



Department of Energy
 Albuquerque Operations Office
 P.O. Box 5400
 Albuquerque, New Mexico 87115

RETURN ORIGINAL TO PDR, HQ.

WM-48

FEB 07 1991

91 FEB 17 1991

URFO
 RECEIVED

Mr. Ramon E. Hall
 Director, Uranium Recovery
 Field Office
 Region IV
 U.S. Nuclear Regulatory Commission
 P.O. Box 25325
 Denver, CO 80225

Dear Mr. Hall:

Enclosed for your information is a Class III Project Interface Document (PID) No. 03-S-41 for the Durango, Colorado, Uranium Mill Tailings Remedial Action site. The PID involves a change for the completion date in Specification 01010-1.8.A. In addition, a copy of the previously sent Class II PID 93-S-30 is enclosed per the request of Dawn Jacoby of your staff.

Should you have any questions, please contact Steve Ham of my staff at PDS 845-5640.

Sincerely,

Mark L. Matthews

Mark L. Matthews
 Project Manager
 Uranium Mill Tailings Remedial Action
 Project Office

Enclosures

cc w/o enclosures:
 M. Abrams, UMTRA
 D. Gillen, NRC

DESIGNATED ORIGINAL

Certified By *Mary C. Howard*

9102270249 910207
 PDR WASTE PDR
 WM-48

91-0254 *DFW*



UMTRA PROJECT OFFICE
PROJECT INTERFACE DOCUMENT

Site Durango, Colorado	Date 12/31/96	PID No. 03-S-41	Site No. 03	Vic Pro No.
Originator and Location Tom Jernings, APO	Phone (505) 766-1667	Organization MK-Ferguson	Answer By:	References: Subcontract: Subcontract No: DUR-86-02
Subject Extension of Subcontract Completion Date				

Description of Problem and Recommended Solution Clarification Change

Problem: The Subcontract completion date of Specification 01010-1.8.A is December 31, 1990, but because of delays to the work, the Project cannot be completed by that date. An extension of time to June 30, 1991, is considered to be in the best interest of the Government.

Solution: In 01010-1.8.A, Change "December 31, 1990" to "June 30, 1991".

Originator [Signature] 1/3/91
Signature Date

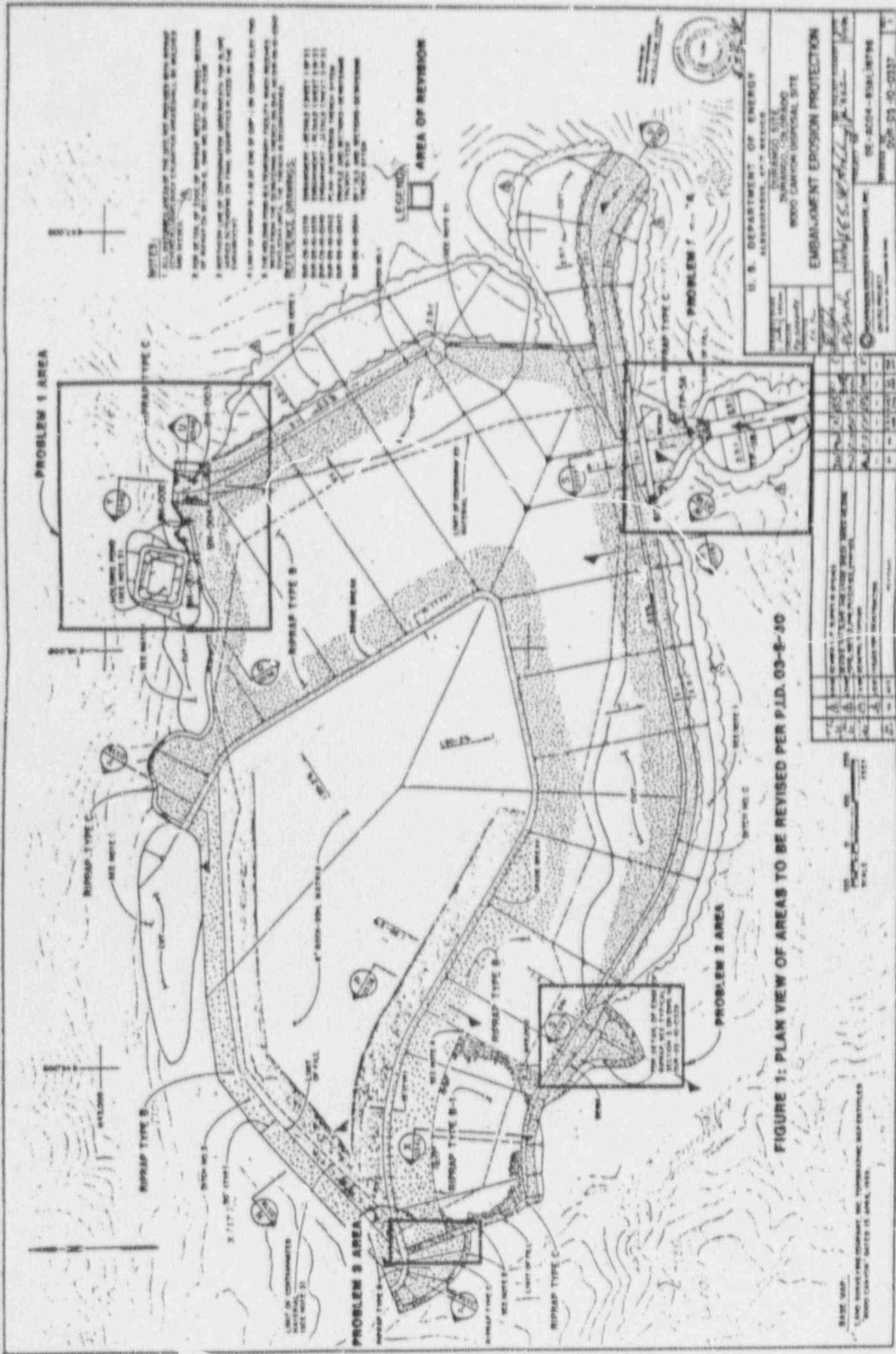
Disposition Approved Disapproved Approved as Noted

Criteria Change? Yes No
(If Yes, DOE approval required)

CONTROLLED WORK COPY

RAC Site Manager	<u>Billy Zebach</u>	1/11/91
RAC Project Control	<u>William W. Johnson</u>	1/4/91
RAC Engineering/Design	<u>J. N. [Signature]</u>	1/8/91
RAC Construction Engineer	<u>Robert C. Cooney</u>	1/4/91
Reviewed for Quality Requirements	<u>Alvin [Signature]</u>	1/4/91

Distribution	Name	Location	Name	Location	Cost/Time Est.
RAC Site Mgr.	<u>M. Thomson</u>		RAC Constr. Engr. Mgr.	<u>R. Cooney</u>	<input type="checkbox"/> Attached <input checked="" type="checkbox"/> Not Required <input type="checkbox"/> DOE Approval Req.
DOE Proj Engr.	<u>J. Harra</u>		RAC Qual. Mgr.	<u>P. Cole</u>	
TAC Site Mgr.	<u>R. Edge</u>		Other	<u>J. Okibon D. Sanders</u>	
RAC Site Qual. Engr.	<u>T. Harrell</u>			<u>J. Hyman</u>	
RAC HS&E Mgr.	<u>F. Peick/KG</u>			<u>M. Stroms</u>	



NOTES:

1. ALL DIMENSIONS OF THE JOB ARE INDICATED BY DIMENSION LINES AND DIMENSIONS.
2. ALL DIMENSIONS OF THE JOB ARE INDICATED BY DIMENSION LINES AND DIMENSIONS.
3. ALL DIMENSIONS OF THE JOB ARE INDICATED BY DIMENSION LINES AND DIMENSIONS.
4. ALL DIMENSIONS OF THE JOB ARE INDICATED BY DIMENSION LINES AND DIMENSIONS.

REFERENCE DIMENSIONS:

- 100'-00" TO 120'-00" (SEE NOTE 1)
- 120'-00" TO 140'-00" (SEE NOTE 1)
- 140'-00" TO 160'-00" (SEE NOTE 1)
- 160'-00" TO 180'-00" (SEE NOTE 1)
- 180'-00" TO 200'-00" (SEE NOTE 1)
- 200'-00" TO 220'-00" (SEE NOTE 1)
- 220'-00" TO 240'-00" (SEE NOTE 1)
- 240'-00" TO 260'-00" (SEE NOTE 1)
- 260'-00" TO 280'-00" (SEE NOTE 1)
- 280'-00" TO 300'-00" (SEE NOTE 1)

LEGEND:

- AREA OF REVISION
- SEE NOTE 1

U. S. DEPARTMENT OF ENERGY
ALBUQUERQUE DISTRICT OFFICE
NUNATAK SITE
MOJO CANYON DISPOSAL SITE
EMBANKMENT EROSION PROTECTION

PROJECT NO. 20-03-0337

DATE: 03-18-80

BY: [Signature]

CHECKED BY: [Signature]

SCALE: AS SHOWN

FIGURE 1: PLAN VIEW OF AREAS TO BE REVISED PER P.L.D. 03-8-80



BASE MAP:
LAND SURVEYING COMPANY, INC. TERRAZAS MAP SHEETS
MOJO CANYON, DATED 13 APRIL 1979.

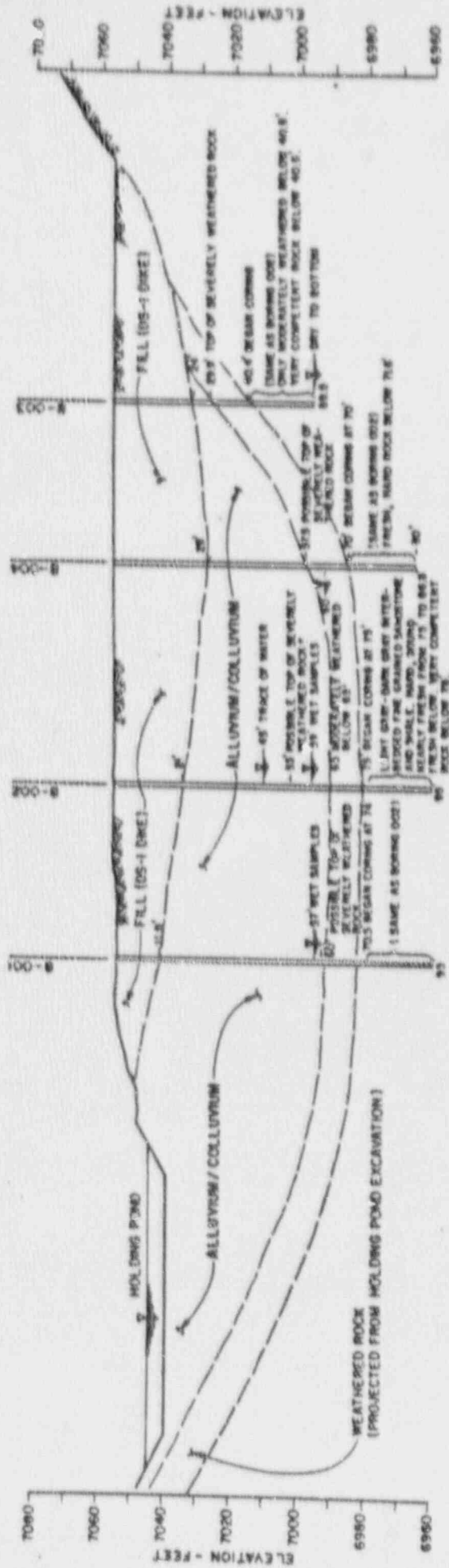
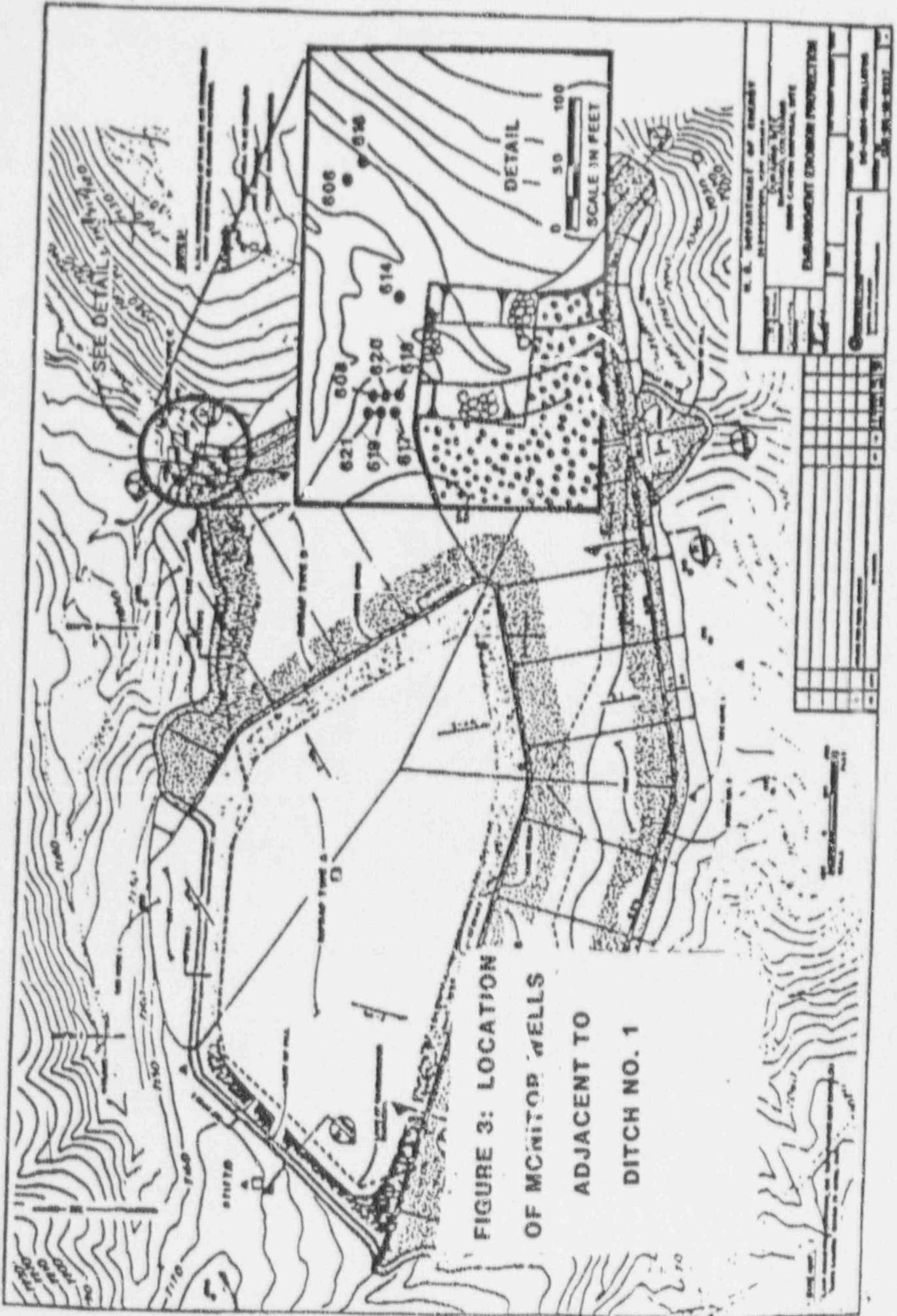


FIGURE 2.

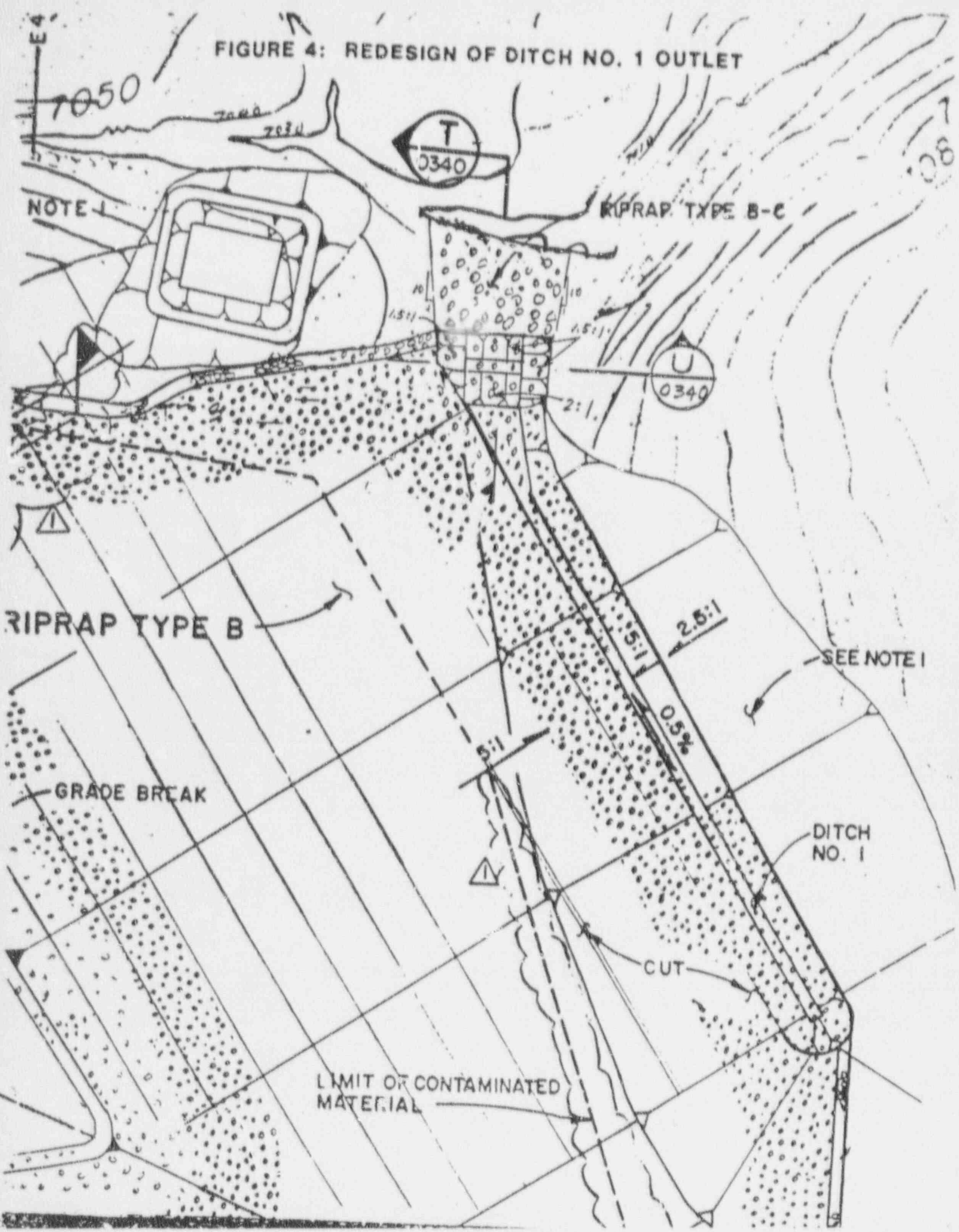
PROFILE (LOOKING NORTH-EAST)



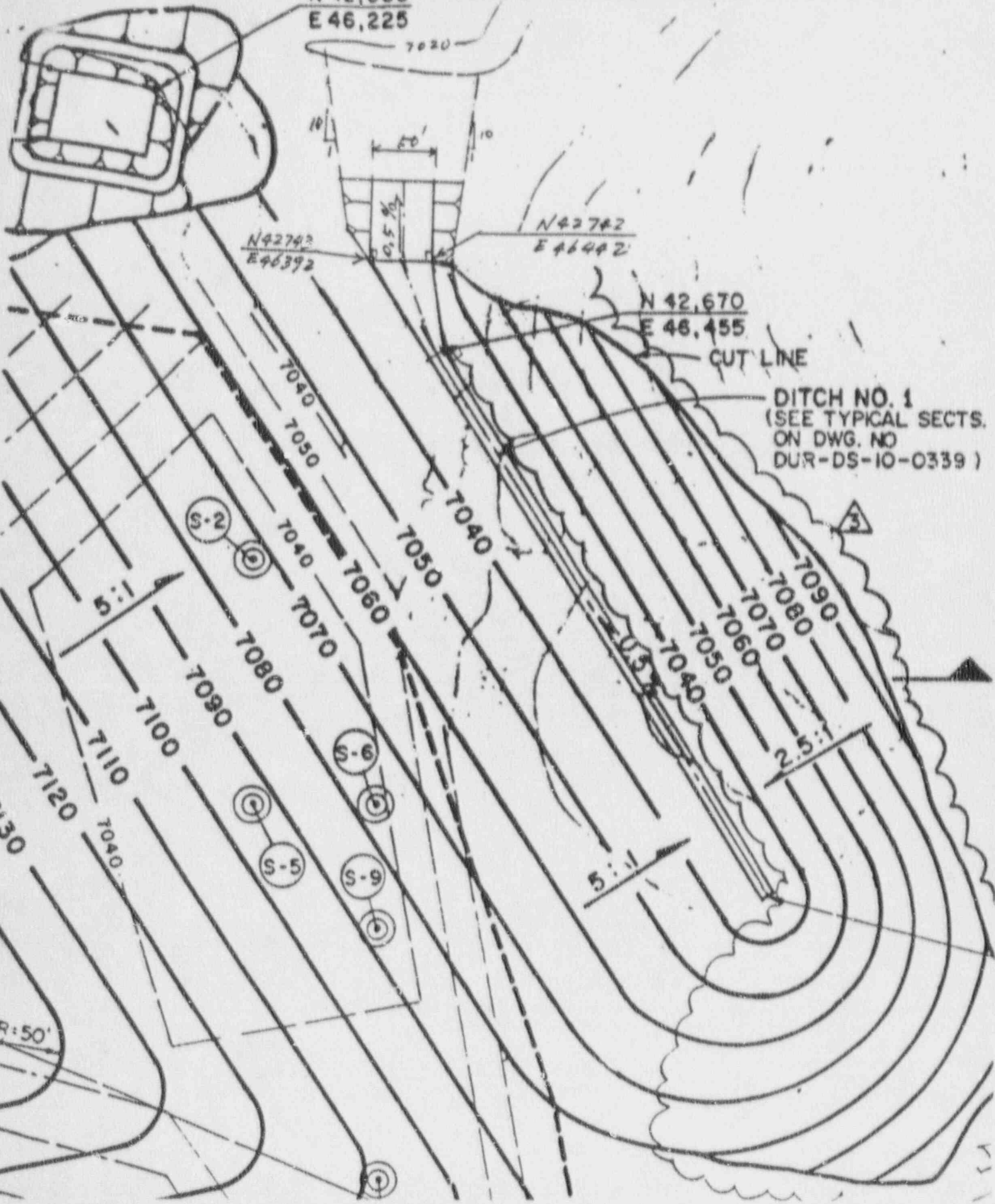


**FIGURE 3: LOCATION
 OF MONITOR WELLS
 ADJACENT TO
 DITCH NO. 1**

FIGURE 4: REDESIGN OF DITCH NO. 1 OUTLET



N 42,888 E 46,225 **FIGURE 5: REVISION TO END OF DITCH NO. 1**



N 42742
E 46392

N 42742
E 46442

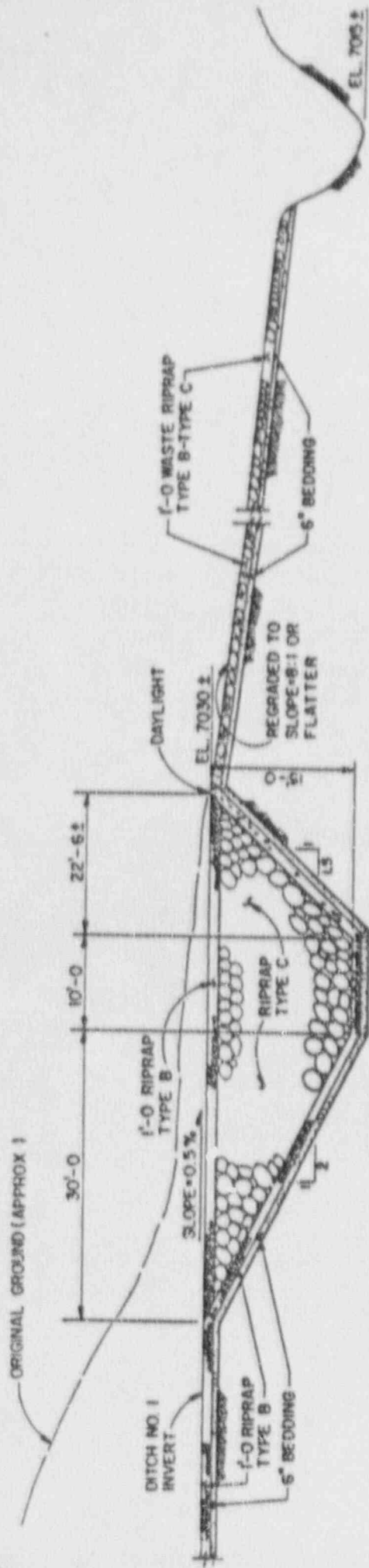
N 42,670
E 46,455

CUT LINE

DITCH NO. 1
(SEE TYPICAL SECTS.
ON DWG. NO
DUR-DS-10-0339)

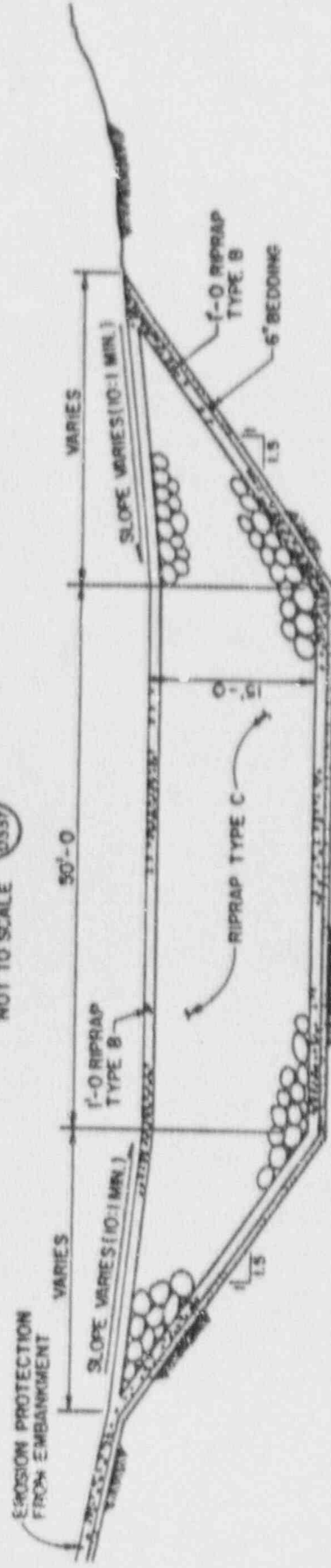
R:50'

1/8" = 10'



OUTLET FOR DITCH NO. 1

SECTION T
NOT TO SCALE 0337



OUTLET FOR DITCH NO. 1

SECTION U
NOT TO SCALE 0337

FIGURE 6: SECTIONS T AND U REVISIONS

DRAINAGE SITE
SOUTH 1000, COLORADO
8000 CANYON RESERVOIR SITE
EROSION PROTECTION
AT DITCH NO. 1 OUTLET

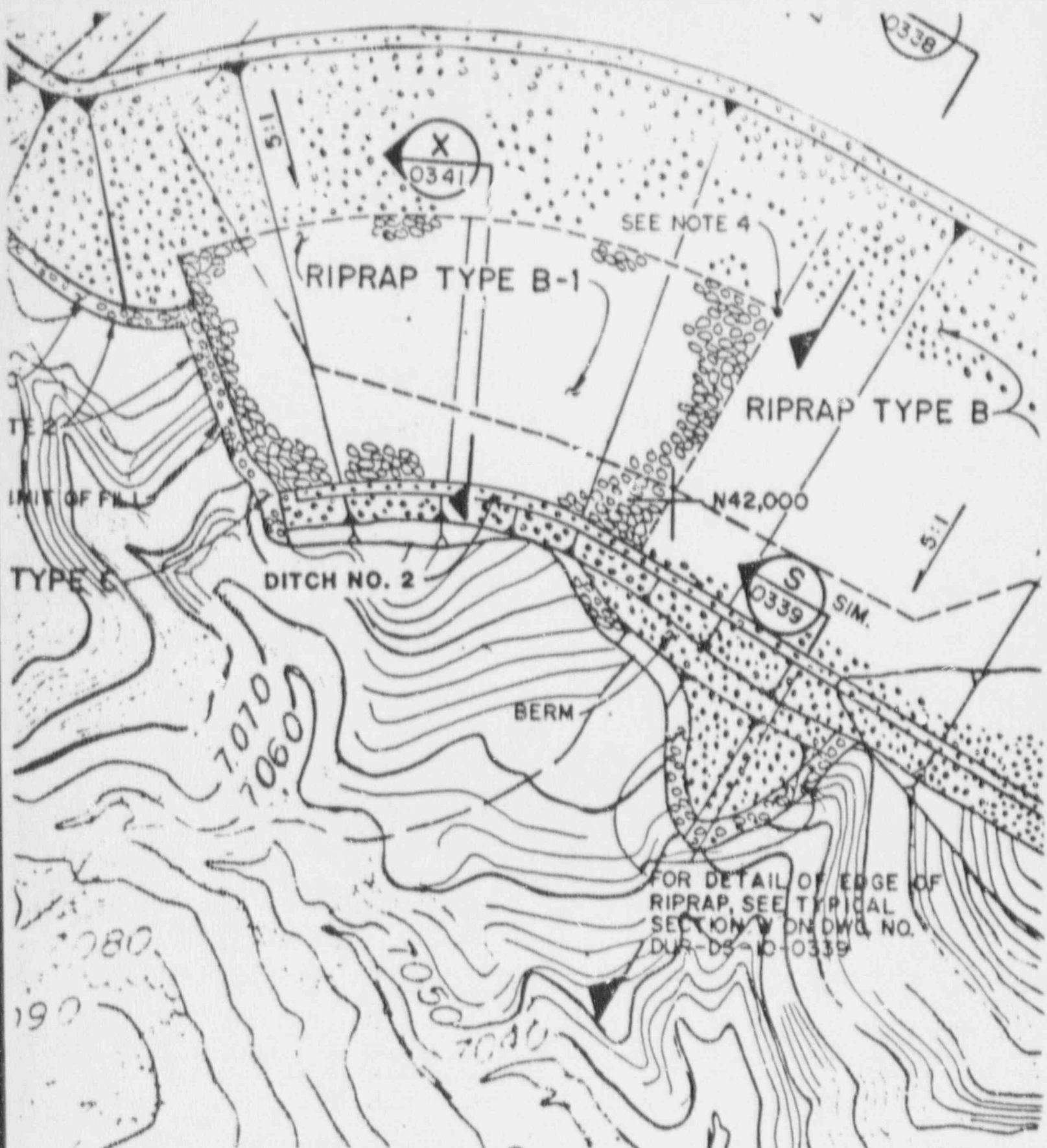
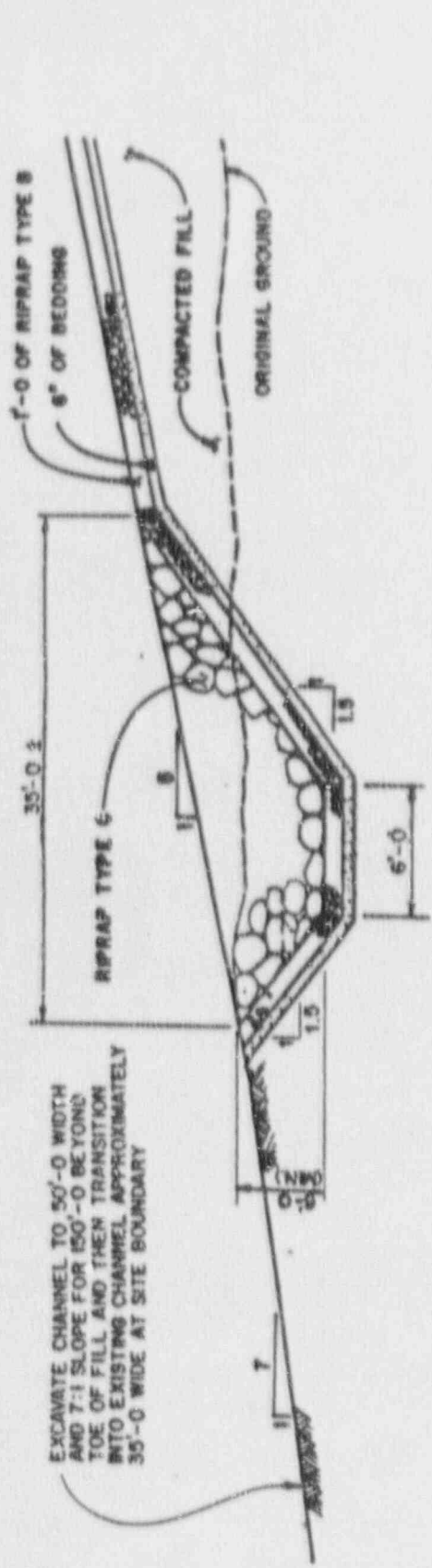
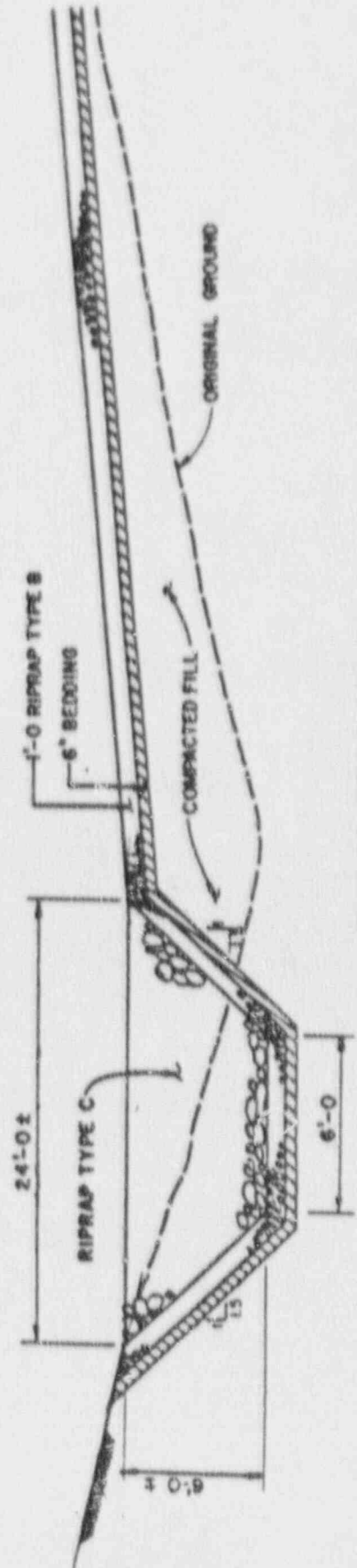


FIGURE 7: REVISIONS OF EDGE DETAILS ON WESTERN SLOPE AND SOUTHWESTERN DRAINAGE ALONG DITCH NO. 2



EXCAVATE CHANNEL TO 50'-0" WIDTH AND 7:1 SLOPE FOR 150'-0" BEYOND TOE OF FILL AND THEN TRANSITION INTO EXISTING CHANNEL APPROXIMATELY 35'-0" WIDE AT SITE BOUNDARY

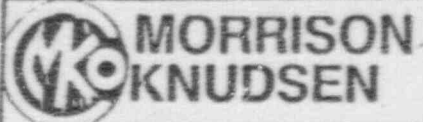
SECTION S
NOT TO SCALE
0337



RIPRAP EDGE DETAIL
SECTION W
NOT TO SCALE
0337

FIGURE 8: SECTION S AND W REVISIONS

DESIGNED BY
CHECKED BY
SCALE: AS SHOWN



UMTRA PROJECT OFFICE
PROJECT INTERFACE DOCUMENT

PID0330.DUR
Sheet 1 of 3

Site Durango	Date 8/09/90	PID No. 03-S-30	Site No. 03	Vic Pro No.
Originator and Location M. L. Wesely, SF	Phone 415/442-7511	Organization MKES	Answer By:	References: Subcontract: Subcontract No:
Subject Redesign of the Ditch No. 1 Outlet and Two Drainage Outlets Along Ditch No. 2				

Description of Problem and Recommended Solution Clarification Change

PROBLEM 1: A drilling program was completed in June to help delineate the bedrock locations in the region of the Ditch No. 1 outfall. The plan view and profile of the outlet area are shown in Figure 1 and 2, respectively. The depth to bedrock at the outlet of Ditch No. 1 is much deeper than originally anticipated. If the original design to key into competent bedrock was implemented, the excavation of the outlet would cut into the adjacent observation wells (see location of wells in Figure 3) and undercut the existing holding pond embankment which contains the discharge water of the toe trench. It would also form a large reservoir for water exiting the ditch and affect the groundwater regime in this area.

SOLUTION 1: Revise the outlet structure on Drawing DUR-DS-10-0337 per Figure 4, revise the end of Ditch No. 1 on Drawing DUR-DS-10-0335 per Figure 5, and revise Sections T and U on Drawing DUR-DS-10-0340 per Figure 6. Add the following note to Drawing DUR-DS-10-0340:

Originator M. L. Wesely 8/10/90
Signature Date

Disposition <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Disapproved <input type="checkbox"/> Approved as Noted	RAC Site Manager <u>Thomas</u> 8/21/90
Criteria Change? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If Yes, DOE approval required)	RAC Project Control <u>William</u> 8/21/90
Class II CONTROLLED WORK COPY	RAC Engineering/Design <u>Paul H. Stahl</u> 8/10/90
	RAC Construction Engineer <u>Robert E. Cooney</u> 8/21/90
	Reviewed for Quality Requirements <u>Phil A. Lusk</u> 8/21/90 Signature Date

Distribution	Name	Location	Name	Location	Cost/Time Est.
RAC Site Mgr.	<u>M. Thomson</u>		RAC Constr. Engr. Mgr.	<u>R. Cooney</u>	<input type="checkbox"/> Attached
DOE Proj Engr.	<u>F. Dangler</u>		RAC Qual. Mgr.	<u>P. Cate</u>	<input type="checkbox"/> Not Required
TAC Site Mgr.	<u>F. Edge</u>		Other	<u>J. Aldham D. Seaton</u>	<input type="checkbox"/> DOE Approval Req.
RAC Site Qual. Engr.	<u>T. Harrell</u>			<u>J. Hyman</u>	
RAC HS&E Mgr.	<u>F. Petelka</u>			<u>M. Abrams</u>	

"2. Riprap for the apron from the edge of outfall to natural drainage channel shall be Type B-Type C approved designated waste riprap from Wheeler Pit screening operations with approximate size range of 6 - 16 inches."

COMMENT:

Design of the outlet structure was reevaluated to determine what volume and size of rock would be required to maintain erosion protection for water discharging from Ditch No. 1. The attached drawings (Figures 4, 5, and 6) and supporting calculations present the proposed revisions. Changes include:

- o Removal of the words "key into bedrock",
- o Slope from ditch into outlet box steepened to 2:1 and subsequent shift of outlet further away from the northern drainage channel.
- o Addition of a rock apron from the far edge of the outlet to the northern drainage channel to prevent gully initiation from water exiting the outlet box,
- o Regrade slope of natural ground towards northern drainage channel to approximately 8:1, and
- o Continue 1 foot of Type B riprap from ditch across top of outlet box.

PROBLEM 2: A similar situation of bedrock not encountered for a considerable distance occurs along the southern Ditch No. 2. Two small regions on the outside edge of the ditch were covered with riprap and edged with a key trench and spillway. During installation of temporary retention basins DS-3 and DS-4 rock was not encountered. Test pits in these regions indicate depths up to 23 feet. The site boundary, adjacent to the southeastern drainage, limits extension of the design if the trench must be excavated to key into competent bedrock.

SOLUTION 2: Revise Drawing DUR-DS-10-0337 per Figure 7 and revise Sections W on Drawing DUR-DS-10-0338 and Section S on Drawing DUR-DS-10-0339 per Figure 8. Revise Note 5 on Drawing DUR-DS-10-0335 to read "5. Existing channel shall be widened as noted in Section S on Drawing DUR-DS-10-0339."

COMMENT:

The southeastern and southwestern riprapped key trenches were also reevaluated. The drainage areas for both are quite small as shown in the attached supporting calculation. The proposed revisions are shown in Figure 7 and Figure 8 and include:

- o Removal of the words "key into bedrock",
- o Section W to be included in both areas and the top width set at approximately 24 feet,

PROBLEM 3: On the western edge of the disposal cell, the key trench is duplicated on an inner edge rather than only edging the outside rim. This extra detail is not necessary for maintaining a raw edge since it is in the middle of a 5:1 riprapped slope.

SOLUTION 3: Remove the inner key trench in the middle of the 5:1 slope on Drawing DUR-DS-10-0337 per Figure 7.