm-11 (2)
Wm-16 (2)

MAY 19 1987

✓ 426.1/A-0297/MB/87/05/18/0

- 1 -

Wm-RES
WM Record File
A0297
LLH

WM Project 10, 11, 16
Docket No. _____
PDR ✓
XLPDR ✓ (B, N, S)

Dr. Dae Chung
Staff Scientist
Lawrence Livermore National Laboratory
University of California
Livermore, CA 94550

Distribution: _____

(Return to WM, 623-SS)

Dear Dr. Chung:

In accordance with Task 2 of Contract A-0297, I request that you initiate the following task:

Conduct a geomorphic examination of the Yucca Mountain HLW site at and near the locations of the proposed shaft and ramp openings (maps attached). Shaft and ramp locations should be examined for the potential for erosion, debris dam formation, and/or other geomorphic changes and the possible resultant entrance of surface waters. The completed report should (1) address the potential effect of 10,000 years of geomorphic change on drainage configurations at the Yucca Mountain site, specifically in the area of the proposed shafts and drifts and in Drill Hole Wash, (2) quantitatively assess the geomorphic changes that could occur with respect to stream and flood plain erosion in those areas, (3) define the potential lateral, vertical (downcutting), and/or upstream movement and erosion of streams and gullies in those areas and (4), assess the possibilities of locating more suitable shaft and ramp locations in those areas.

The results of this study should be transmitted to the NRC in a topical letter report. It is anticipated that this task shall require four staff-weeks of effort to be accomplished by June 30, 1987. A draft of the topical letter report should be submitted by the geomorphologist directly to the NRC staff no later than June 19, 1987 for their review and comment.

The action taken by this letter is considered to be within the scope of the current contract (A-0297). No changes to cost or delivery of contracted services and products are authorized. Please notify me immediately if you believe that this letter would result in changes to cost or delivery of contracted products.

Sincerely,
(Original Signed by _____)

Michael E. Blackford, Project Manager
Geology/Geophysics Section
Geotechnical Branch
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards

8709040232 870519
PDR WMRES EXILLL
A-0297 PDR

Attachments:
As stated

87175454/5
WM Project: WM-10, 11, 16
PDR yes
(Return to WM, 623-SS)

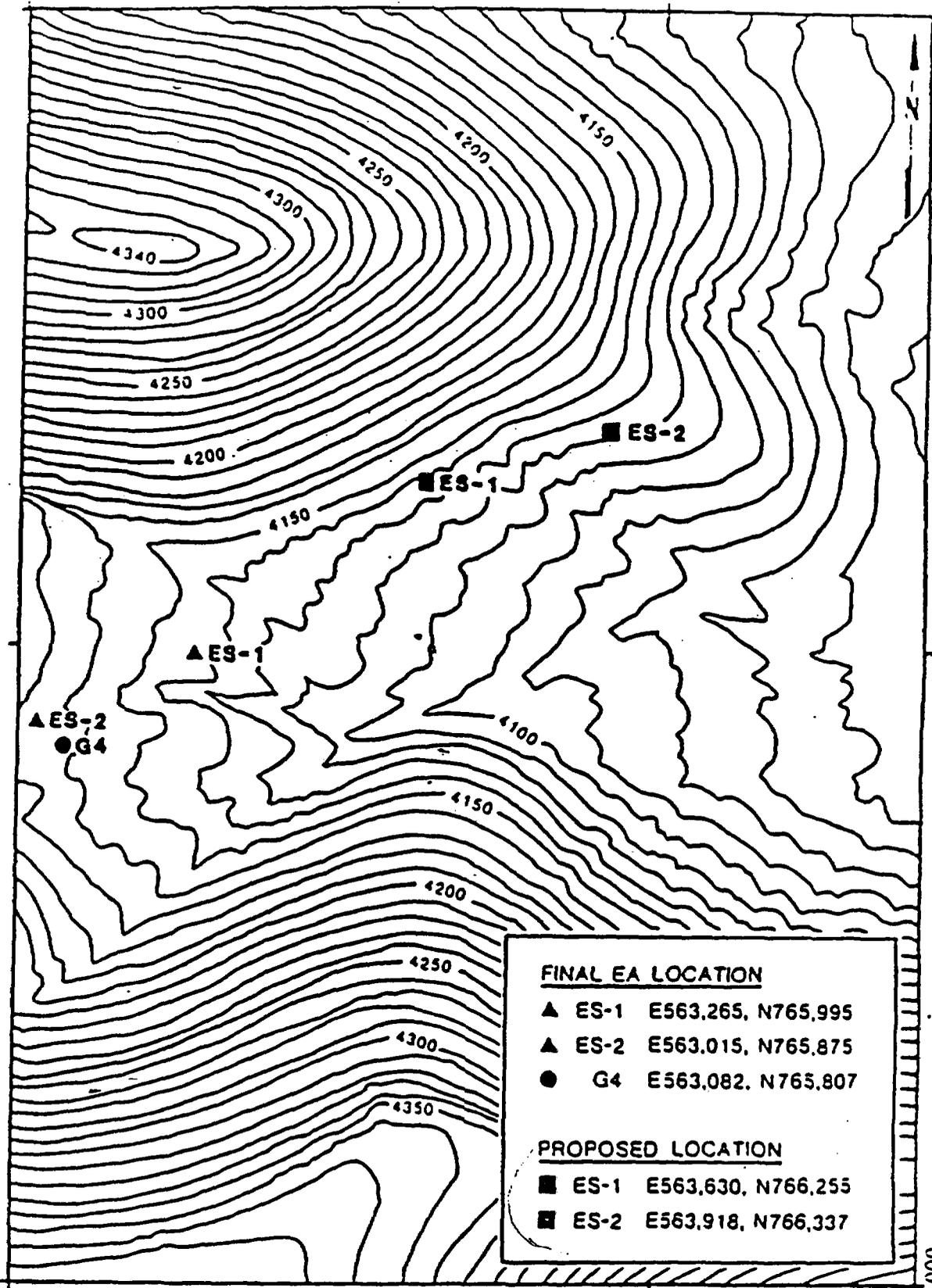
WM Record File: A0297
LPDR yes

3960

563.000

564.000

767.000

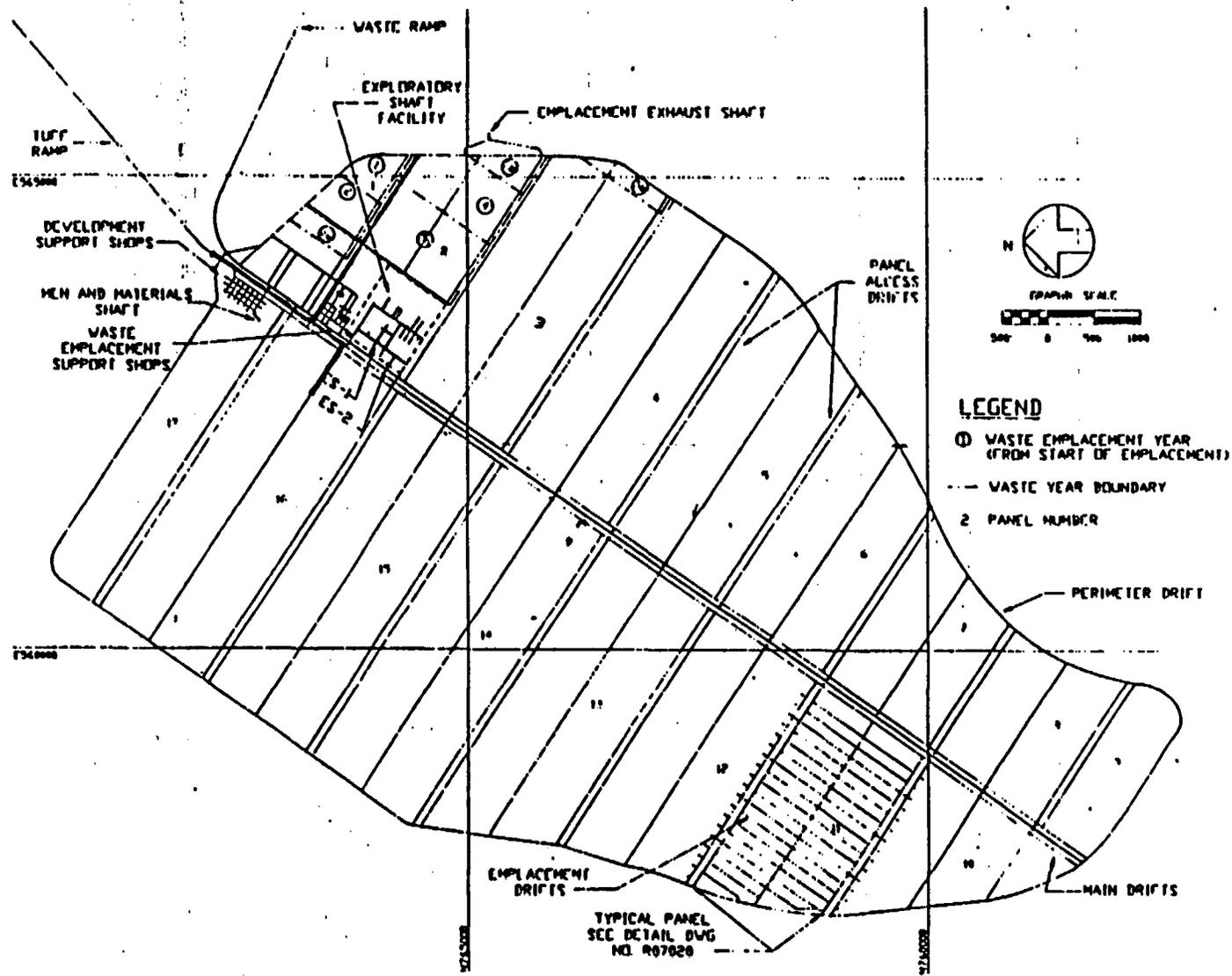


766.000

765.000

Figure 3. Comparative Illustration of the Final EA Versus the Proposed Exploratory Shaft Locations

6-80



DRAFT

Figure 6-13. Vertical emplacement configurations.

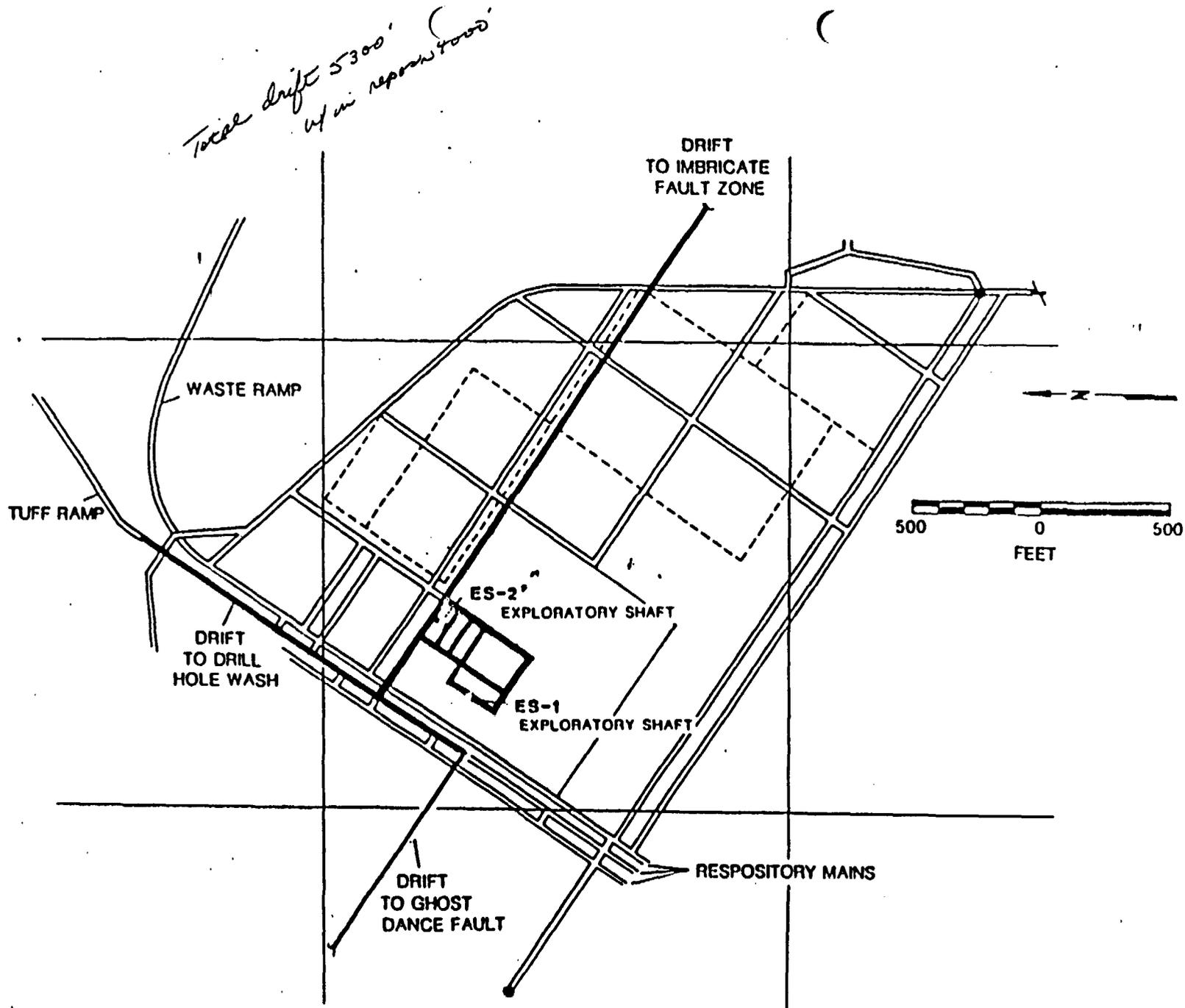
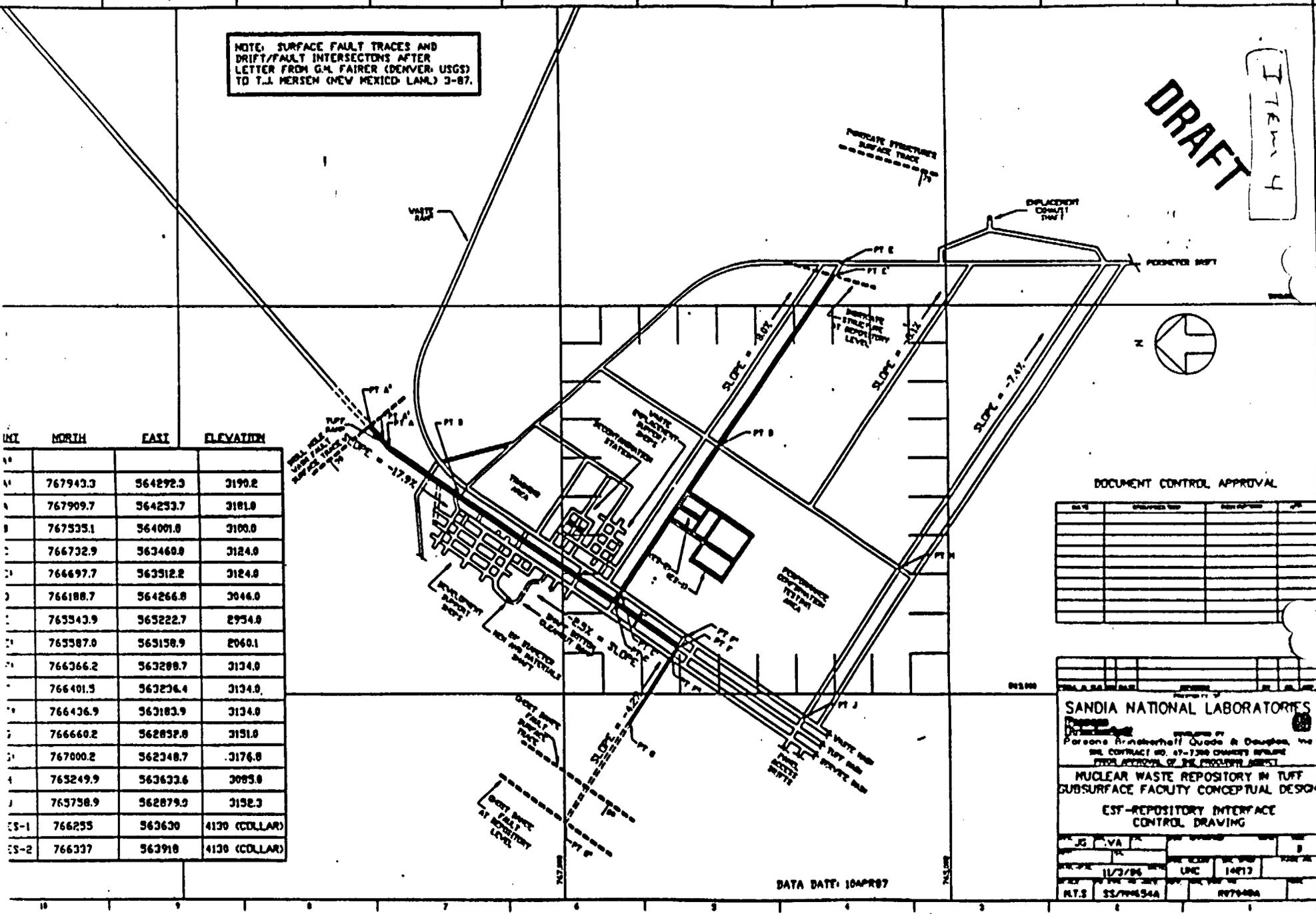


Figure 5. Relationship of FSF long drifts and the conceptual repository design.

NOTE: SURFACE FAULT TRACES AND DRIFT/FAULT INTERSECTIONS AFTER LETTER FROM G.M. FAIRER (DENVER USGS) TO T.J. MERSEN (NEW MEXICO LAML) 3-87.

DRAFT
ITEM 4



NCI	NORTH	EAST	ELEVATION
11			
11	767943.3	564292.3	3190.2
11	767909.7	564253.7	3181.0
8	767535.1	564001.0	3106.0
2	766732.9	563468.0	3124.0
21	766497.7	563512.2	3124.0
0	766188.7	564266.0	3046.0
2	765543.9	565222.7	2954.0
21	765587.0	563158.9	2960.1
21	766366.2	563288.7	3134.0
2	766401.5	563236.4	3134.0
21	766436.9	563183.9	3134.0
2	766660.2	562852.0	3151.0
21	767000.2	562348.7	3176.0
4	765249.9	563633.6	3089.0
J	765758.9	562879.0	3152.3
CS-1	766255	563630	4130 (COLLAR)
CS-2	766337	563918	4130 (COLLAR)

DOCUMENT CONTROL APPROVAL

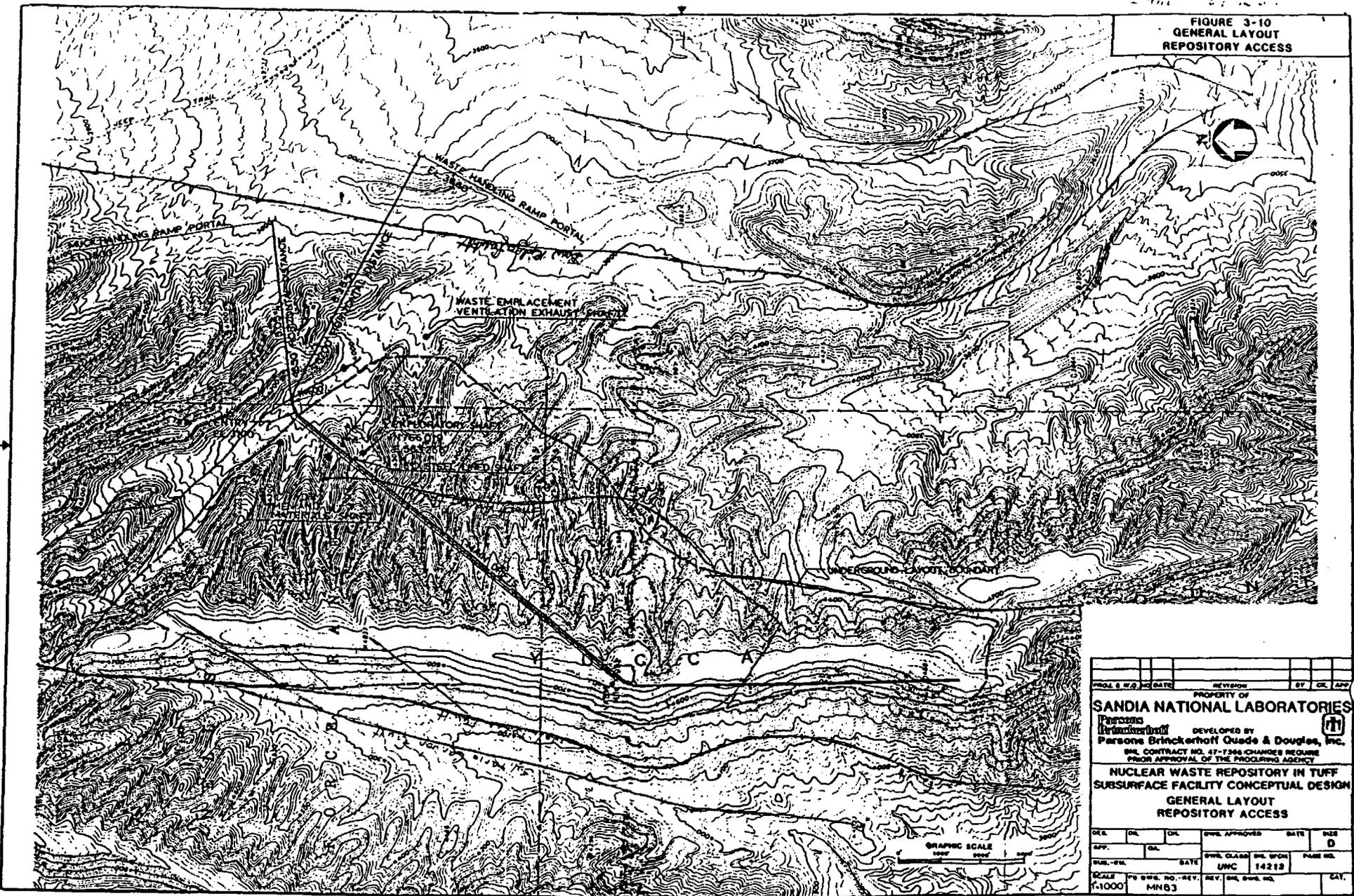
DATE	APPROVED BY	REVISION	JOB

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 FIELD APPROVAL OF THE PROSPECTIVE SUBJECT
**NUCLEAR WASTE REPOSITORY IN TUFF
 SUBSURFACE FACILITY CONCEPTUAL DESIGN**
**EST-REPOSITORY INTERFACE
 CONTROL DRAWING**

JG	VA		
PK-PC	11/3/86	UNC	14813
RTS	SS/198634A		8979-004

DATA DATE: 10APR87

FIGURE 3-10
GENERAL LAYOUT
REPOSITORY ACCESS



PROJ. NO.	DATE	REVISION	BY	CHK	APPV
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NUCLEAR WASTE REPOSITORY IN TUFF SUBSURFACE FACILITY CONCEPTUAL DESIGN GENERAL LAYOUT REPOSITORY ACCESS					
DES.	CHK.	CHK.	DATE APPROVED	DATE	BASE
APPV.	CHK.	CHK.			D
SUB-CHK.	DATE	SPWL CLASS	DEL. SPCH	PAGE NO.	
SCALE	NO. OF SHEETS	REV.	NO. OF SHEETS	CAT.	
1:1000	MND3				

MAY 19 1987

426.1/A-0297/MB/87/05/18/0

- 2 -

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LETTER TO: Dr. Dae Chung, LLNL, Livermore, CA
FROM: Michael E. Blackford, Project Manager, FIN A-0297
SUBJECT: TASK LETTER TO INVESTIGATE GEOMORPHIC HAZARDS IN THE VICINITY OF THE SHAFT AND RAMP OPENINGS AT THE YUCCA MOUNTAIN SITE
DATE:

DISTRIBUTION

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87/05/19

(Mailed by the WMLCC,

5-26-87 8:00

Date / / Time