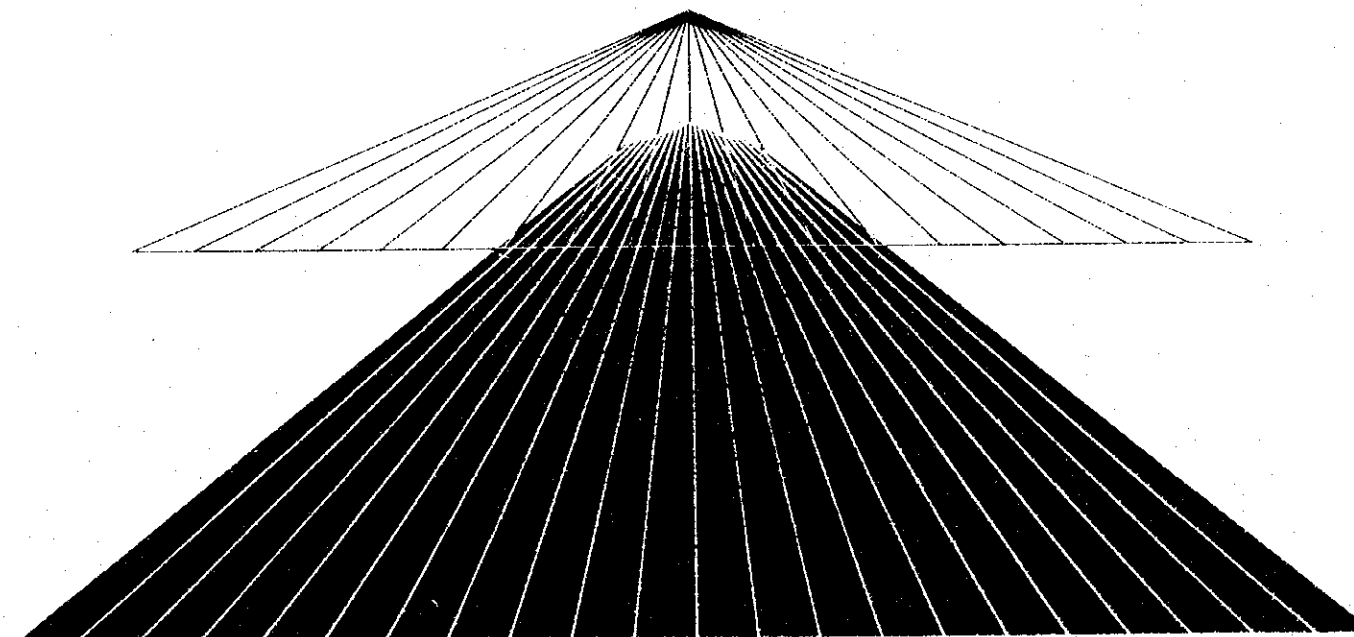


Kingdom of Thailand Ministry of Transport
and Communications Department of Highways

The Study on Road Disaster Prevention Plan in The Kingdom of Thailand

FINAL REPORT DRAWINGS

VOLUME 3



JUNE 1995

ORIENTAL CONSULTANTS
KATAHIRA & ENGINEERS INTERNATIONAL

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JR
95-091



Japan International
Cooperation Agency




Kingdom of Thailand Ministry of Transport
and Communications Department of Highways

The Study on Road Disaster Prevention Plan in The Kingdom of Thailand

**FINAL REPORT
DRAWINGS**

VOLUME 3

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The following foreign exchange rate is applied in the study:

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1BART = J¥4.03

(as of November 1994)

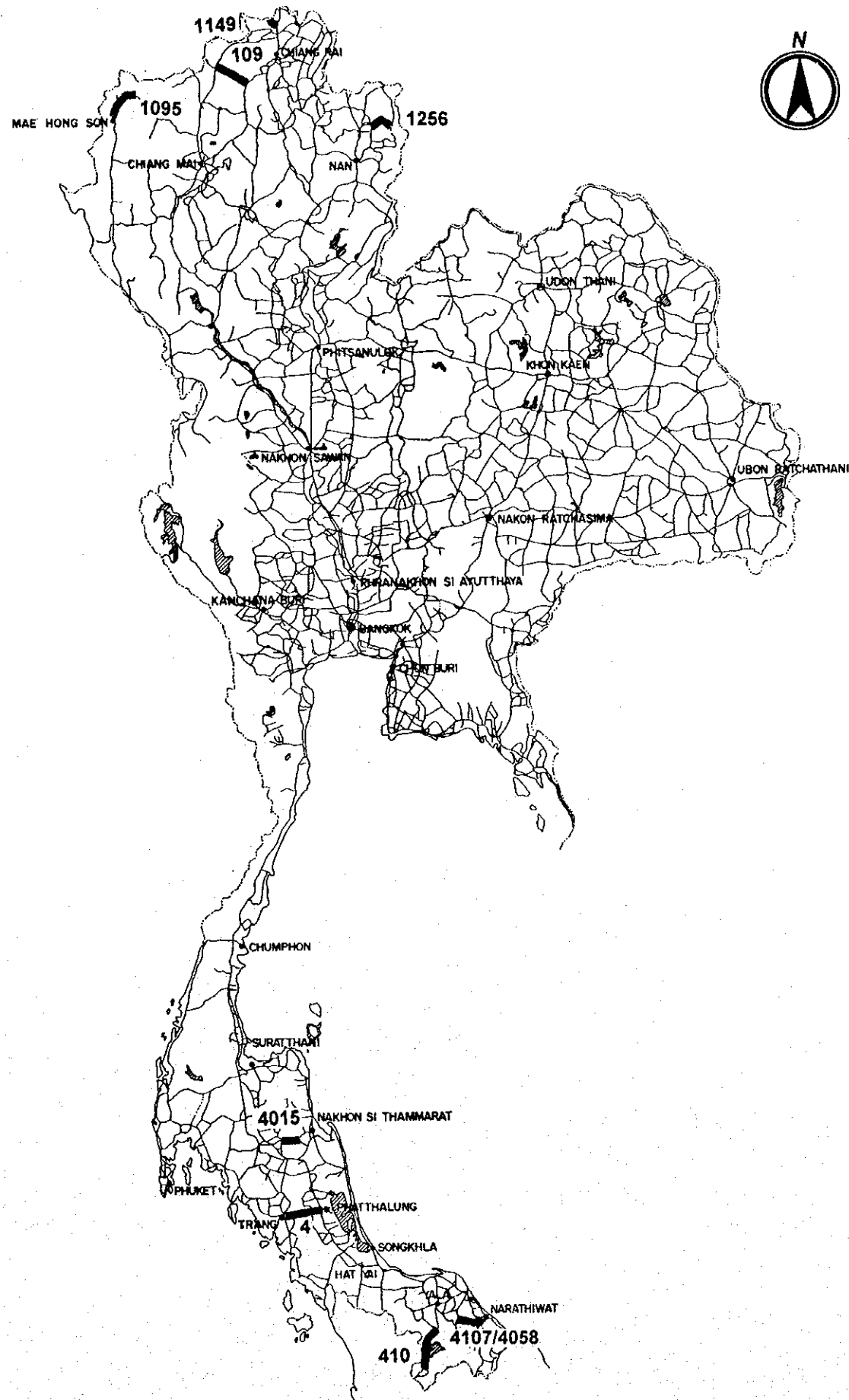
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11244811

I. Location Map of Project Road

LOCATION MAP OF PROJECT ROAD

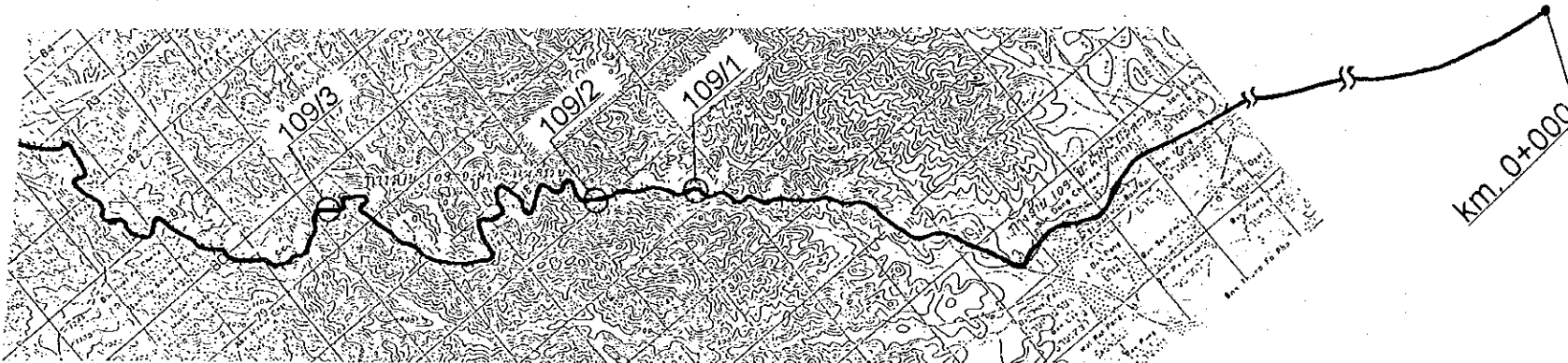
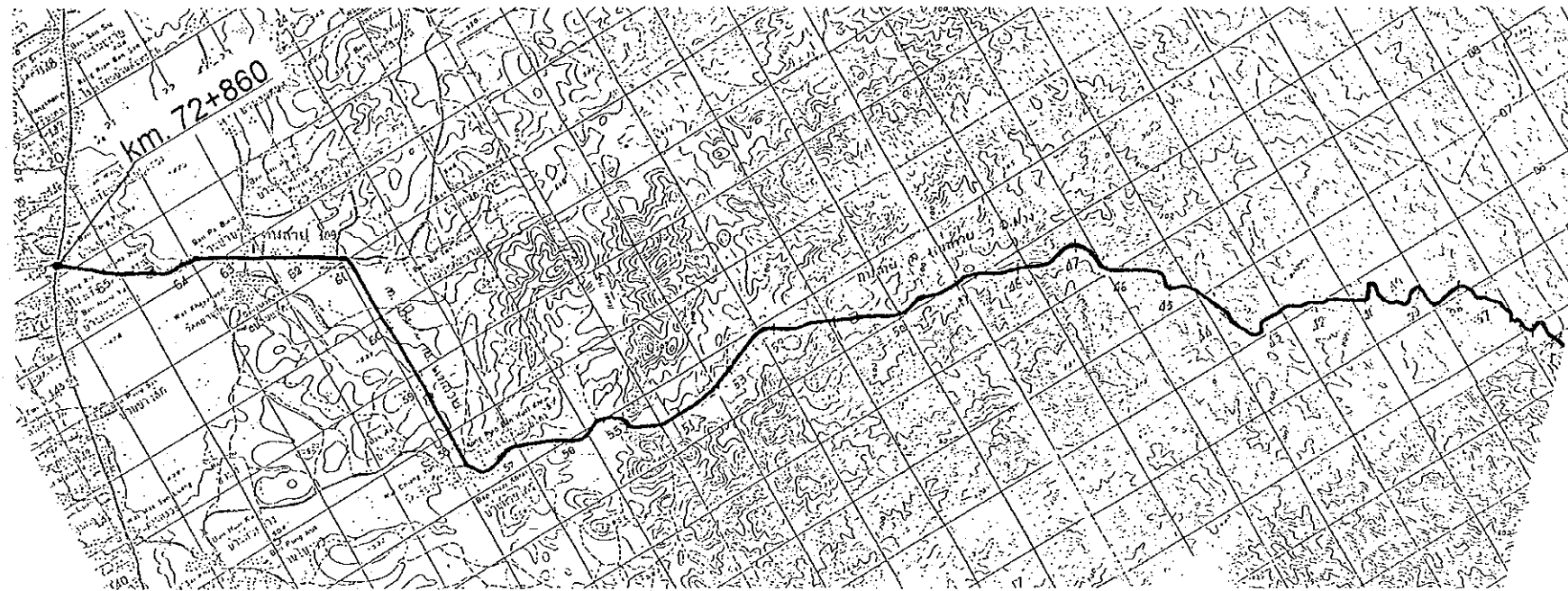


II. Preliminary Design for Route 109

1. Location of Disaster Spots

LOCATION OF DISASTER SPOTS

ALIGNMENT OF ROUTE 109



DISASTER SPOTS

SPOT NO.	CONTROL NO.	CHAINAGE NO.	DAMAGE TYPE
109/1	0100	14.500	SD-2-10
109/2	0100	16.500	SD-2-3
109/C1	0100	19.100	SD-2-10
109/C2	0100	21.950	SD-3-3
109/3	0100	24.650	SD-2-6
109/C3	0100	25.200	SD-2-6
109/C4	0100	26.600	SD-3-3
109/C5	0100	30.640	SD-2-10
109/C6	0100	31.620	SD-1-3
109/C7	0100	33.420	SD-2-10
109/C8	0200	35.100	SD-3-3
109/C9	0200	35.900	SD-3-3
*109/C10	0200	15.500 - 43.600	SD-2-3

Note for SPOT NO.

- Route No./1,2 : Spot for Preliminary Design and Cost Estimate.
- Route No./C1,C2... : Spot for Cost Estimate

*About eighty percent of the section from 15.5 km to 43.6 km is damaged by gully erosions on cut slopes. All of these damages are expressed as 109/C10.

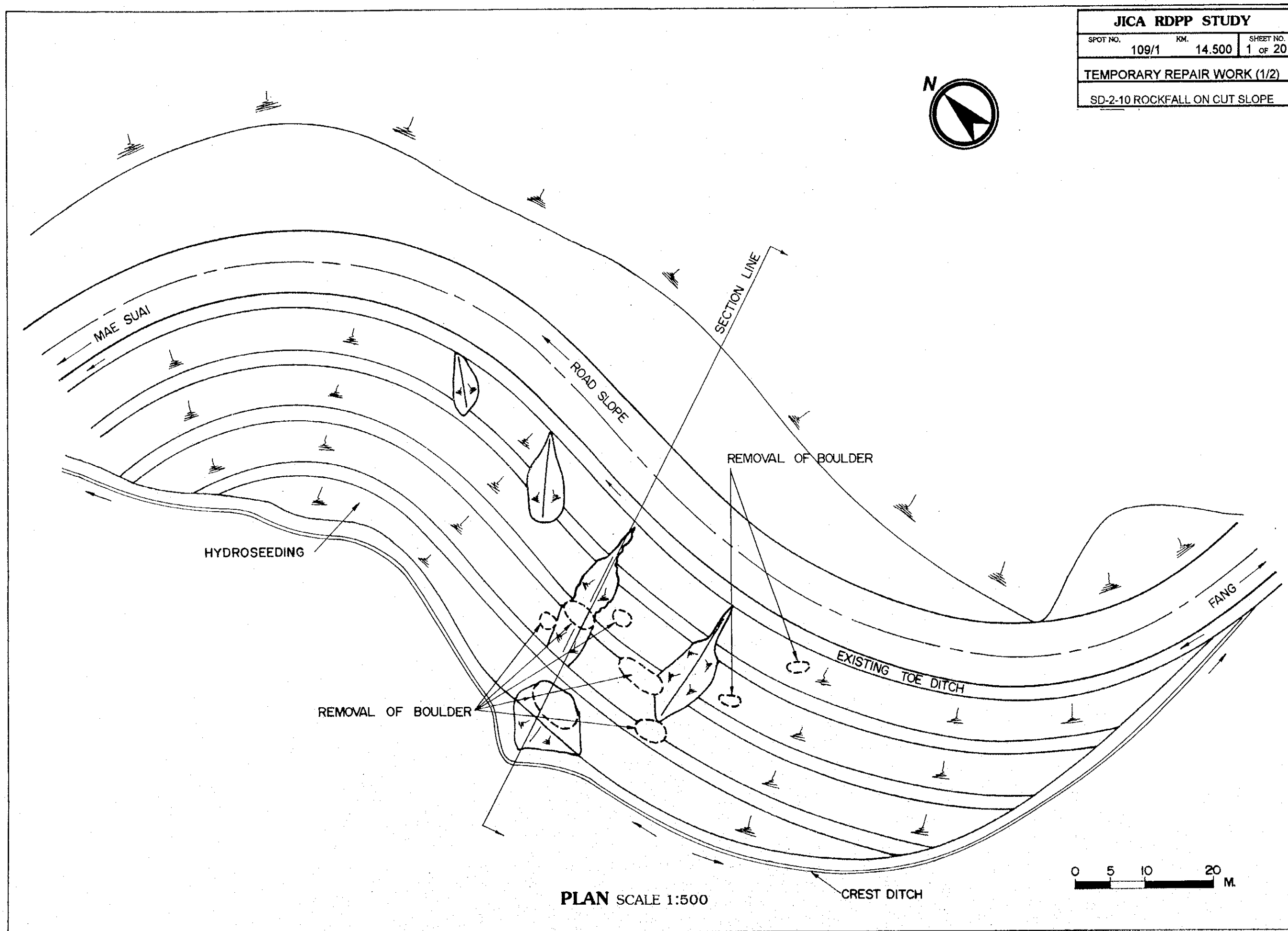
2. Drawings

JICA RDPP STUDY

SPOT NO.	KM.	SHEET NO.
109/1	14.500	1 OF 20

TEMPORARY REPAIR WORK (1/2)

SD-2-10 ROCKFALL ON CUT SLOPE



HYDROSEEDING

MAE SUAI

ROAD SLOPE

SECTION LINE

REMOVAL OF BOULDER

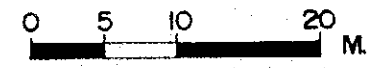
REMOVAL OF BOULDER

EXISTING TOE DITCH

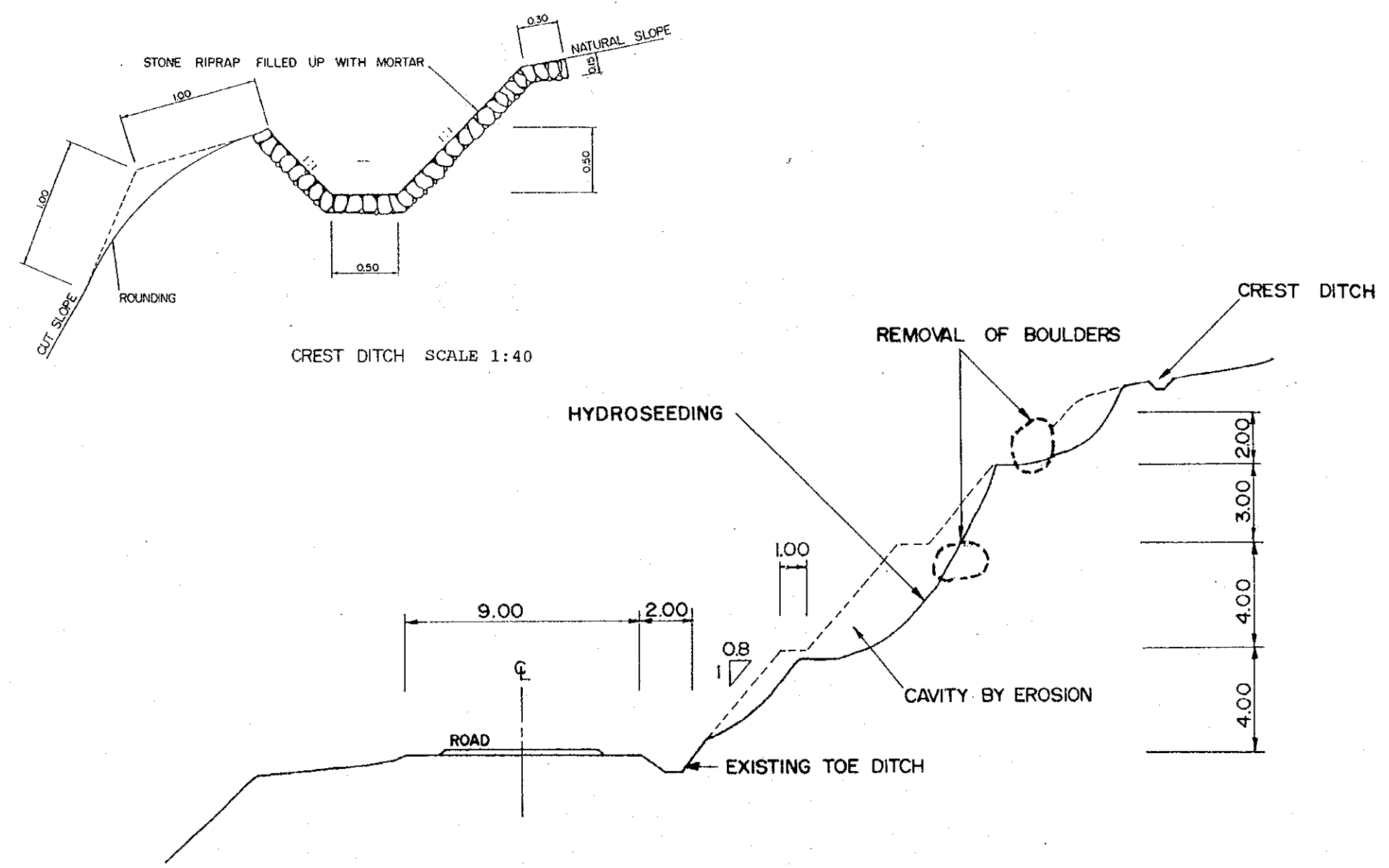
FANG

CREST DITCH

PLAN SCALE 1:500

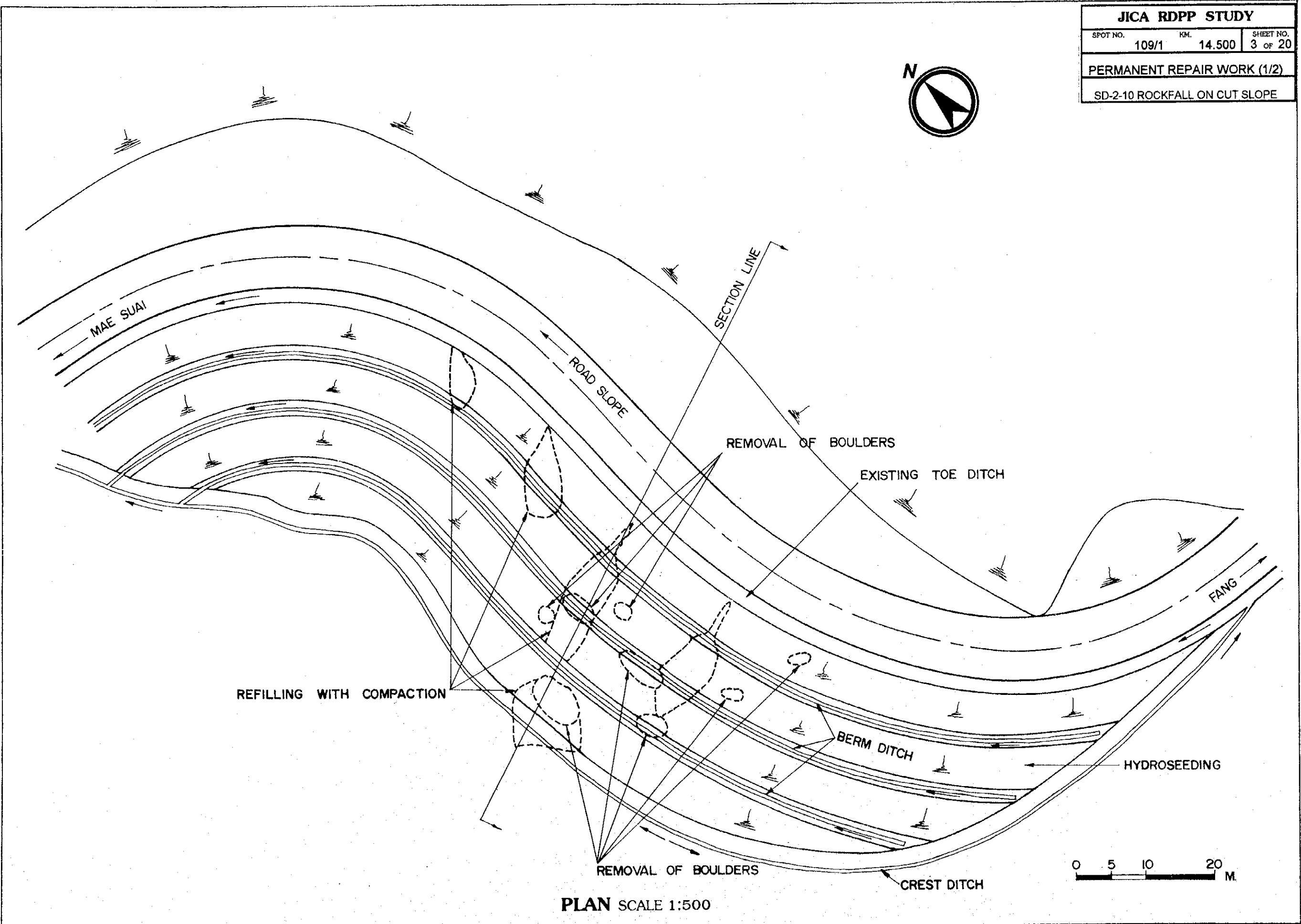


JICA RDPP STUDY		
SPOT NO.	KM.	SHEET NO.
109/1	14.500	2 OF 20
TEMPORARY REPAIR WORK (2/2)		
SD-2-10 ROCKFALL ON CUT SLOPE		



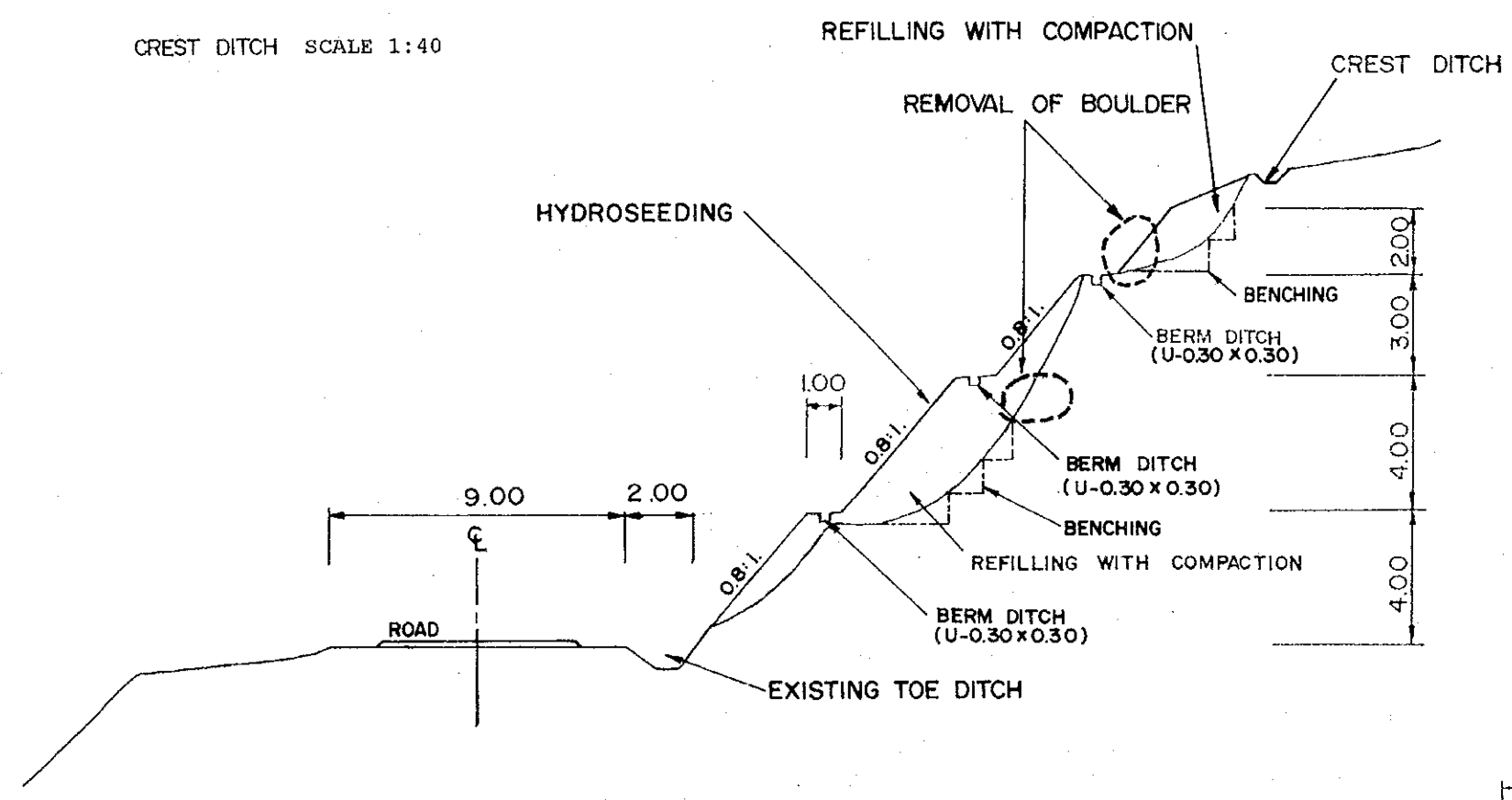
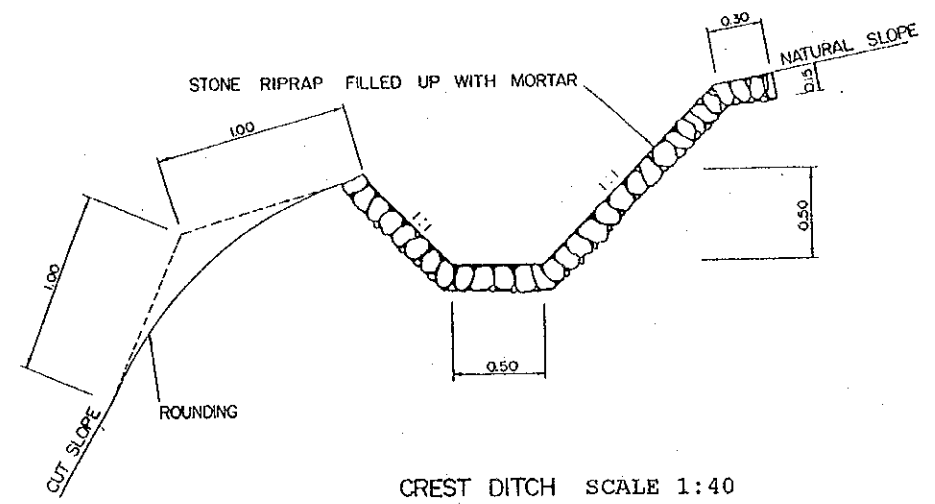
CROSS SECTION SCALE 1:200

JICA RDPP STUDY		
SPOT NO.	KM.	SHEET NO.
109/1	14.500	3 OF 20
PERMANENT REPAIR WORK (1/2)		
SD-2-10 ROCKFALL ON CUT SLOPE		

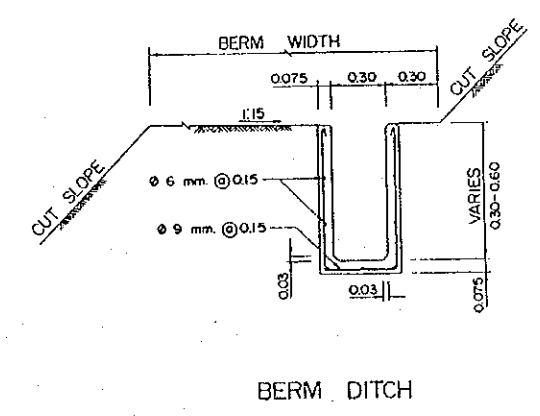


PLAN SCALE 1:500

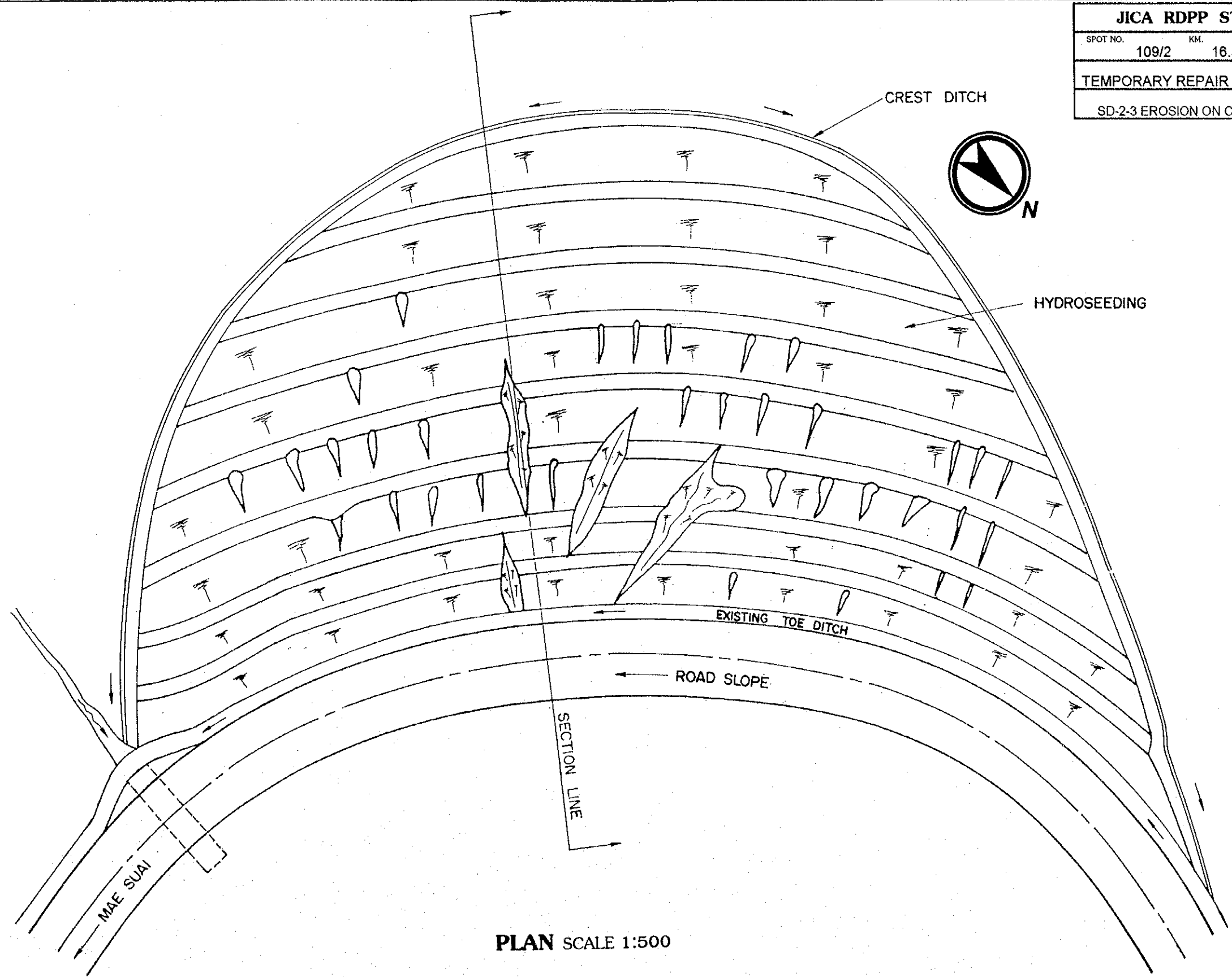
JICA RDPP STUDY		
SPOT NO.	KM.	SHEET NO.
109/1	14.500	4 OF 20
PERMANENT REPAIR WORK (2/2)		
SD-2-10 ROCKFALL ON CUT SLOPE		



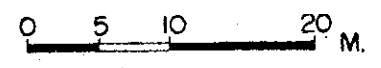
CROSS SECTION SCALE 1:200



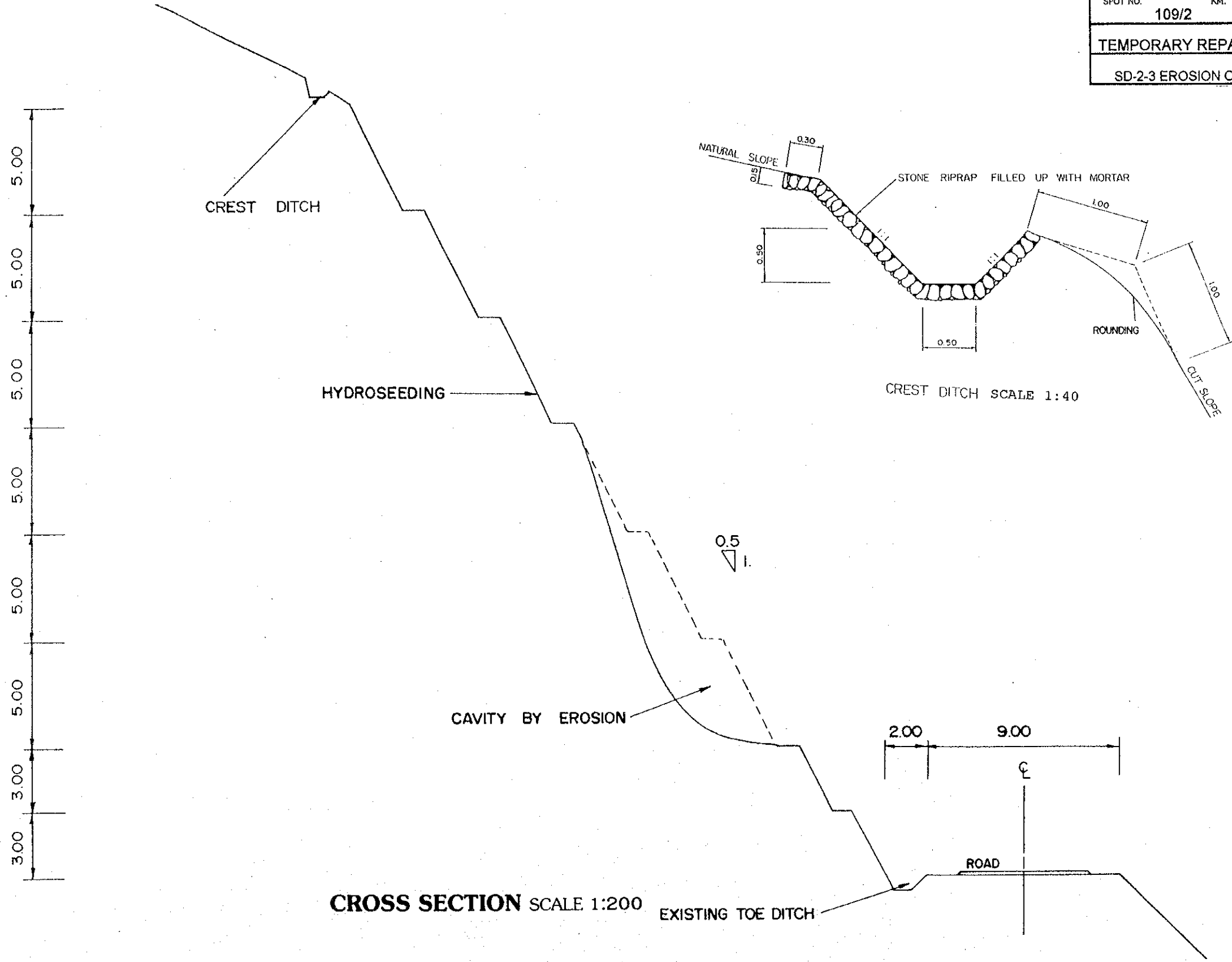
JICA RDPP STUDY		
SPOT NO.	KM.	SHEET NO.
109/2	16.500	5 OF 20
TEMPORARY REPAIR WORK (1/2)		
SD-2-3 EROSION ON CUT SLOPE		



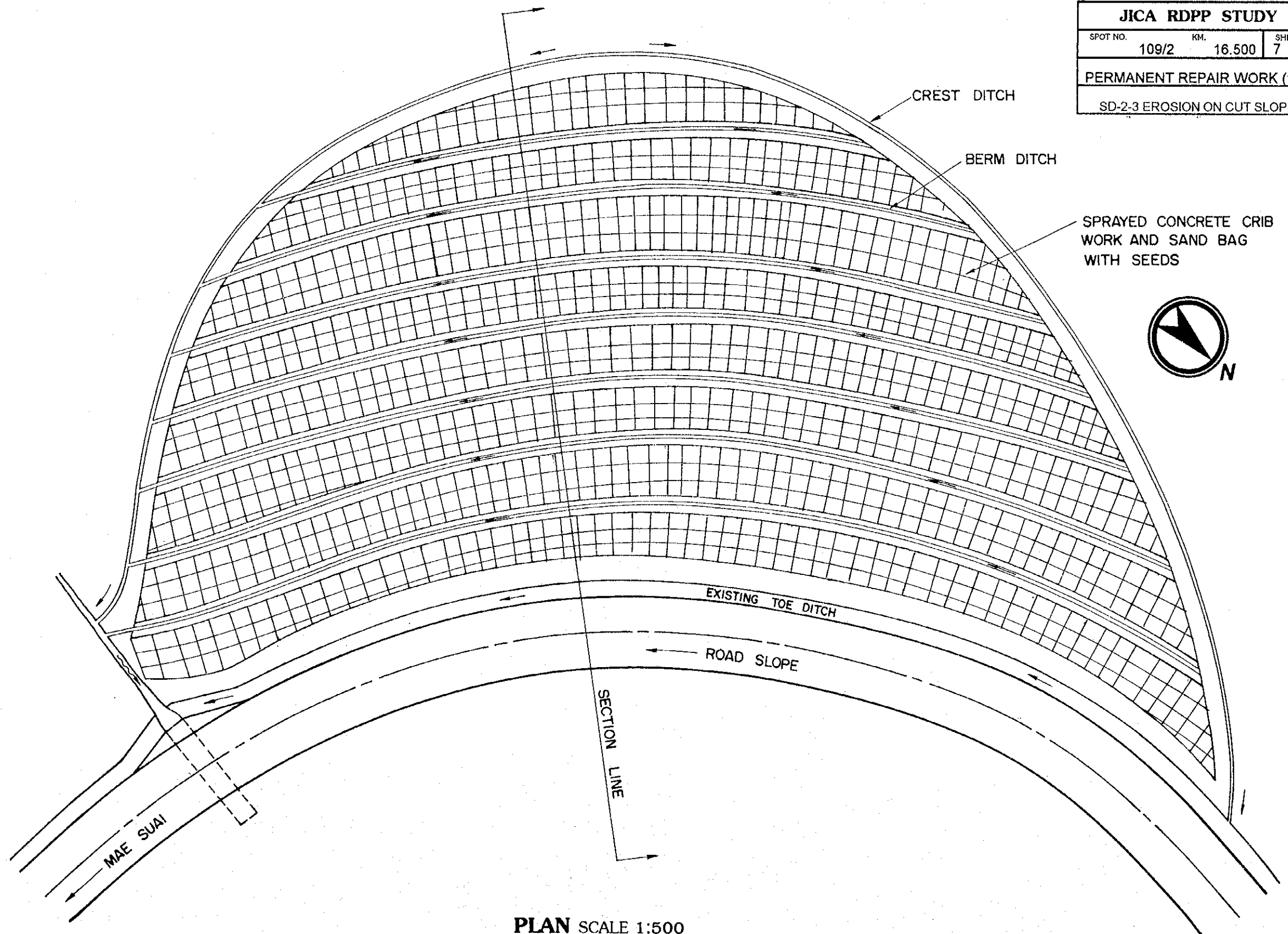
PLAN SCALE 1:500



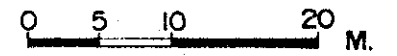
JICA RDPP STUDY		
SPOT NO.	KM.	SHEET NO.
109/2	16.500	6 OF 20
TEMPORARY REPAIR WORK (2/2)		
SD-2-3 EROSION ON CUT SLOPE		



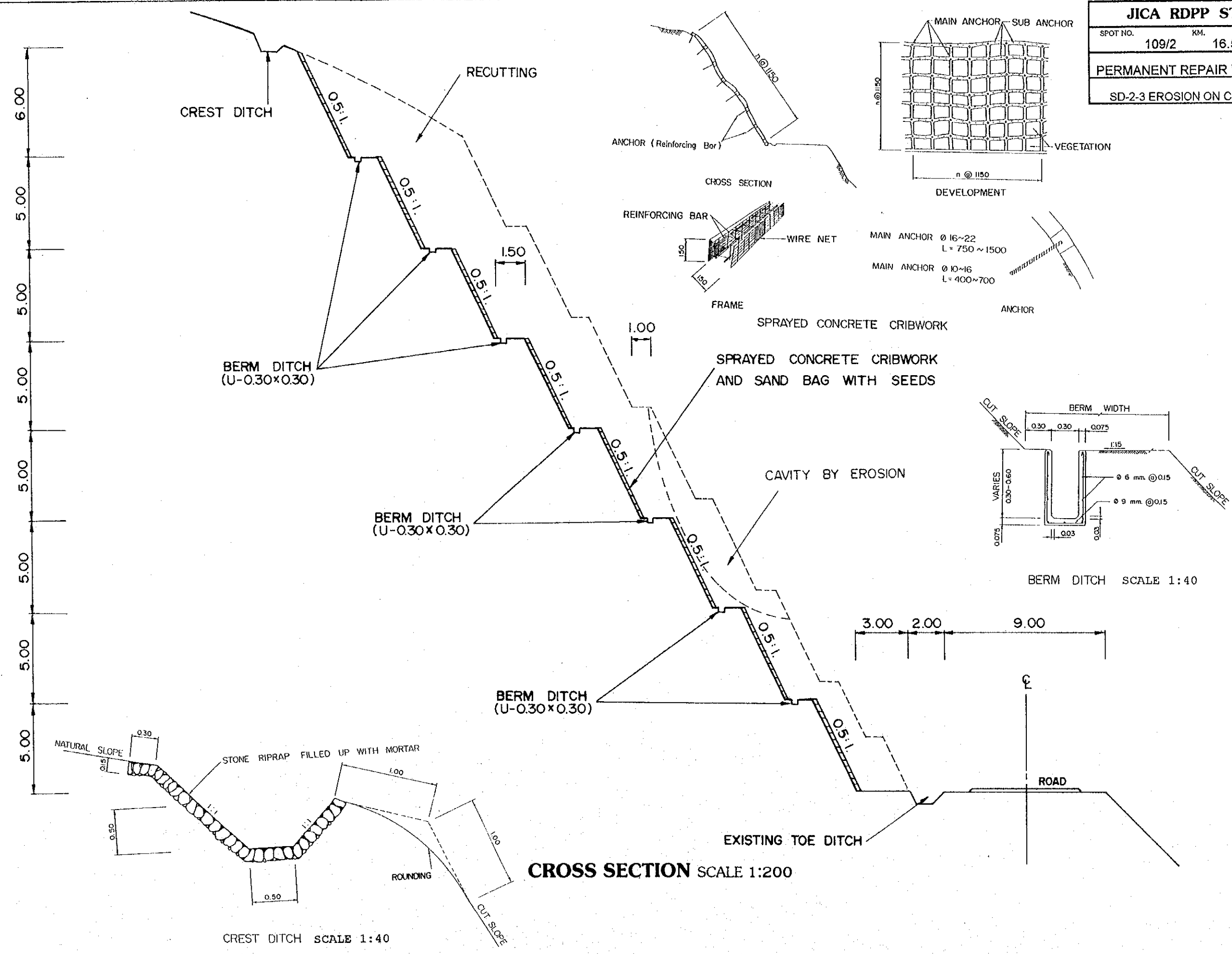
JICA RDPP STUDY		
SPOT NO.	KM.	SHEET NO.
109/2	16.500	7 OF 20
PERMANENT REPAIR WORK (1/2)		
SD-2-3 EROSION ON CUT SLOPE		



PLAN SCALE 1:500



JICA RDPP STUDY		
SPOT NO.	KM.	SHEET NO.
109/2	16.500	8 OF 20
PERMANENT REPAIR WORK (2/2)		
SD-2-3 EROSION ON CUT SLOPE		

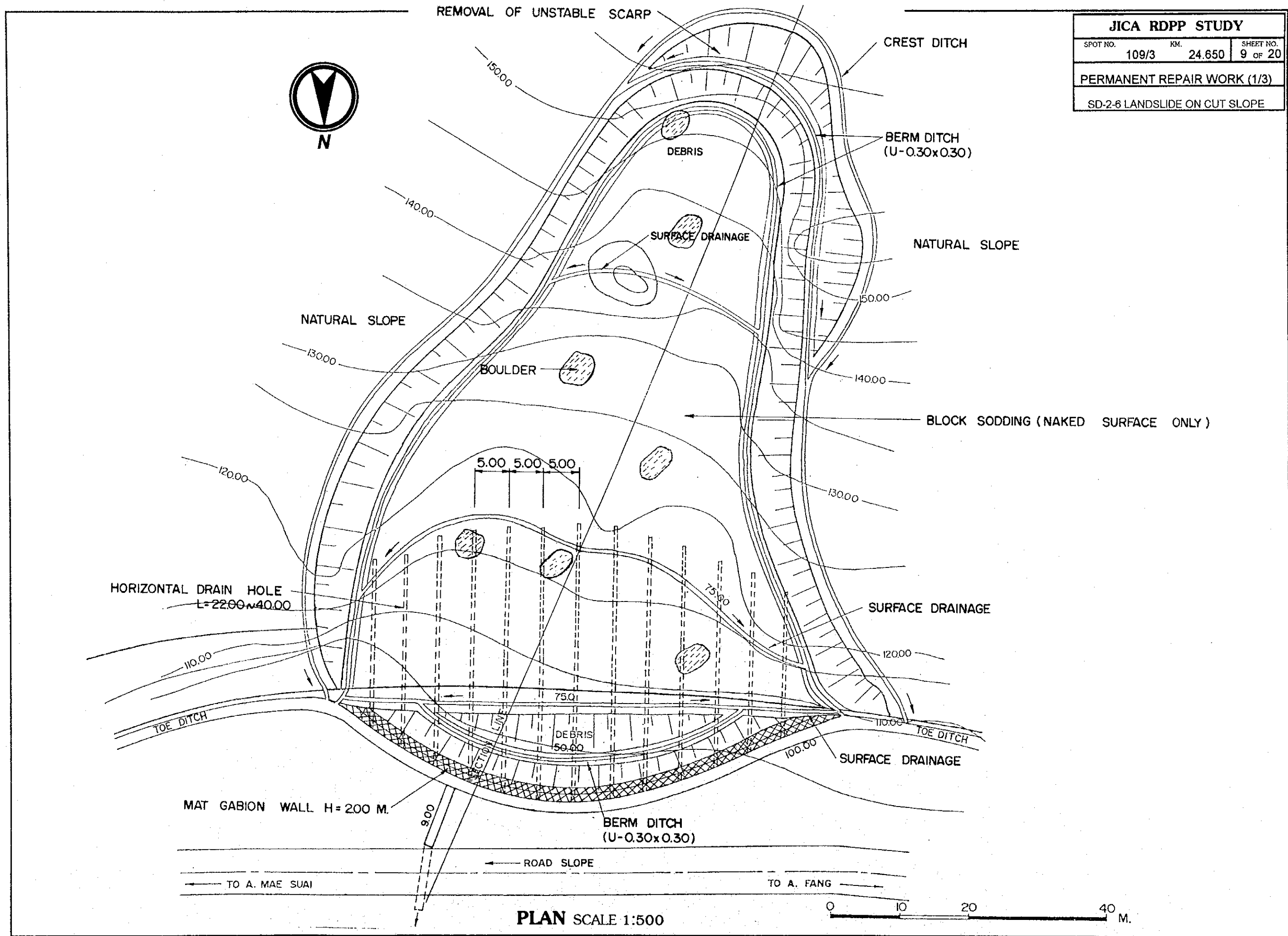


CROSS SECTION SCALE 1:200

CREST DITCH SCALE 1:40

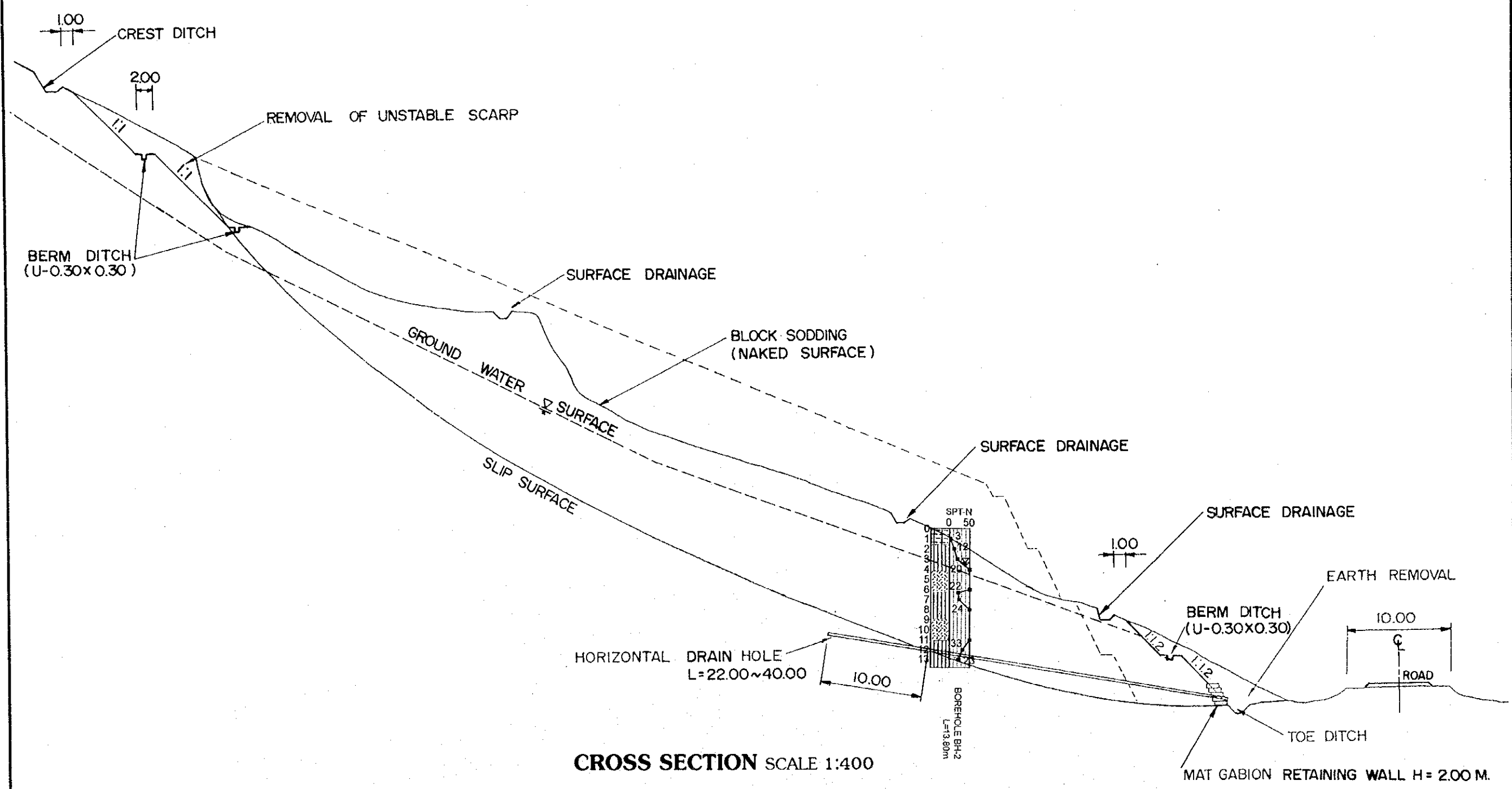
BERM DITCH SCALE 1:40

JICA RDPP STUDY		
SPOT NO.	KM.	SHEET NO.
109/3	24.650	9 OF 20
PERMANENT REPAIR WORK (1/3)		
SD-2-6 LANDSLIDE ON CUT SLOPE		



PLAN SCALE 1:500

JICA RDPP STUDY		
SPOT NO.	KM.	SHEET NO.
109/3	24.650	10 OF 20
PERMANENT REPAIR WORK (2/3)		
SD-2-6 LANDSLIDE ON CUT SLOPE		



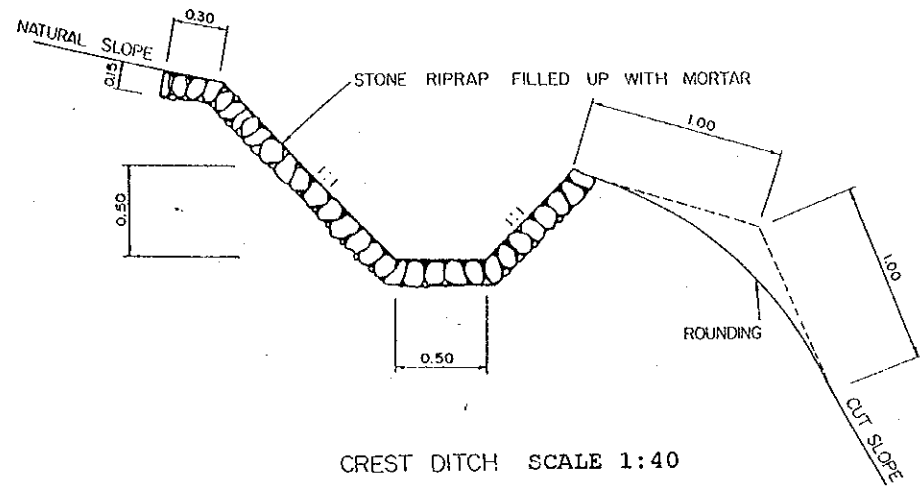
CROSS SECTION SCALE 1:400

JICA RDPP STUDY

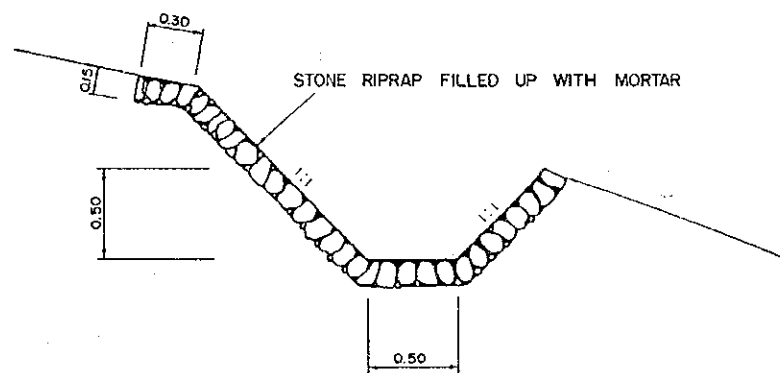
SPOT NO. 109/3 KM. 24.650 SHEET NO. 11 OF 20

PERMANENT REPAIR WORK (3/3)

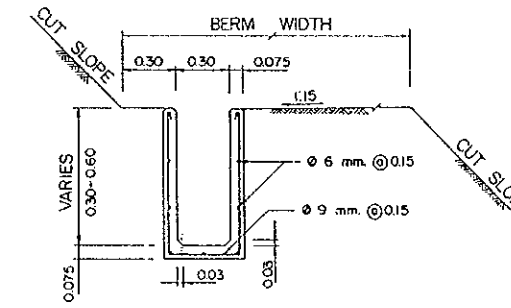
SD-2-6 LANDSLIDE ON CUT SLOPE



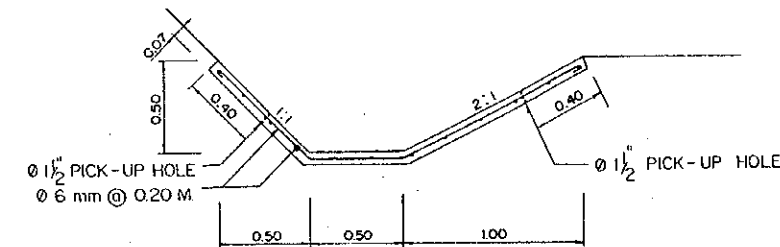
CREST DITCH SCALE 1:40



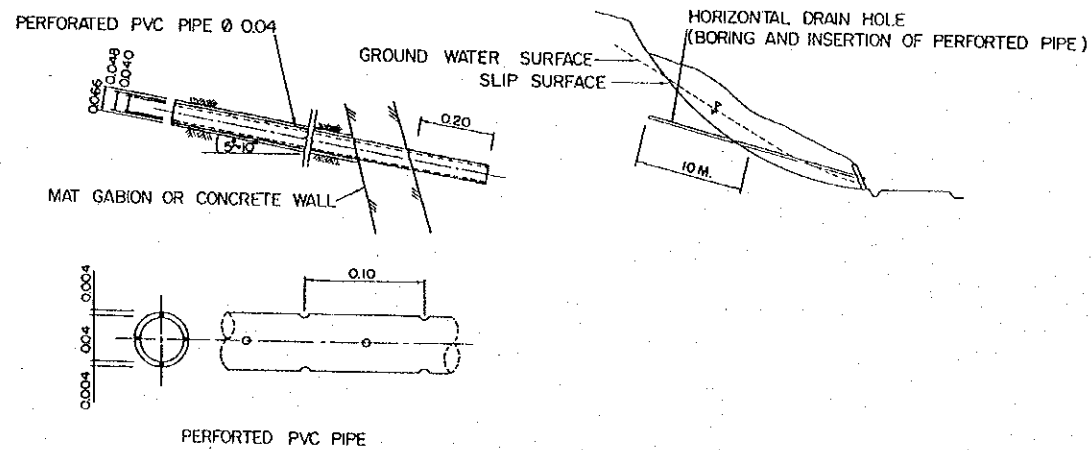
SURFACE DRAINAGE SCALE 1:40



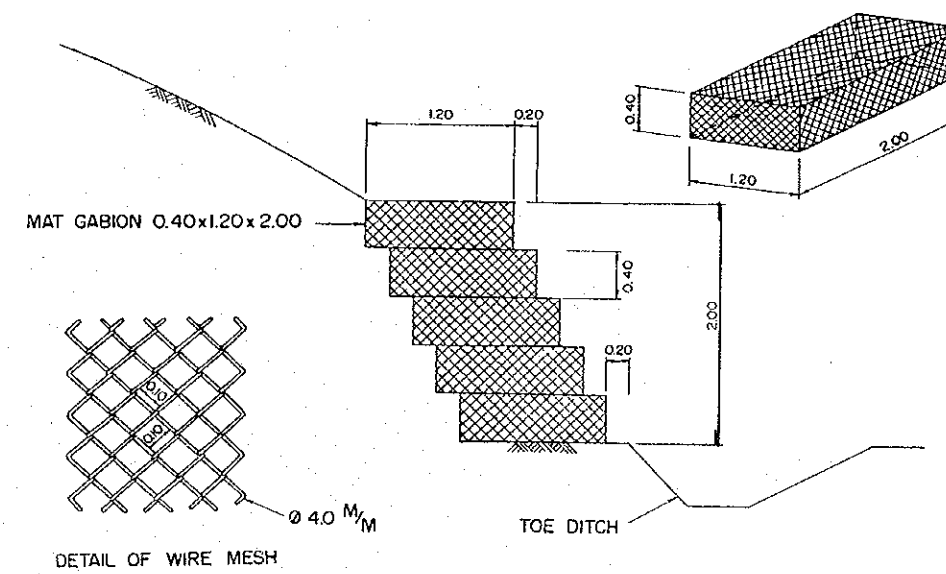
BERM DITCH SCALE 1:40



TOE DITCH SCALE 1:40



HORIZONTAL DRAIN HOLE



MAT GABION RETAINING WALL SCALE 1:60

3. Existing Condition

JICA RDPP STUDY

SPOT NO.	KM.	SHEET NO.
109/C1	19.100	12 OF 20

EXISTING CONDITION

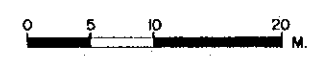
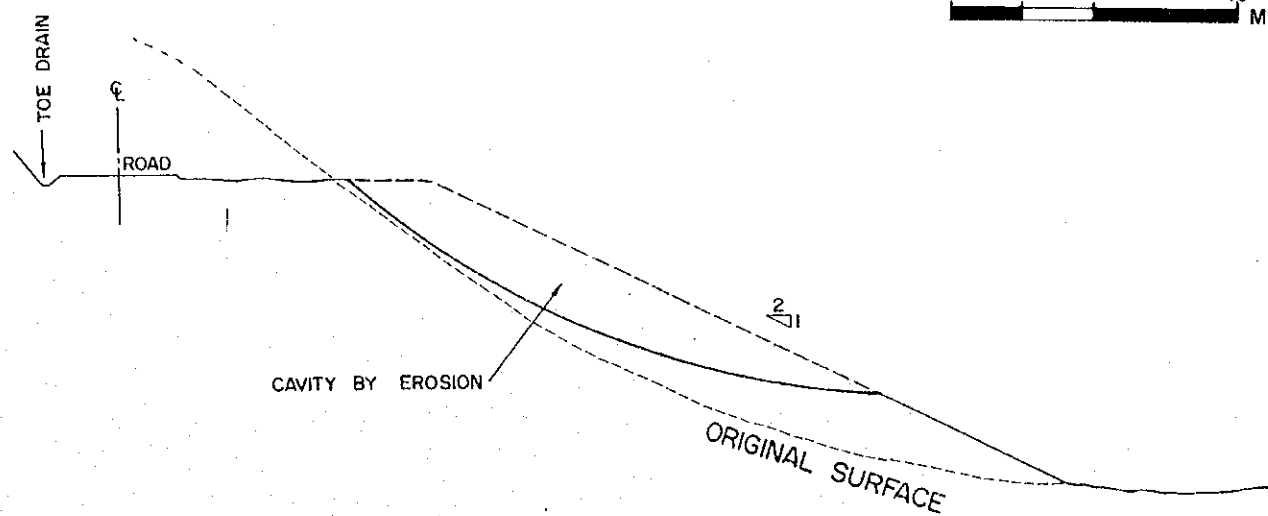
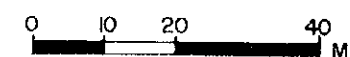
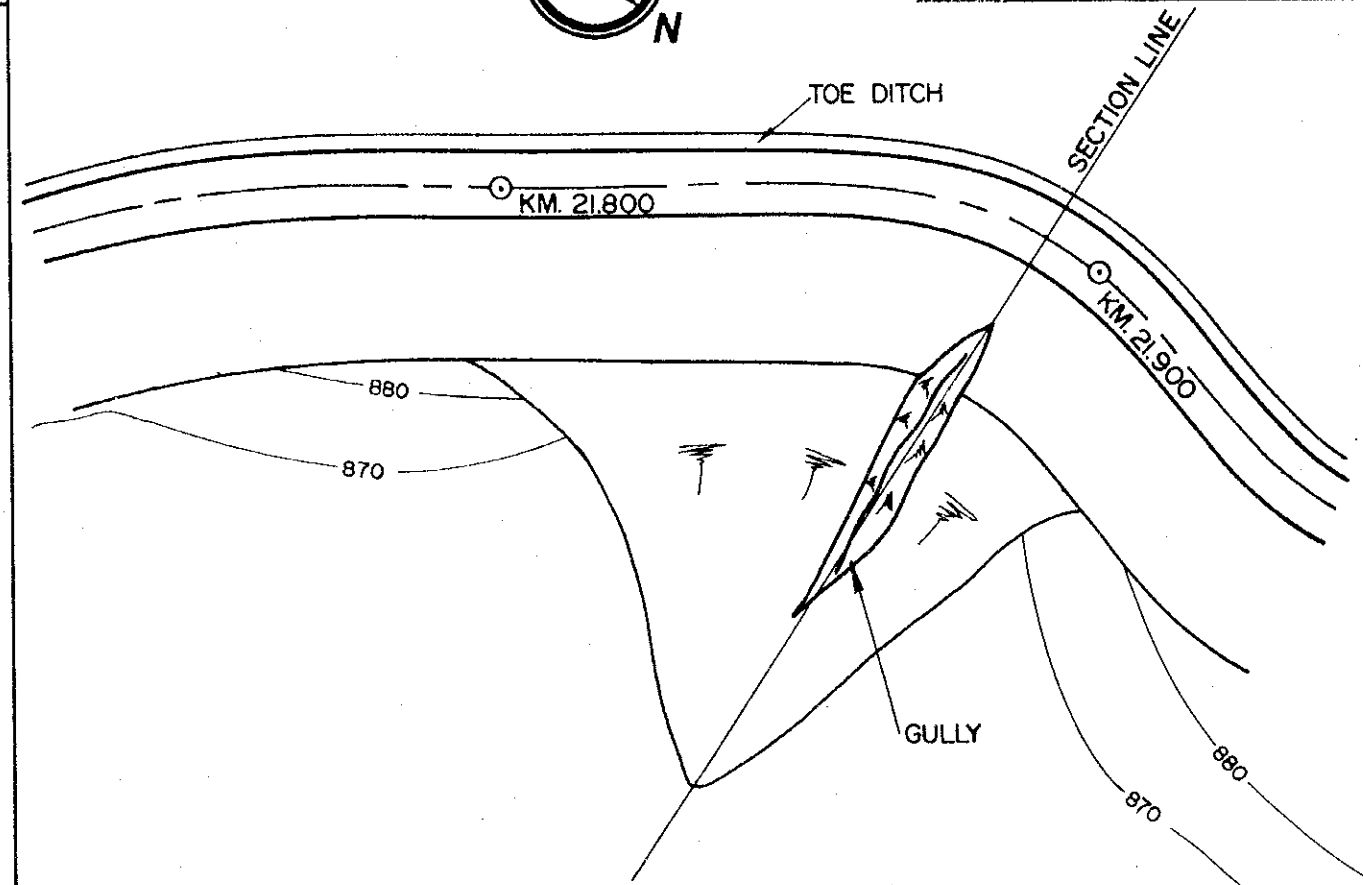
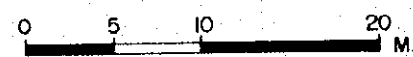
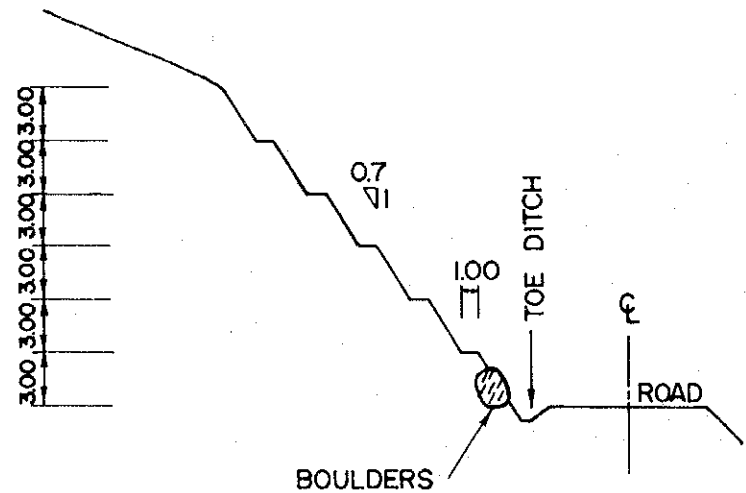
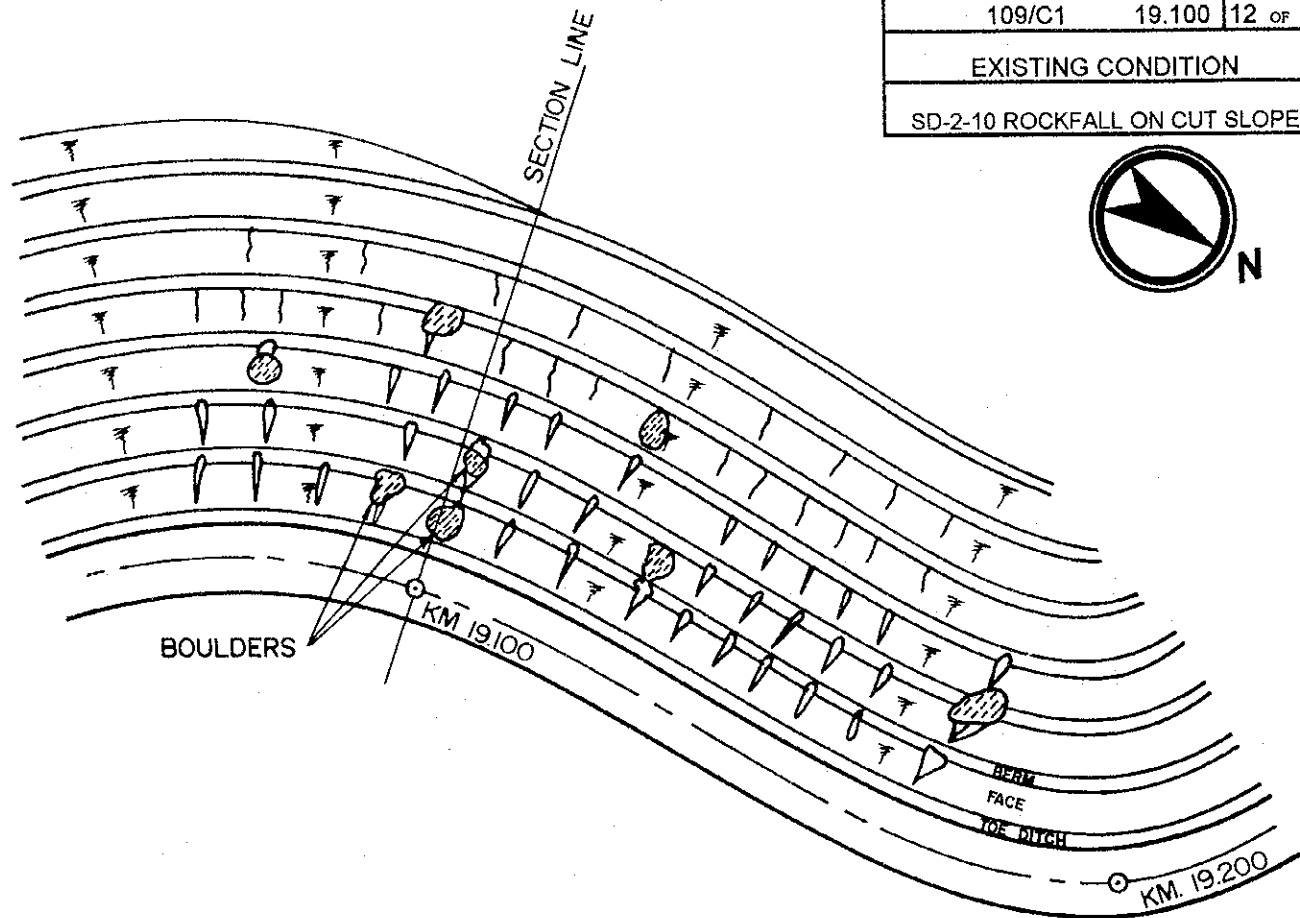
SD-2-10 ROCKFALL ON CUT SLOPE

JICA RDPP STUDY

SPOT NO.	KM.	SHEET NO.
109/C2	21.950	13 OF 20

EXISTING CONDITION

SD-3-3 EROSION ON FILL SLOPE

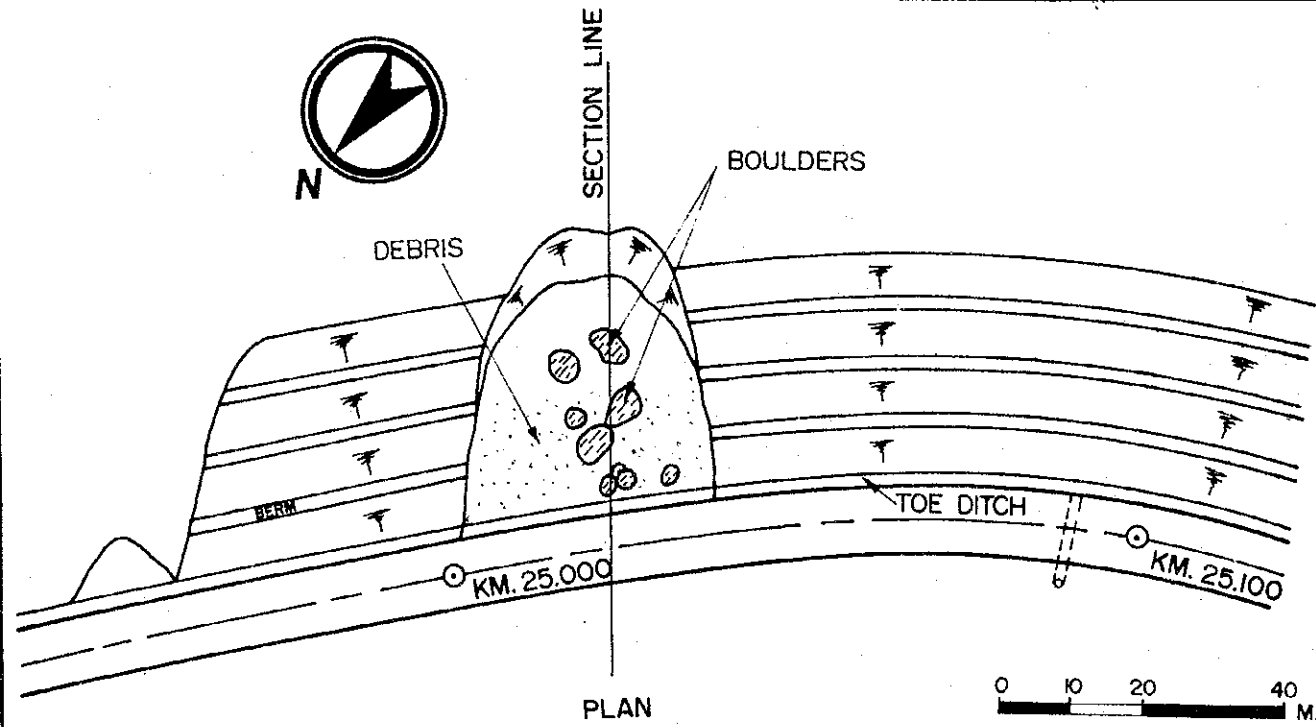


JICA RDPP STUDY

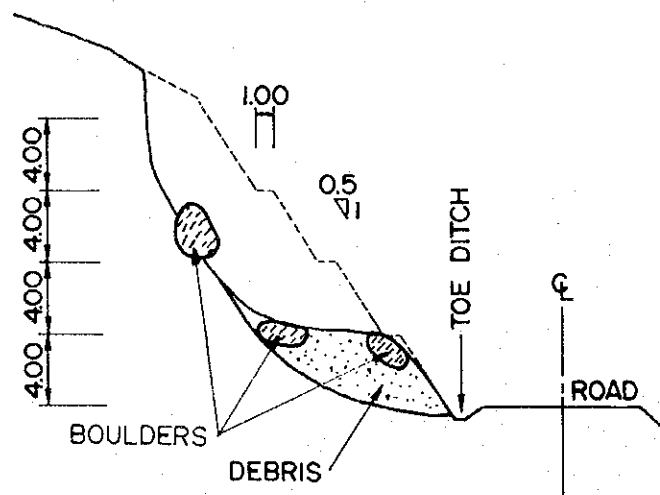
SPOT NO.	KM.	SHEET NO.
109/C3	25.200	14 OF 20

EXISTING CONDITION

SD-2-6 LANDSLIDE ON CUT SLOPE



PLAN



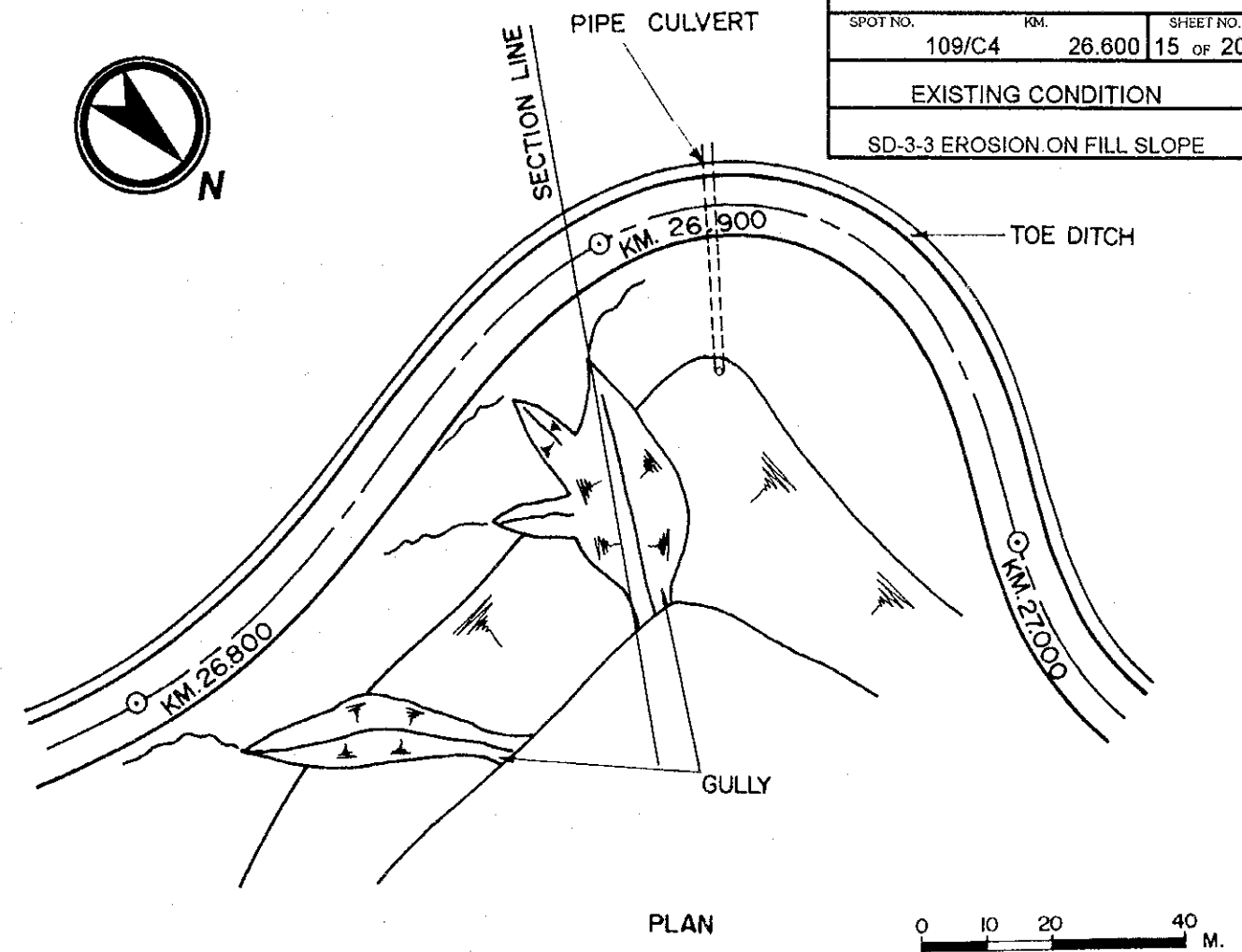
CROSS SECTION

JICA RDPP STUDY

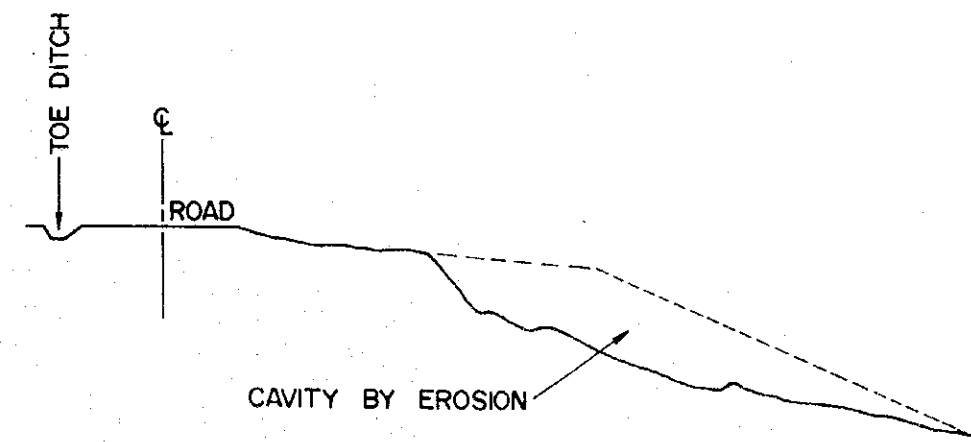
SPOT NO.	KM.	SHEET NO.
109/C4	26.600	15 OF 20

EXISTING CONDITION

SD-3-3 EROSION ON FILL SLOPE



PLAN



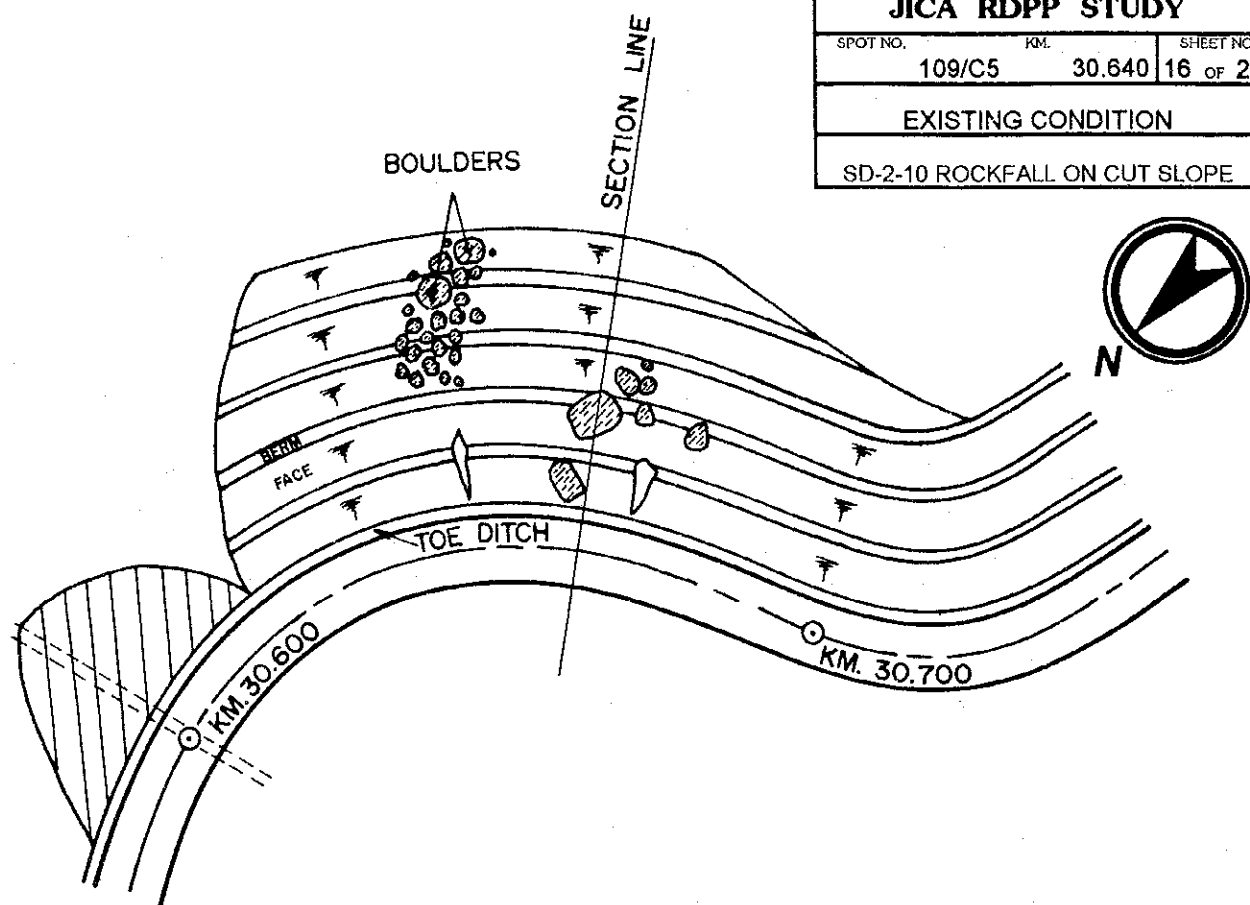
CROSS SECTION

JICA RDPP STUDY

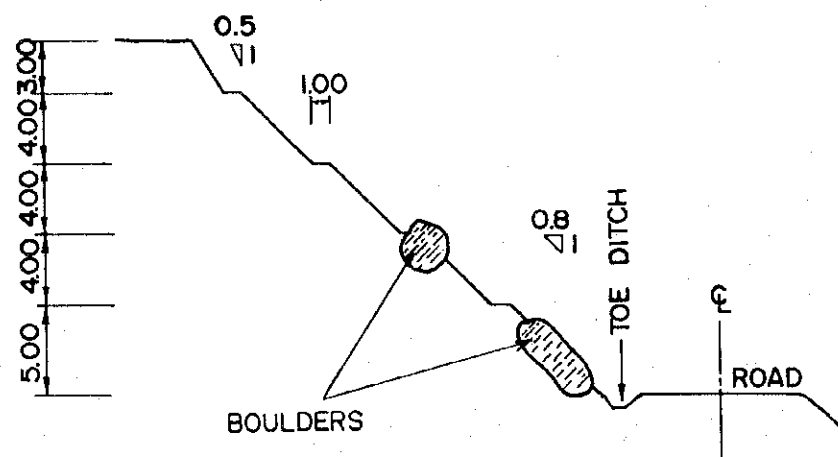
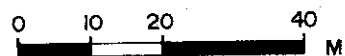
SPOT NO.	KM.	SHEET NO.
109/C5	30.640	16 OF 20

EXISTING CONDITION

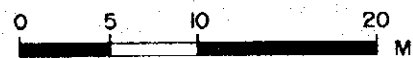
SD-2-10 ROCKFALL ON CUT SLOPE



PLAN



CROSS SECTION

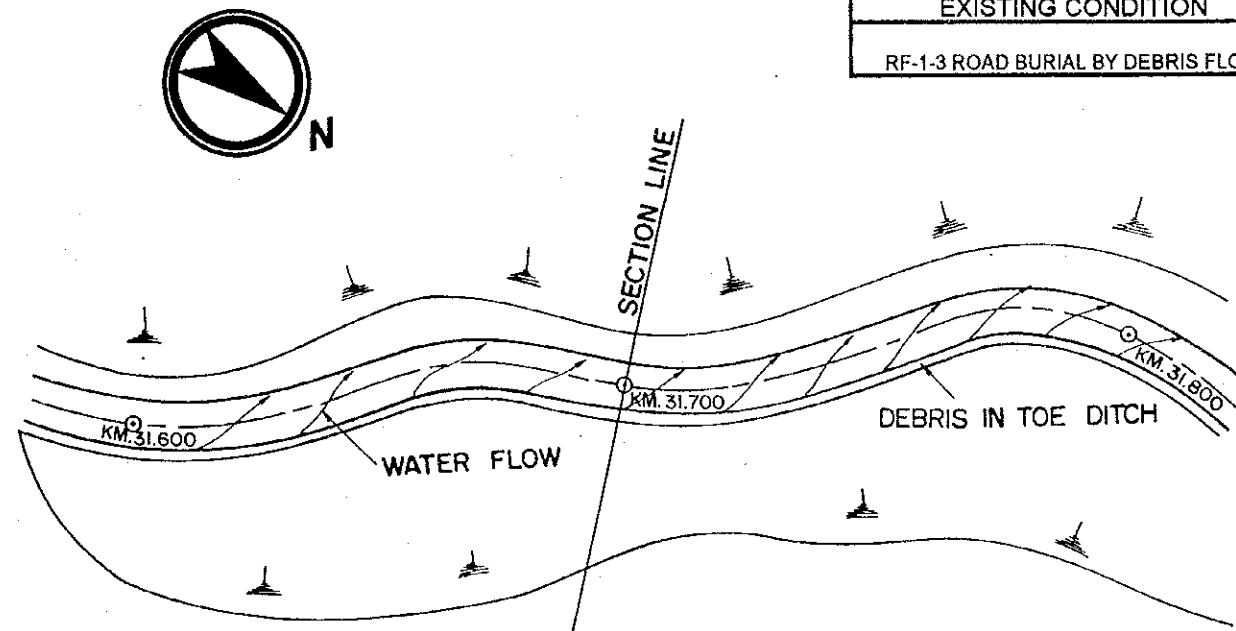


JICA RDPP STUDY

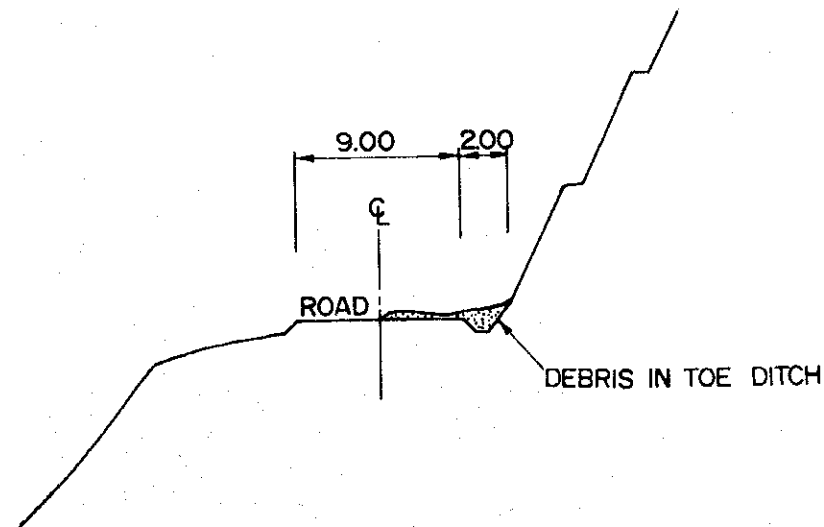
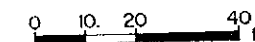
SPOT NO.	KM.	SHEET NO.
109/C6	31.620	17 OF 20

EXISTING CONDITION

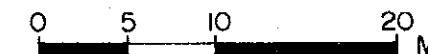
RF-1-3 ROAD BURIAL BY DEBRIS FLOW



PLAN



CROSS SECTION

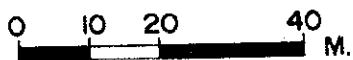
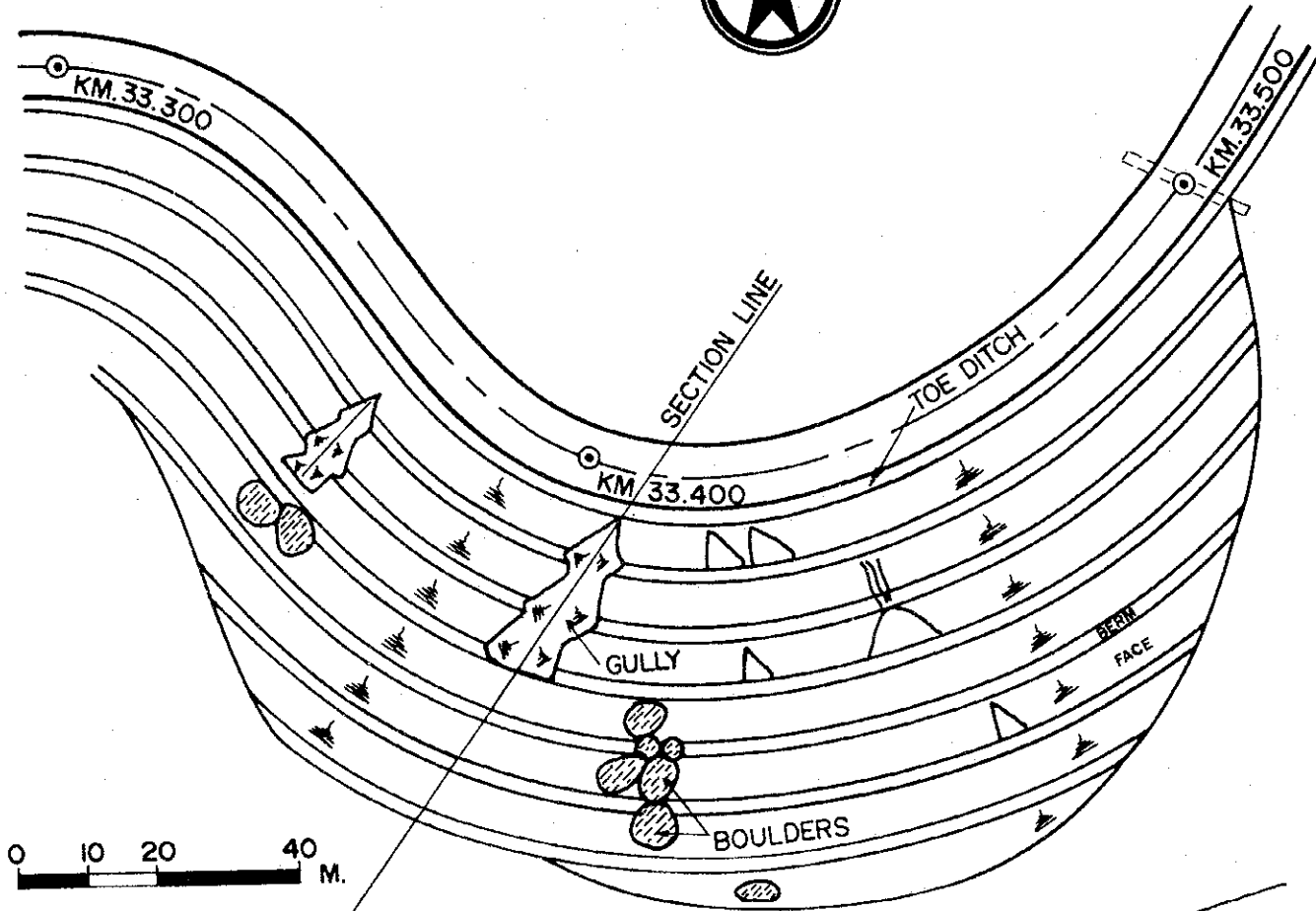


JICA RDPP STUDY

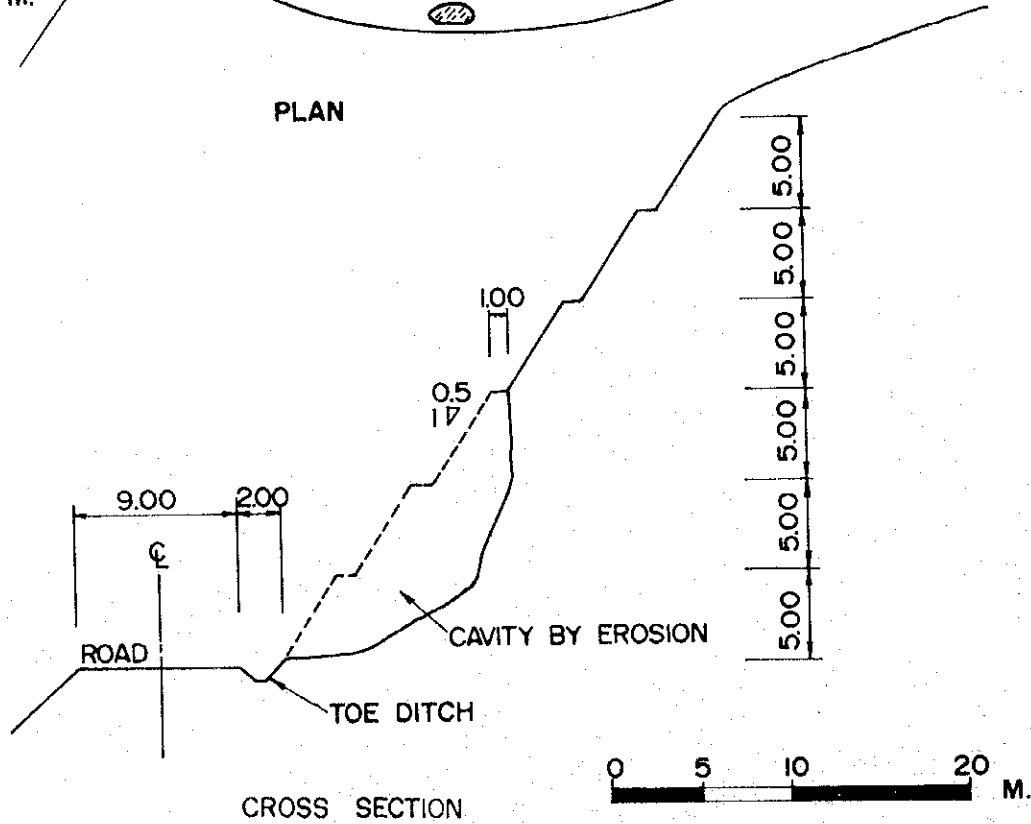
SPOT NO.	KM.	SHEET NO.
109/C7	33.420	18 OF 20

EXISTING CONDITION

SD-2-10 ROCKFALL ON CUT SLOPE



PLAN



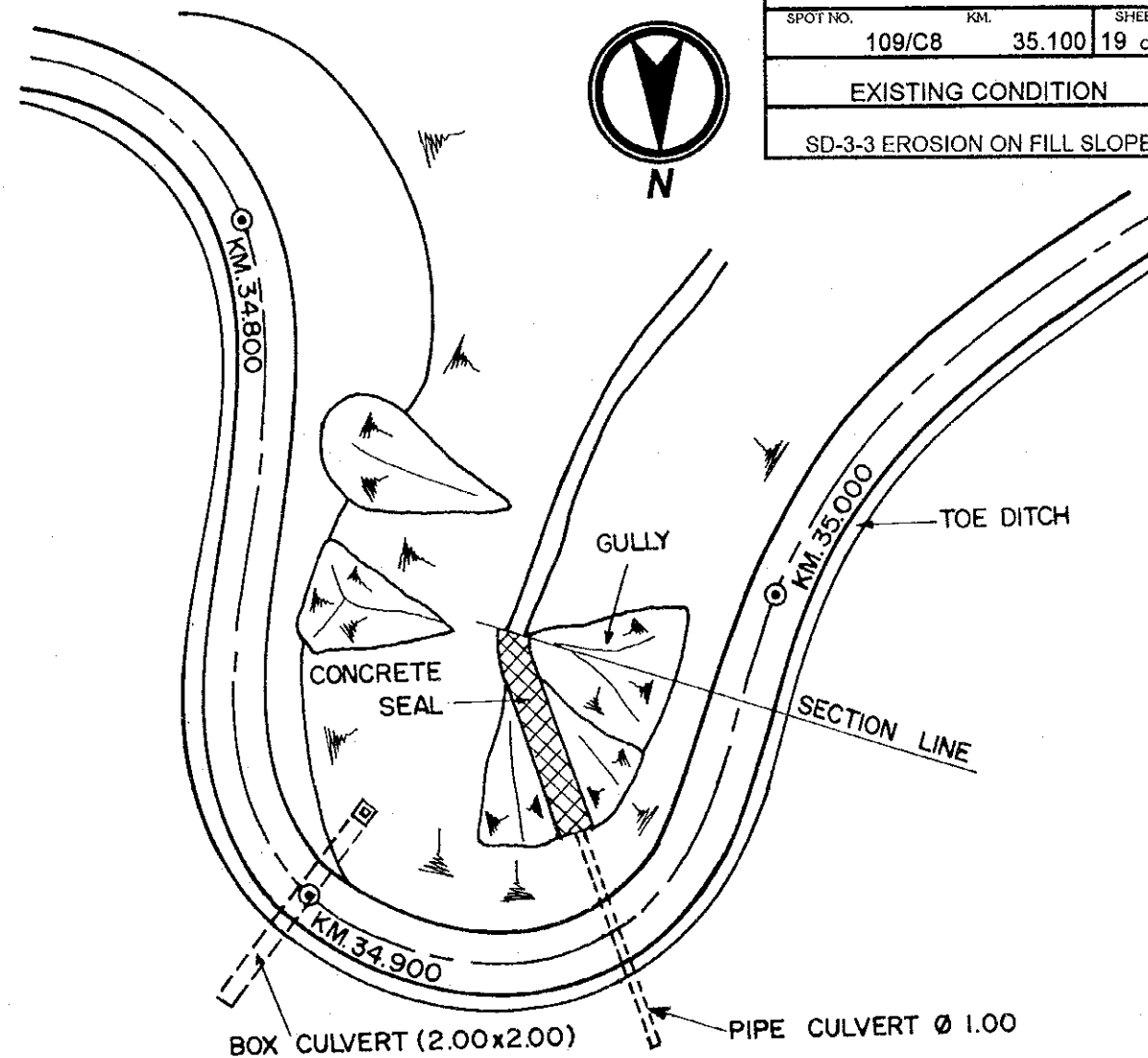
CROSS SECTION

JICA RDPP STUDY

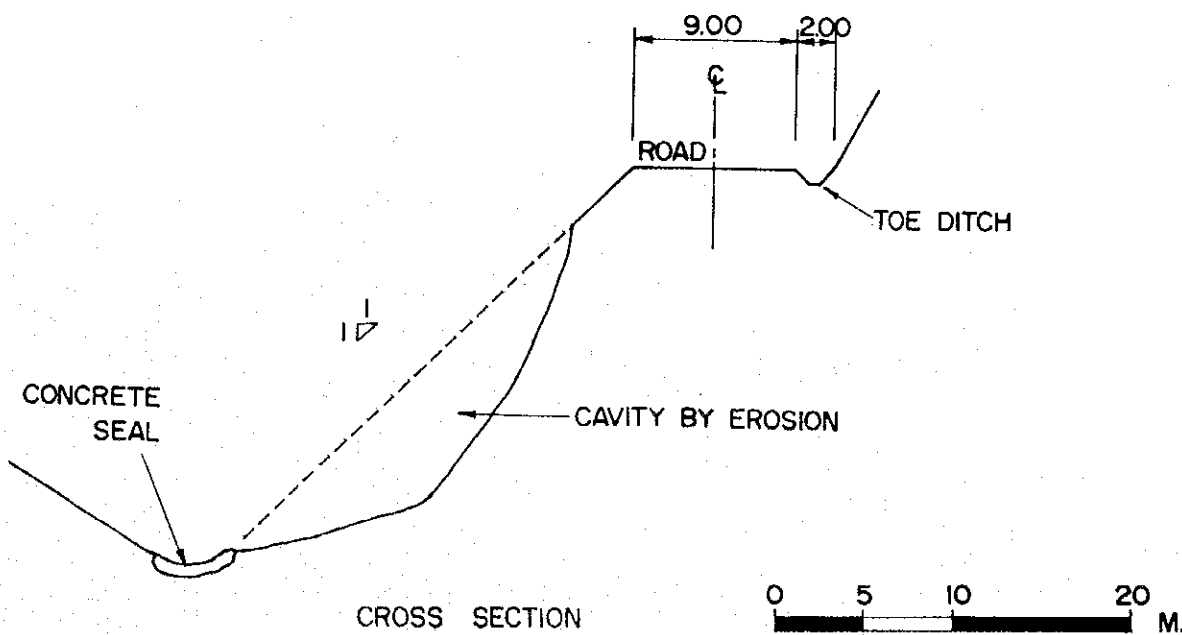
SPOT NO.	KM.	SHEET NO.
109/C8	35.100	19 OF 20

EXISTING CONDITION

SD-3-3 EROSION ON FILL SLOPE

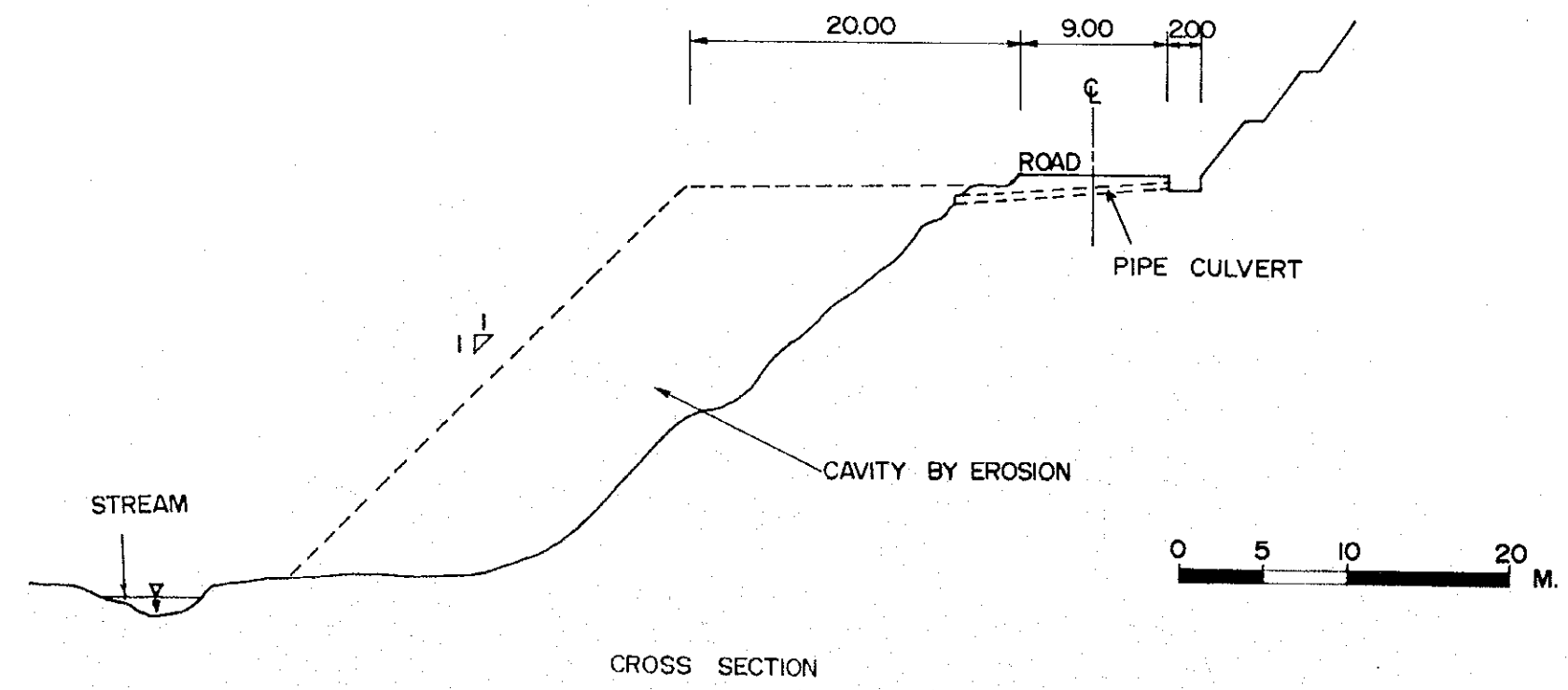
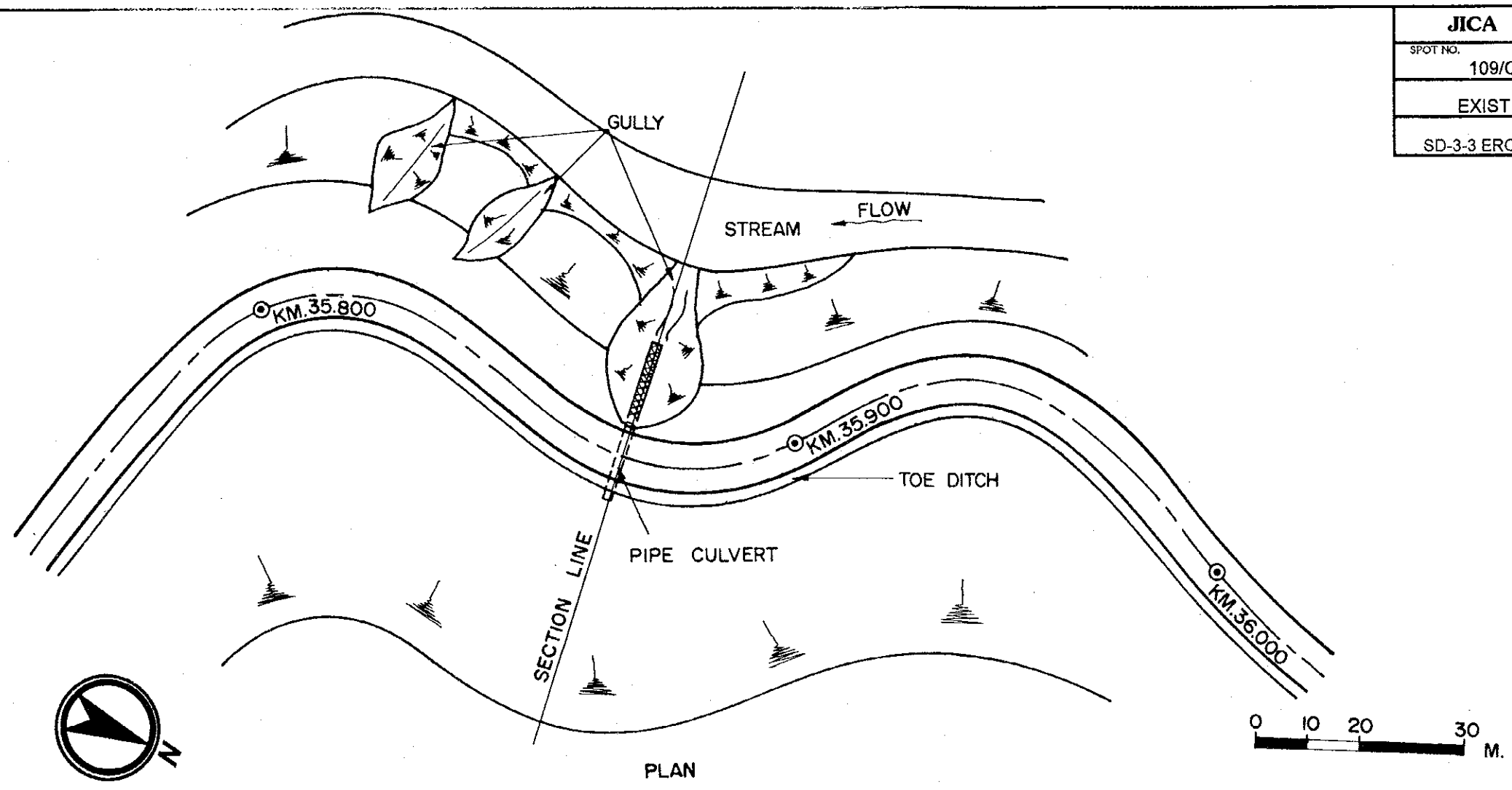


PLAN



CROSS SECTION

JICA RDPP STUDY		
SPOT NO.	KM.	SHEET NO.
109/C9	35.900	20 OF 20
EXISTING CONDITION		
SD-3-3 EROSION ON FILL SLOPE		

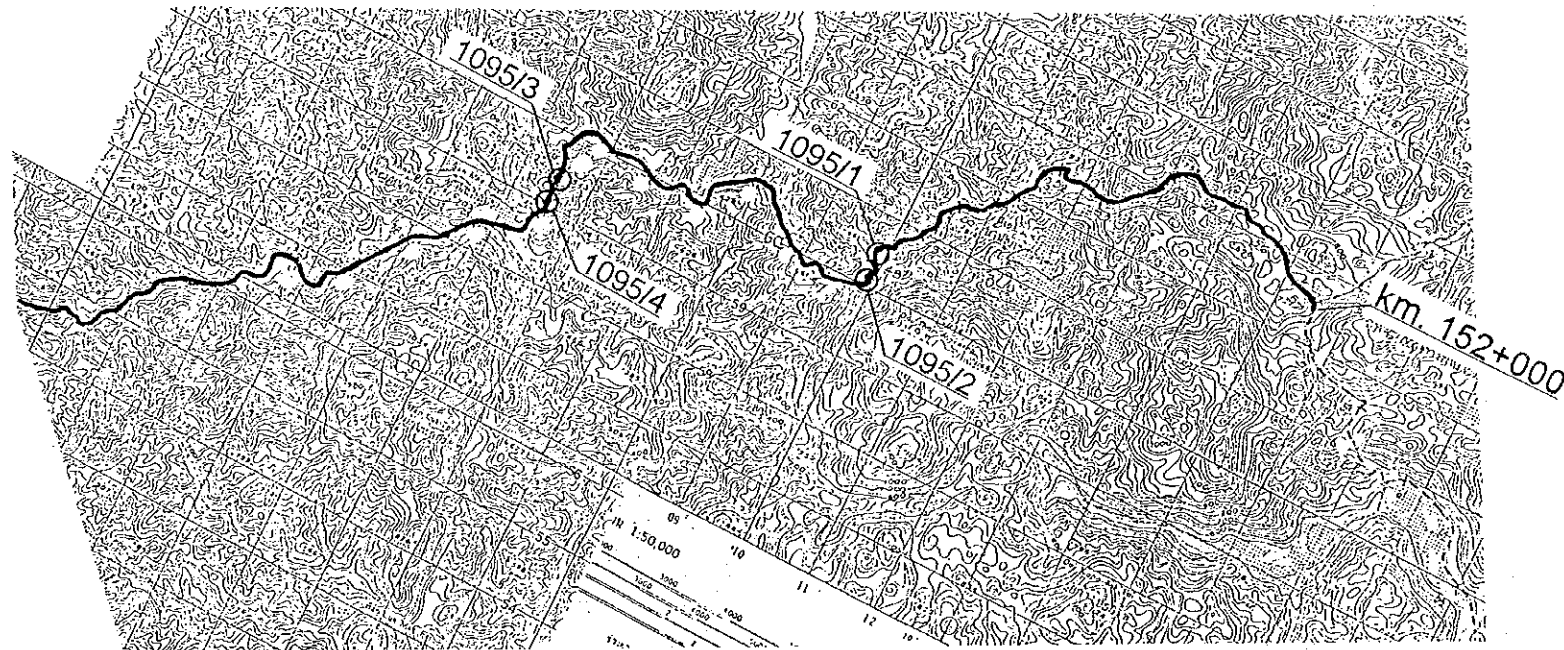
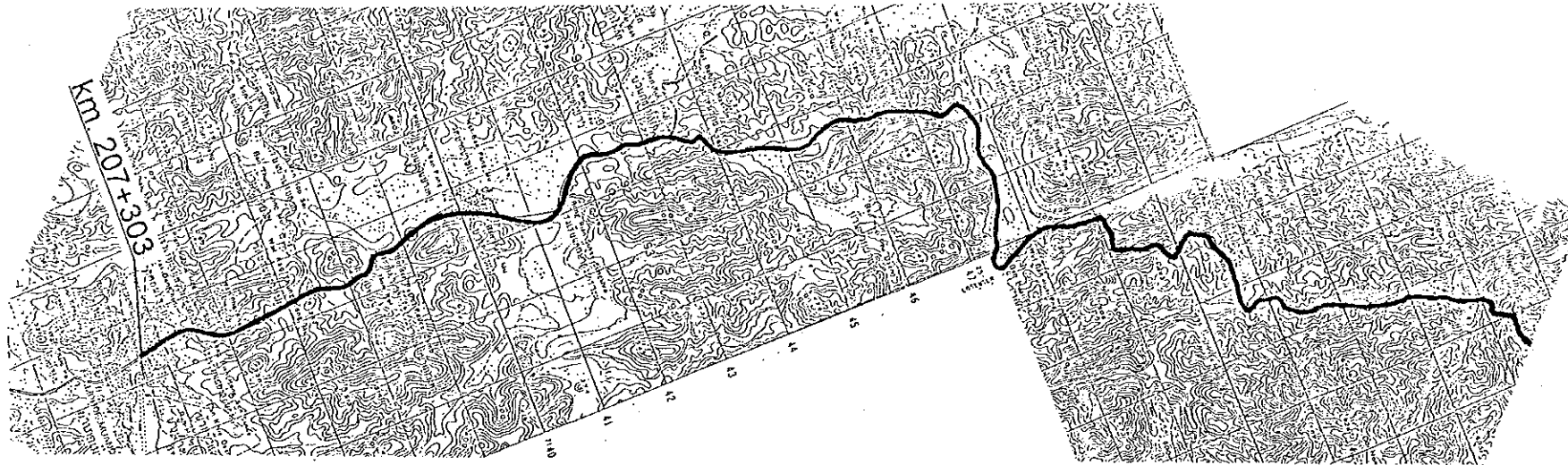


III. Preliminary Design for Route 1095

1. Location of Disaster Spots

LOCATION OF DISASTER SPOTS

ALIGNMENT OF ROUTE 1095



DISASTER SPOTS

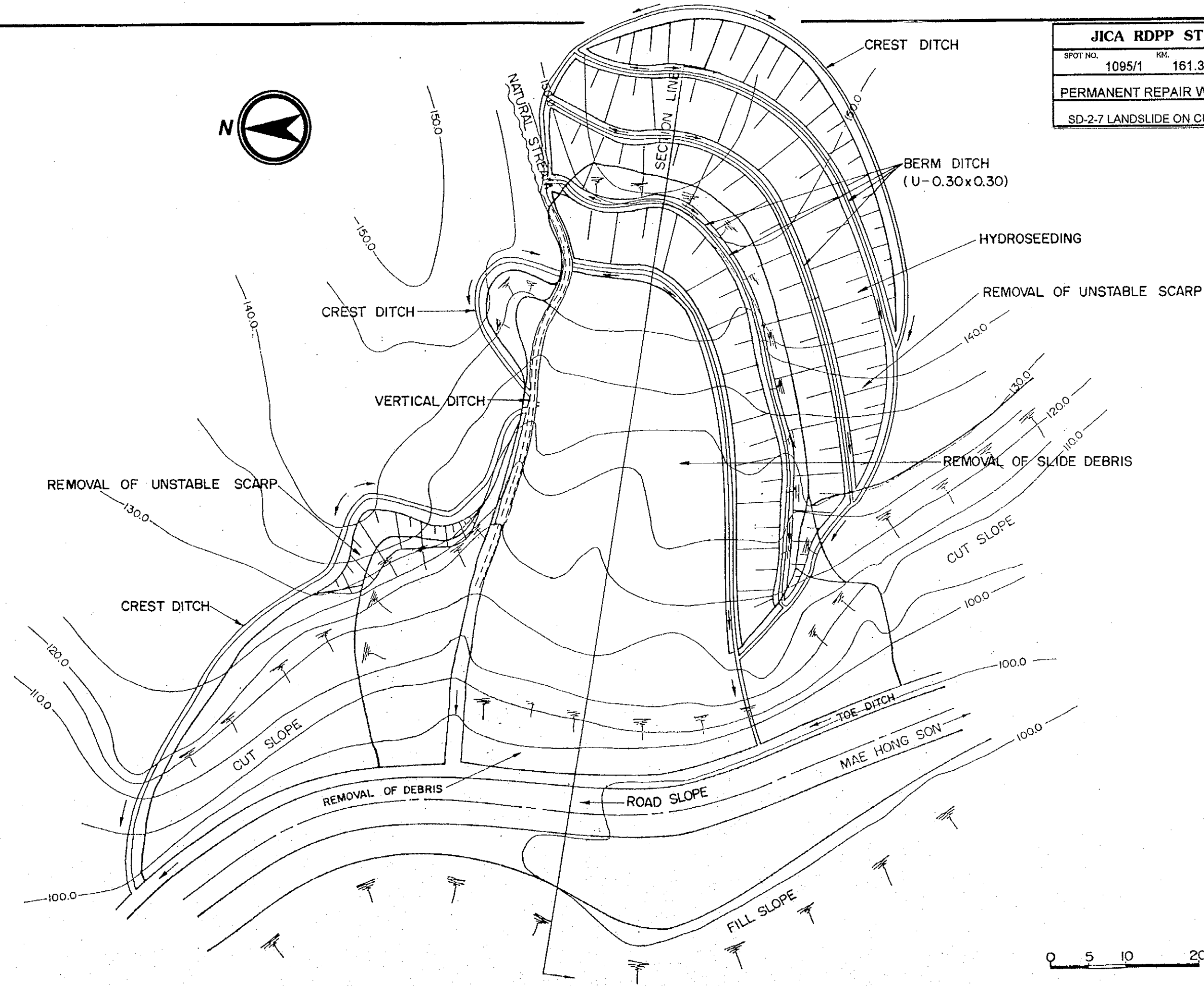
SPOT NO.	CONTROL NO.	CHAINAGE NO.	DAMAGE TYPE
1095/C1	0500	154.250	SD-3-6
1095/C2	0500	156.050	SD-2-6
1095/C3	0500	156.150	SD-2-3
1095/C4	0500	157.000	SD-2-10
1095/C5	0500	157.500	SD-2-6
1095/C6	0500	157.700	SD-2-8
1095/C7	0500	157.900	SD-2-3
1095/C8	0500	158.800	SD-2-7
1095/C9	0500	159.000	SD-2-2
1095/C10	0500	159.450	SD-2-3
1095/C11	0500	159.900	SD-2-6
1095/C12	0500	160.000	SD-2-7
1095/C13	0500	160.500	SD-2-8
1095/C14	0500	160.600	SD-2-7
1095/C15	0500	160.800	SD-2-6
1095/C16	0500	160.850	SD-2-7
1095/1	0500	161.350	SD-2-7
1095/C17	0500	161.600	SD-3-3
1095/2	0500	161.700	SD-2-9
1095/C18	0500	162.350	SD-2-6
1095/C19	0500	162.600	SD-2-7
1095/C20	0500	162.800	SD-2-7
1095/C21	0500	163.450	SD-2-6
1095/C22	0500	163.500	SD-2-6
1095/C23	0500	164.000	SD-2-2
1095/C24	0500	166.800	SD-2-6
1095/C25	0500	167.400	SD-2-6
1095/C26	0500	167.800	SD-2-6
1095/C27	0500	168.000	SD-2-6
1095/C28	0500	168.400	SD-2-7
1095/C29	0500	168.500	SD-2-6
1095/3	0500	168.650	SD-2-6
1095/4	0500	168.900	SD-2-8
1095/C30	0500	169.000	SD-2-6
1095/C31	0500	170.000	SD-1-10
1095/C32	0500	170.250	SD-1-10
1095/C33	0500	172.000	SD-1-10
1095/C34	0500	177.100	SD-2-7
1095/C35	0500	177.800	SD-2-3
1095/C36	0500	178.900	SD-2-6
1095/C37	0500	179.100	SD-2-6
1095/C38	0500	179.200	SD-2-7
1095/C39	0500	179.400	SD-2-6
1095/C40	0500	179.500	SD-2-6
1095/C41	0500	180.250	SD-2-6

Note for SPOT NO.

- Route No./1,2 : Spot for Preliminary Design and Cost Estimate.
- Route No./C1,C2... : Spot for Cost Estimate

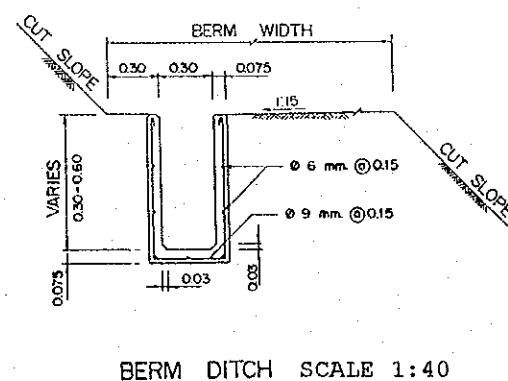
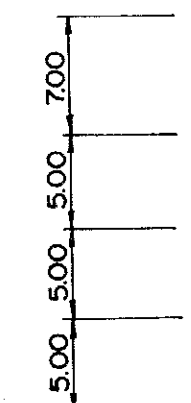
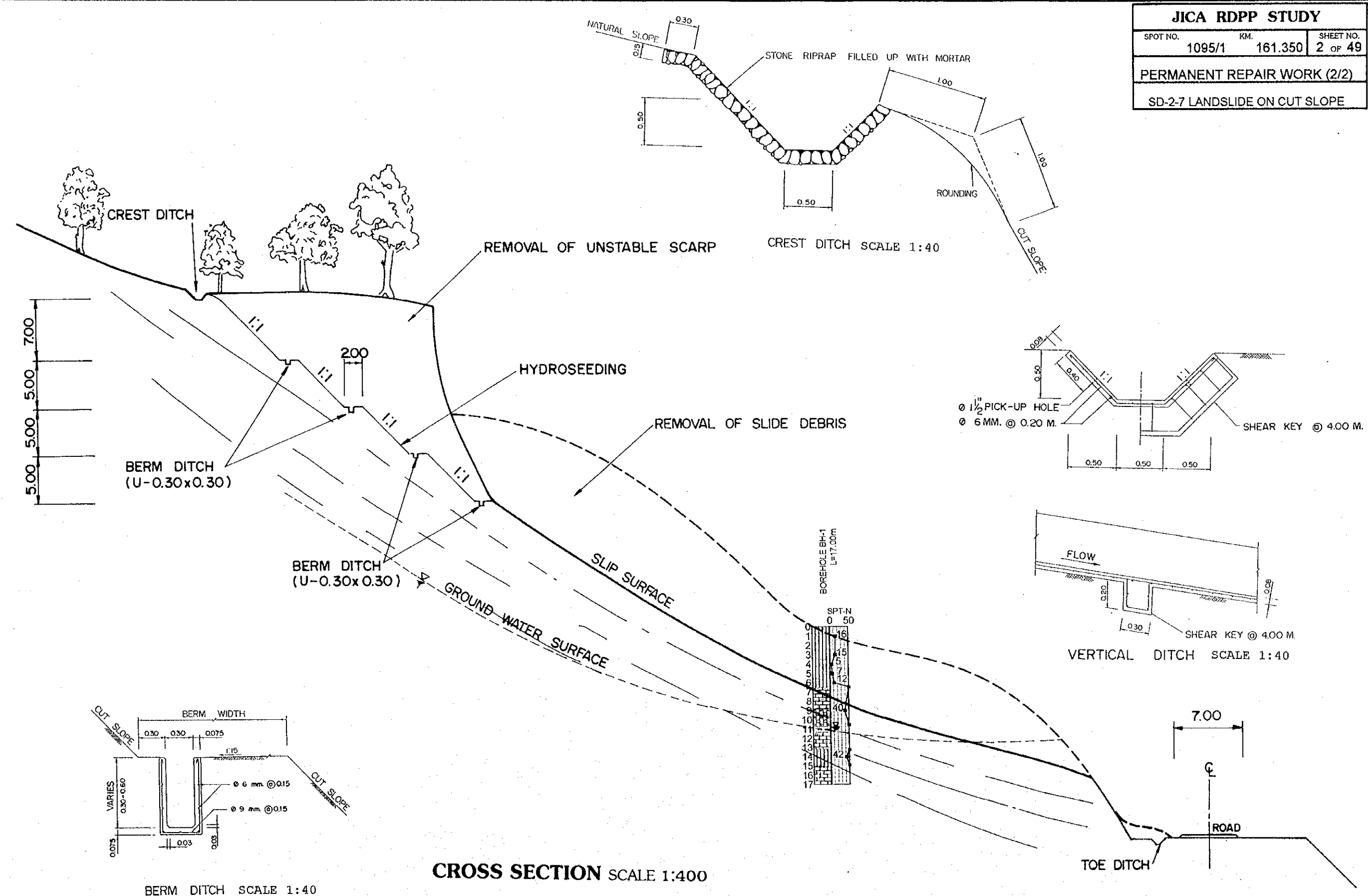
2. Drawings

JICA RDPP STUDY		
SPOT NO.	KM.	SHEET NO.
1095/1	161.350	1 OF 49
PERMANENT REPAIR WORK (1/2)		
SD-2-7 LANDSLIDE ON CUT SLOPE		



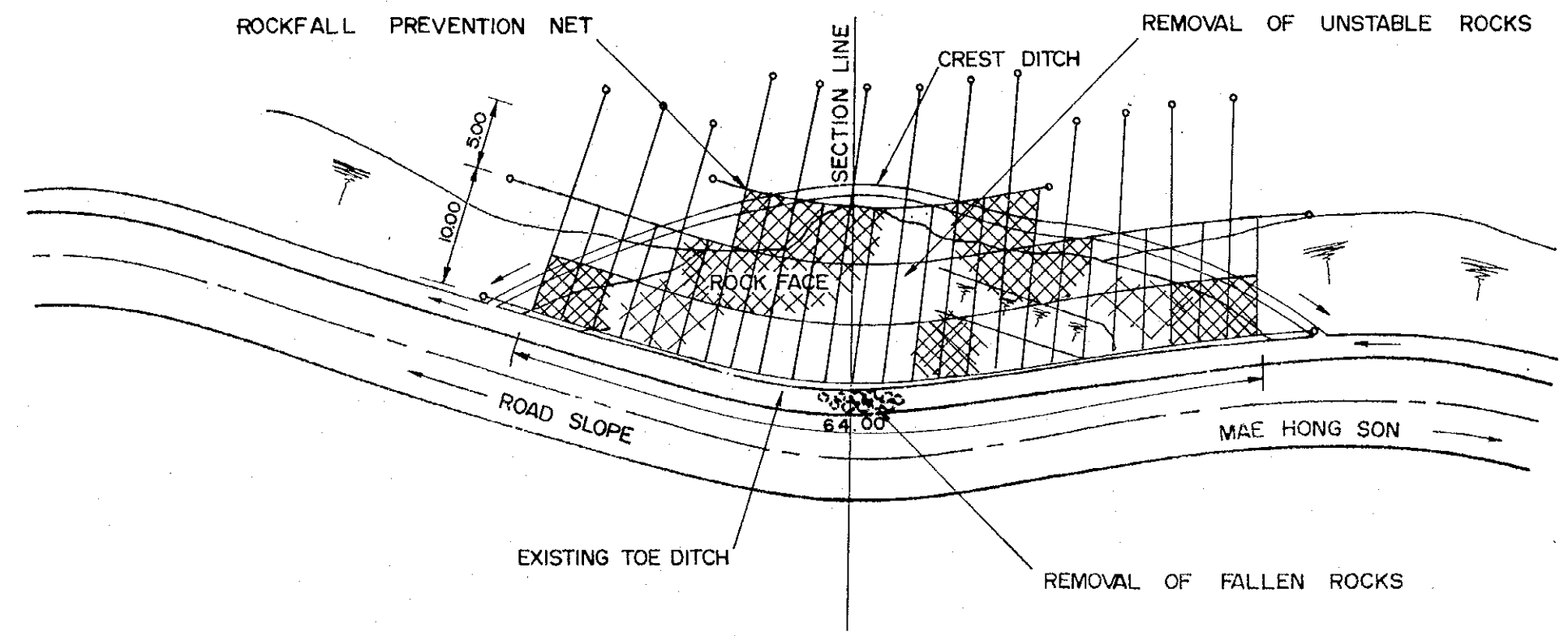
PLAN SCALE 1:500

JICA RDPP STUDY		
SPOT NO.	KM.	SHEET NO.
1095/1	161.350	2 OF 49
PERMANENT REPAIR WORK (2/2)		
SD-2-7 LANDSLIDE ON CUT SLOPE		

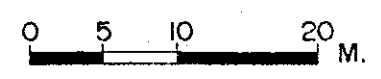


CROSS SECTION SCALE 1:400

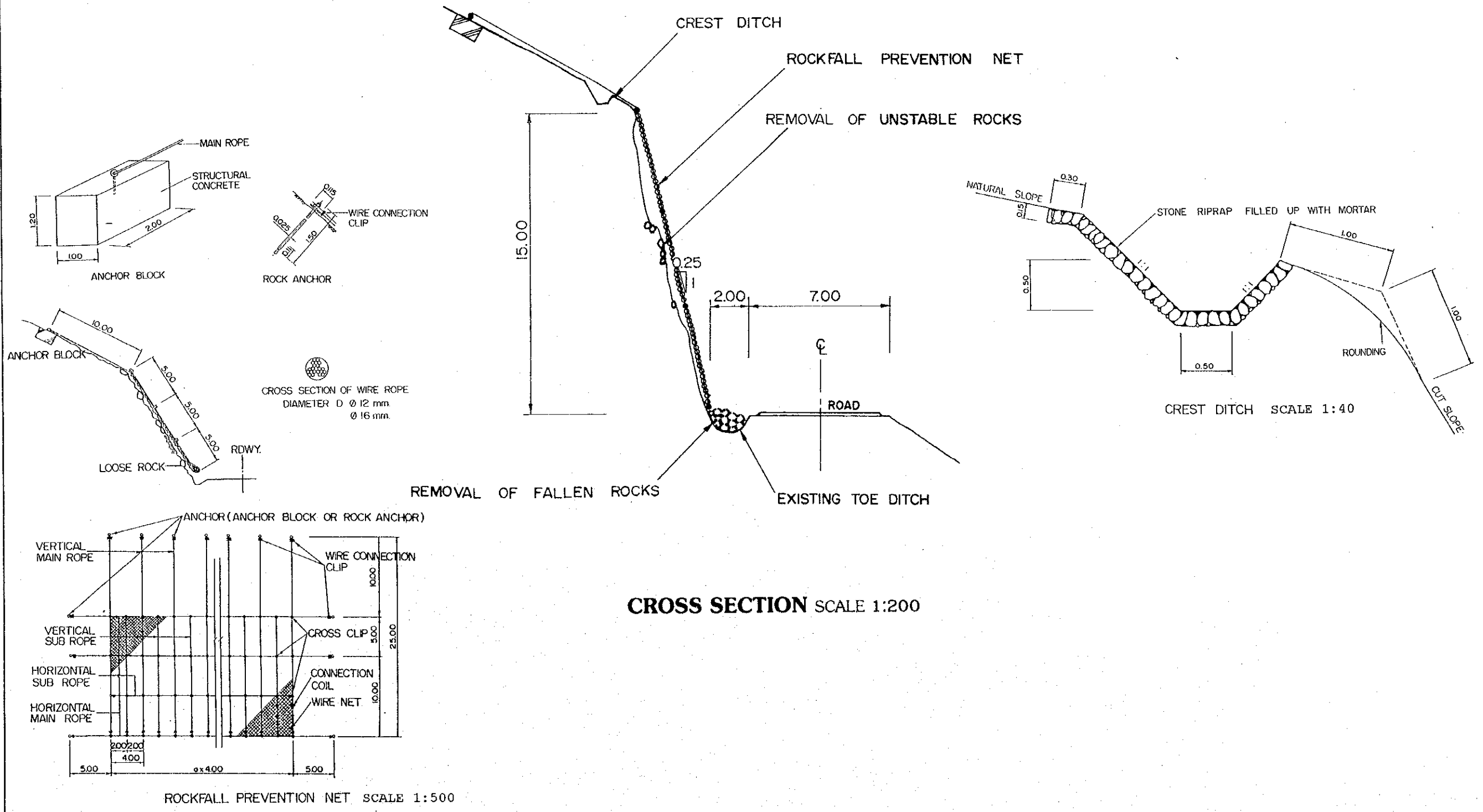
JICA RDPP STUDY		
SPOT NO.	KM.	SHEET NO.
1095/2	161.700	3 OF 49
PERMANENT REPAIR WORK (1/2)		
SD-2-9 ROCKFALL ON CUT SLOPE		



PLAN SCALE 1:500



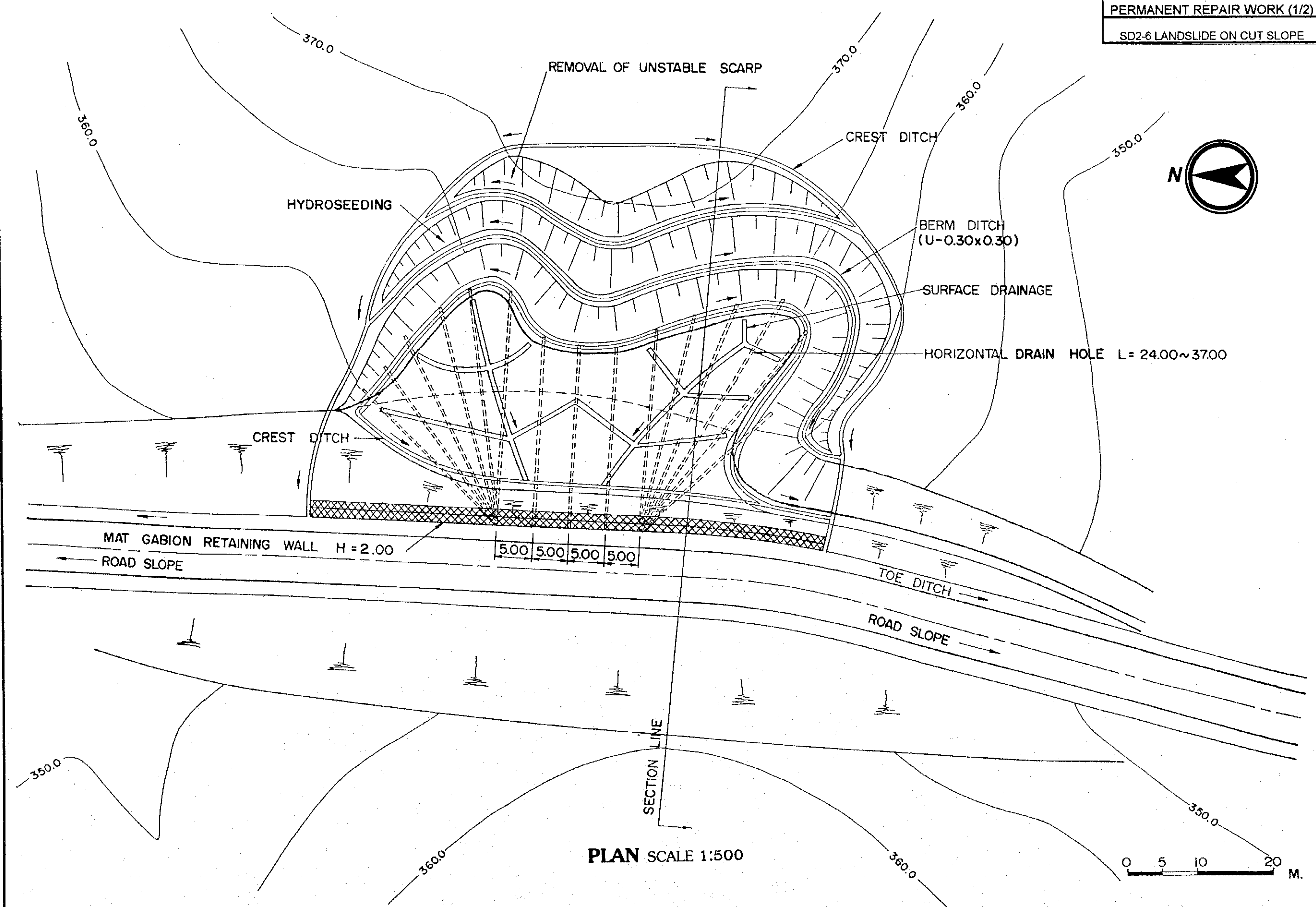
JICA RDPP STUDY		
SPOT NO.	KM.	SHEET NO.
1095/2	161.700	4 OF 49
PERMANENT REPAIR WORK (2/2)		
SD-2-9 ROCKFALL ON CUT SLOPE		



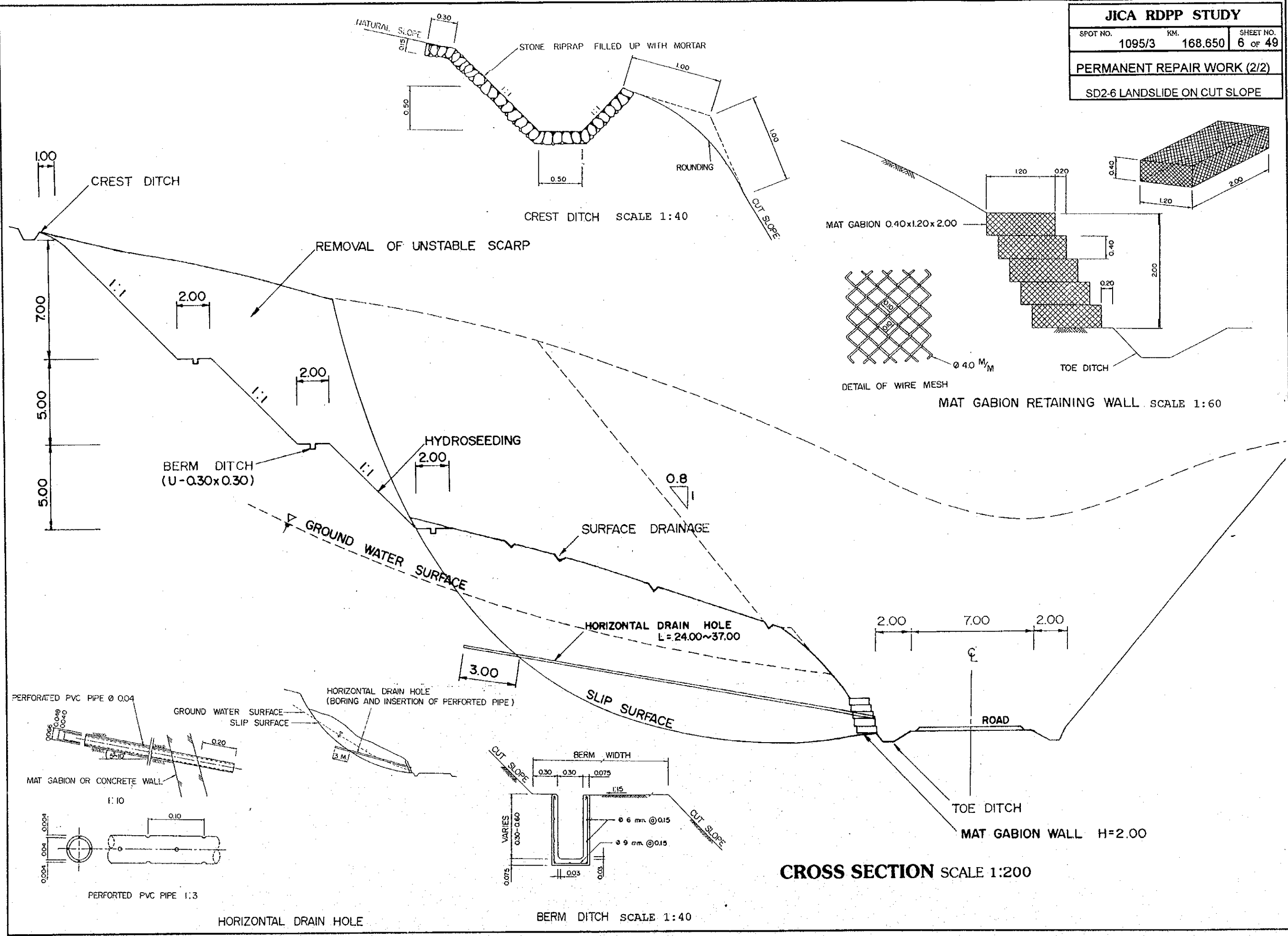
CROSS SECTION SCALE 1:200

ROCKFALL PREVENTION NET SCALE 1:500

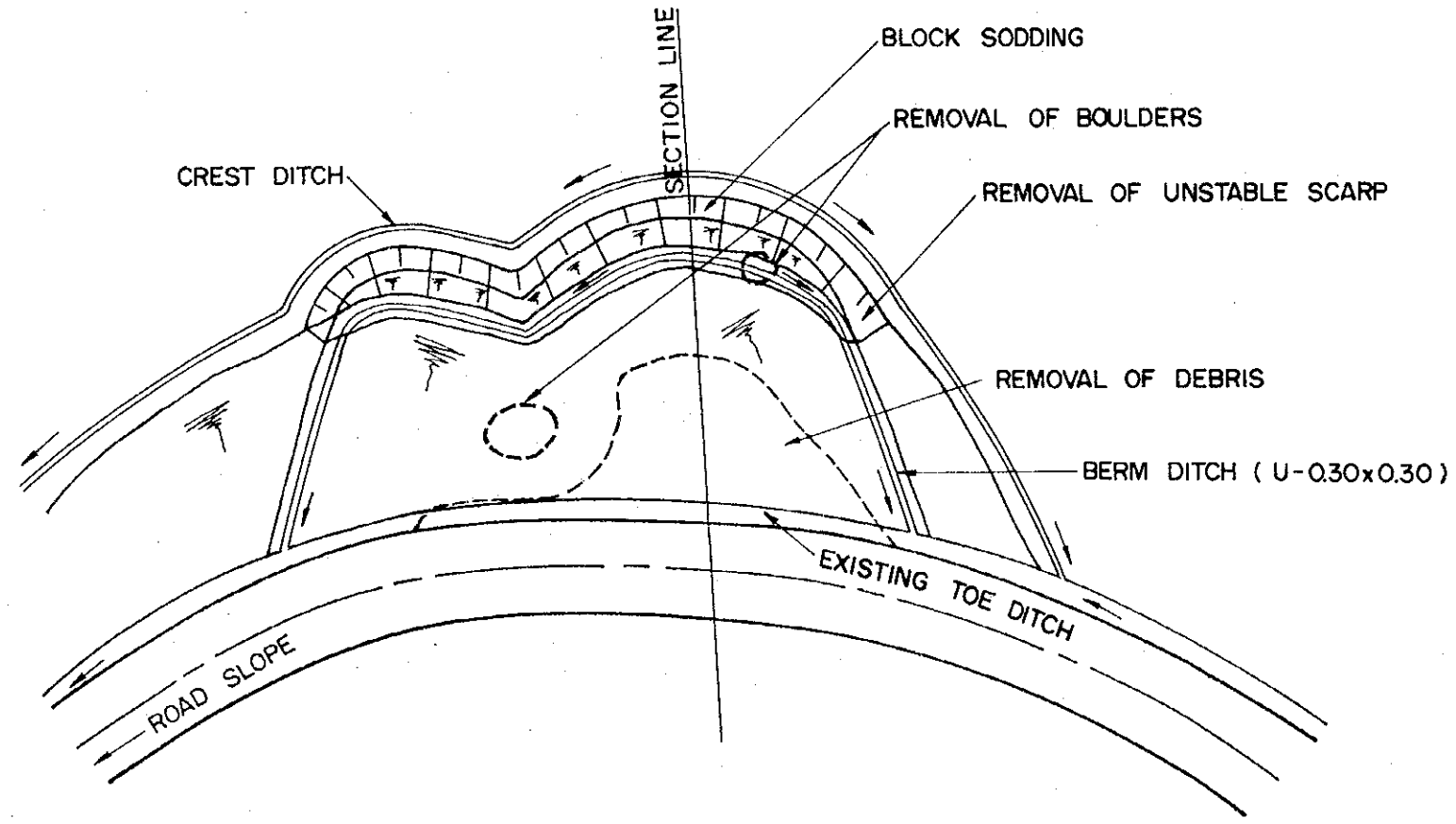
JICA RDPP STUDY		
SPOT NO.	KM.	SHEET NO.
1095/3	168.650	5 OF 49
PERMANENT REPAIR WORK (1/2)		
SD2-6 LANDSLIDE ON CUT SLOPE		



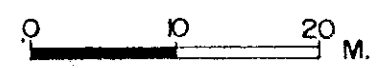
JICA RDPP STUDY		
SPOT NO.	KM.	SHEET NO.
1095/3	168.650	6 OF 49
PERMANENT REPAIR WORK (2/2)		
SD2-6 LANDSLIDE ON CUT SLOPE		



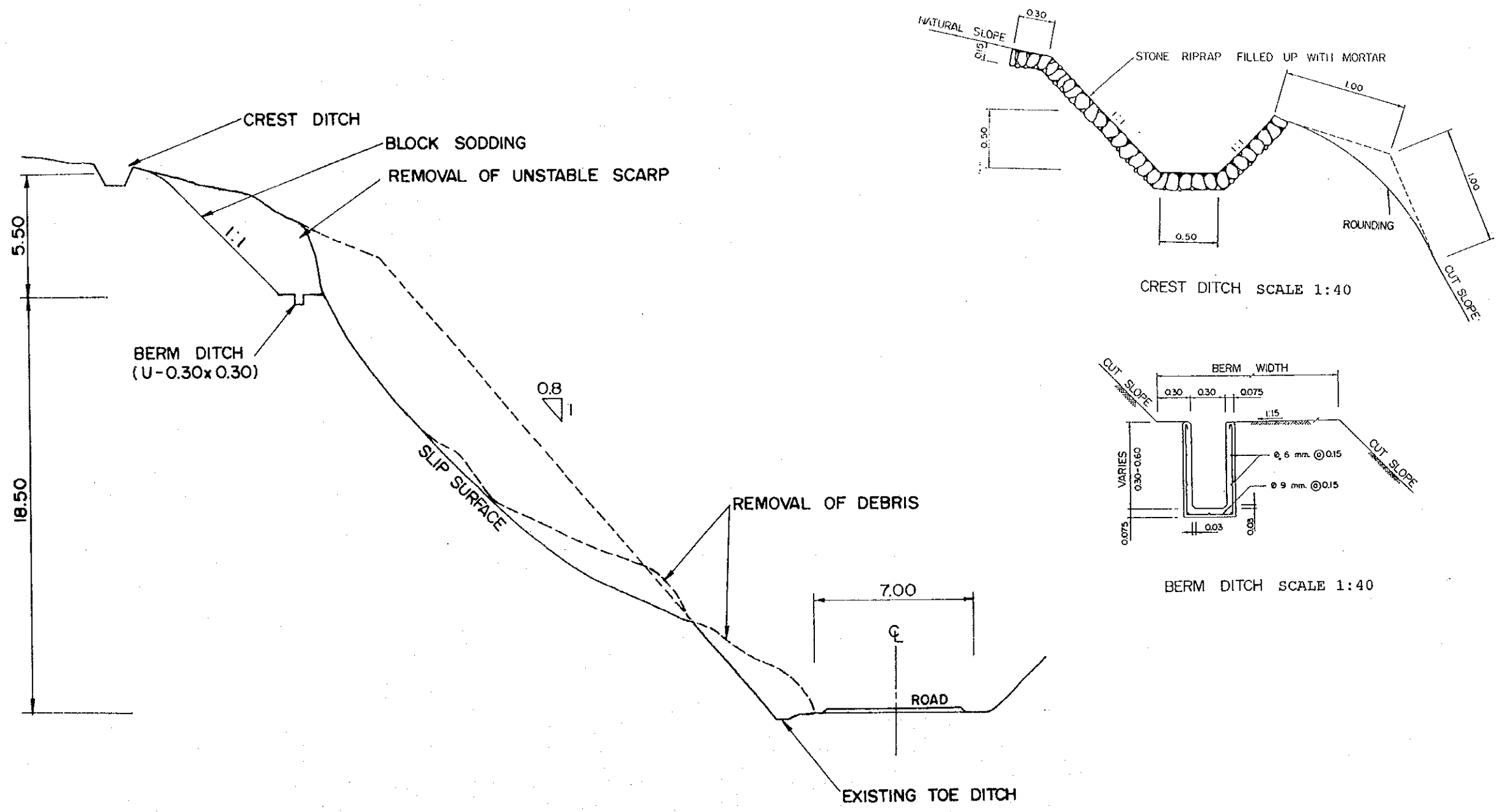
JICA RDPP STUDY		
SPOT NO.	KM.	SHEET NO.
1095/4	168.900	7 OF 49
PERMANENT REPAIR WORK (1/2)		
SD-2-8 LANDSLIDE ON CUT SLOPE		



PLAN SCALE 1:500



JICA RDPP STUDY		
SPOT NO.	KM.	SHEET NO.
1095/4	168.900	8 OF 49
PERMANENT REPAIR WORK (2/2)		
SD-2-8 LANDSLIDE ON CUT SLOPE		



CROSS SECTION SCALE 1:200

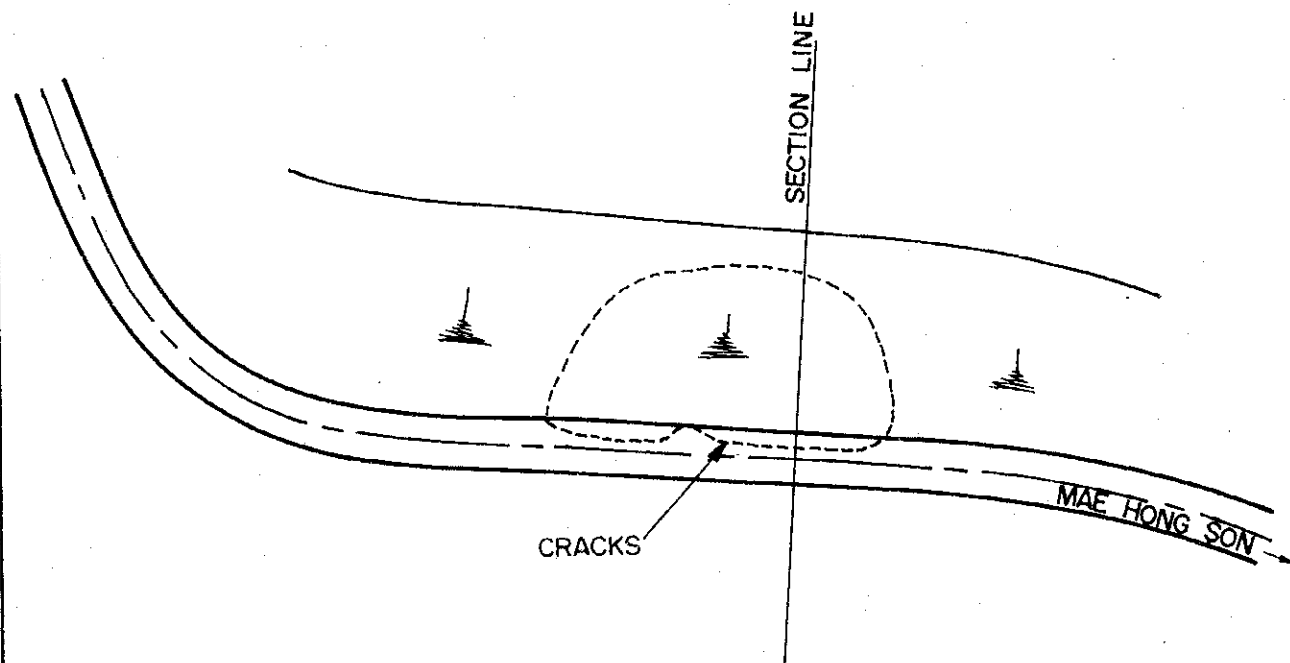
3. Existing Condition

JICA RDPP STUDY

SPOT NO.	KM.	SHEET NO.
1095/C1	154.250	9 OF 49

EXISTING CONDITION

SD-3-6 LANDSLIDE ON FILL SLOPE

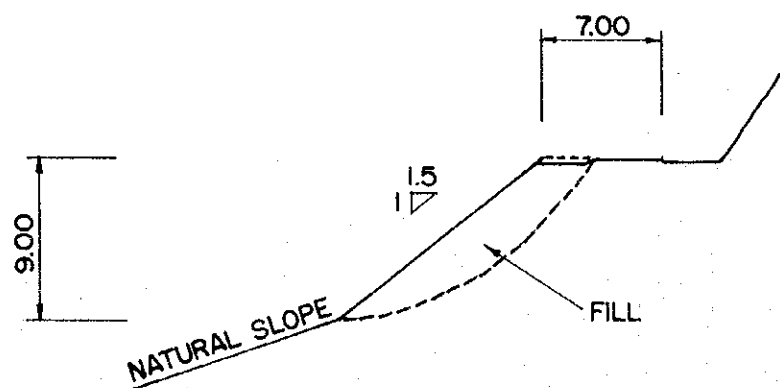
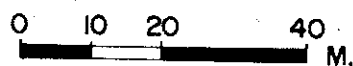


CRACKS

MAE HONG SON

SECTION LINE

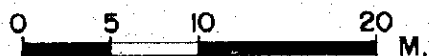
PLAN



NATURAL SLOPE

FILL

CROSS SECTION

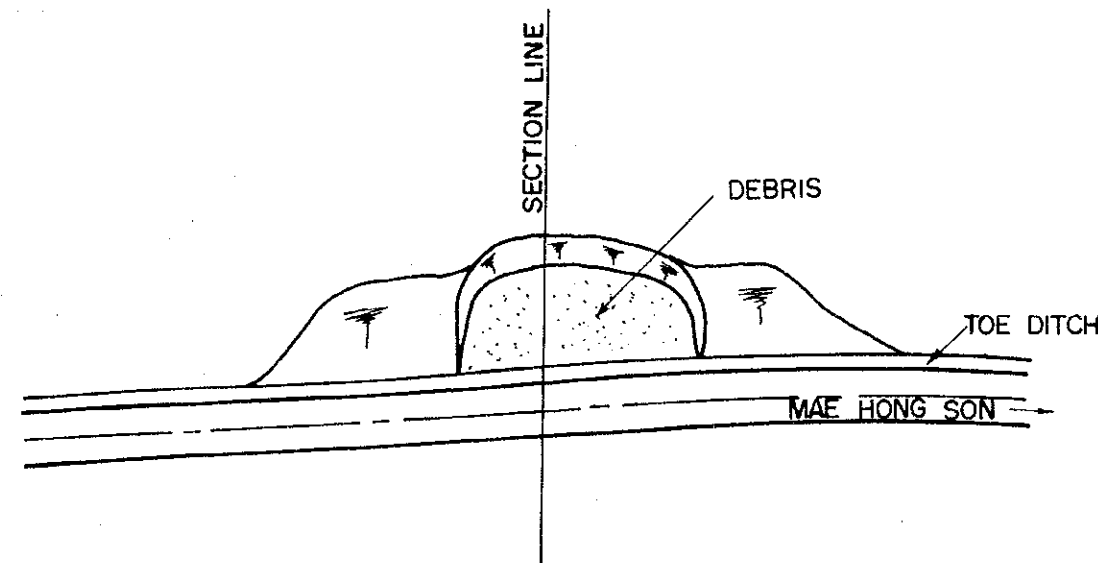


JICA RDPP STUDY

SPOT NO.	KM.	SHEET NO.
1095/C2	156.050	10 OF 49

EXISTING CONDITION

SD-2-6 LANDSLIDE ON CUT SLOPE



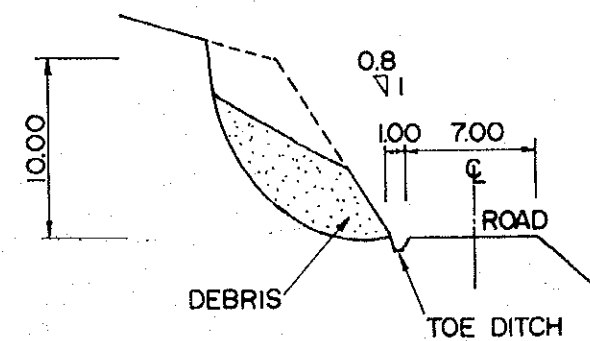
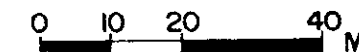
DEBRIS

TOE DITCH

MAE HONG SON

SECTION LINE

PLAN



DEBRIS

TOE DITCH

0.8
1

1.00 7.00

ROAD

CROSS SECTION



JICA RDPP STUDY

SPOT NO.	KM.	SHEET NO.
1095/C3	156.150	11 OF 49

EXISTING CONDITION

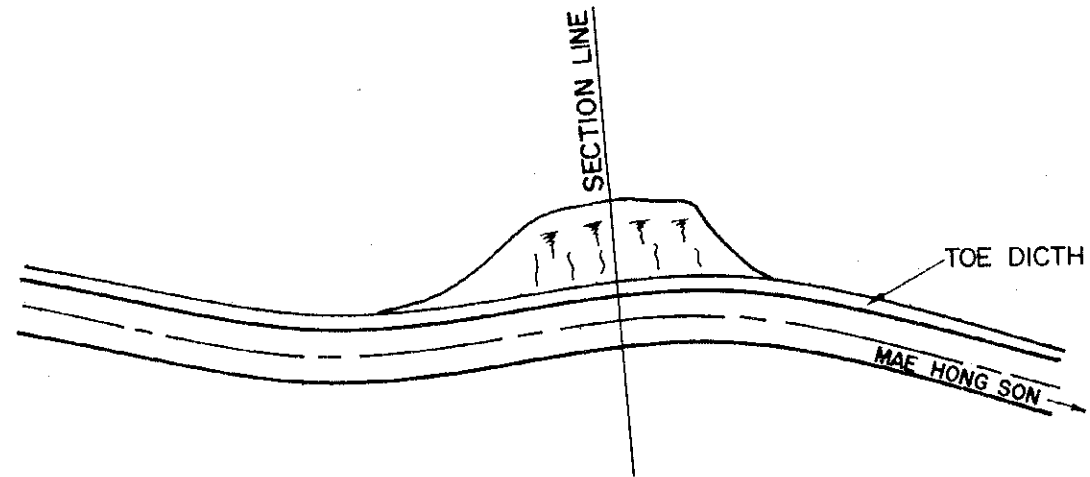
SD-2-3 EROSION ON CUT SLOPE

JICA RDPP STUDY

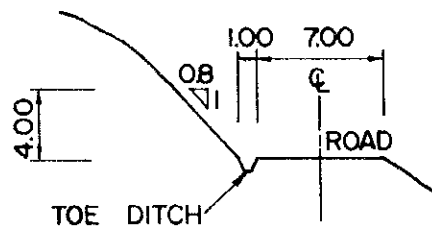
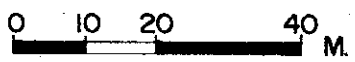
SPOT NO.	KM.	SHEET NO.
1095/C4	157.000	12 OF 49

EXISTING CONDITION

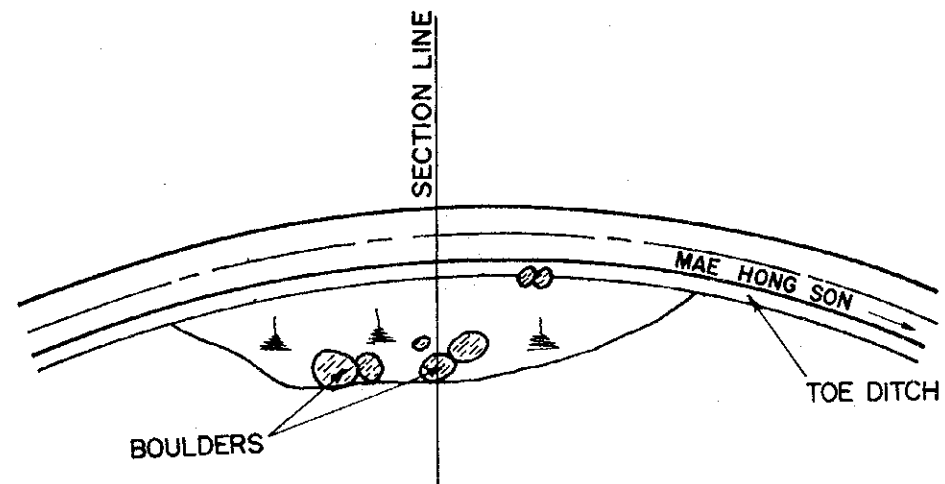
SD-2-10 ROCKFALL ON CUT SLOPE



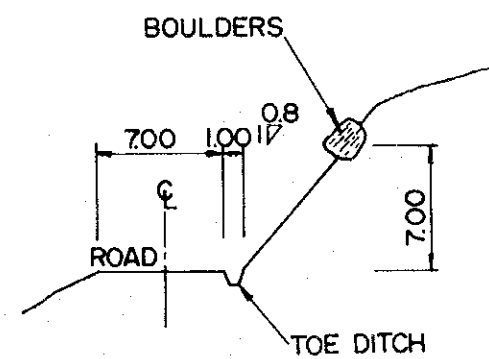
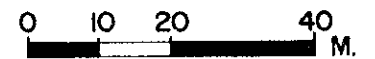
PLAN



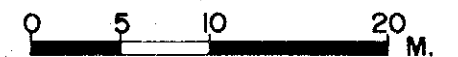
CROSS SECTION



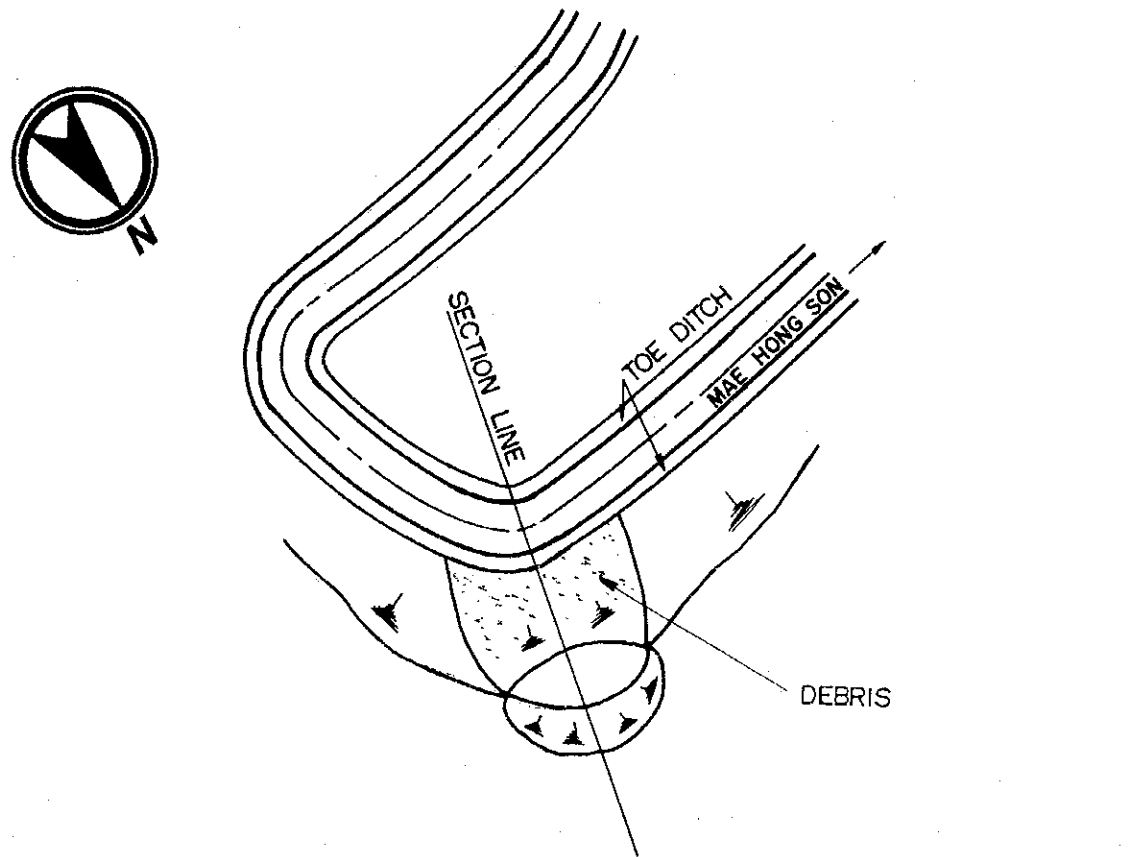
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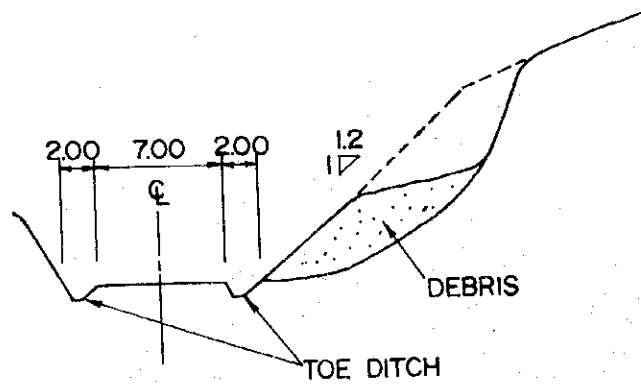
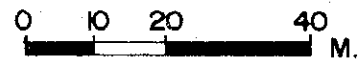
CROSS SECTION



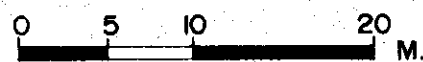
JICA RDPP STUDY		
SPOT NO.	KM.	SHEET NO.
1095/C5	157.500	13 OF 49
EXISTING CONDITION		
SD-2-6 LANDSLIDE ON CUT SLOPE		



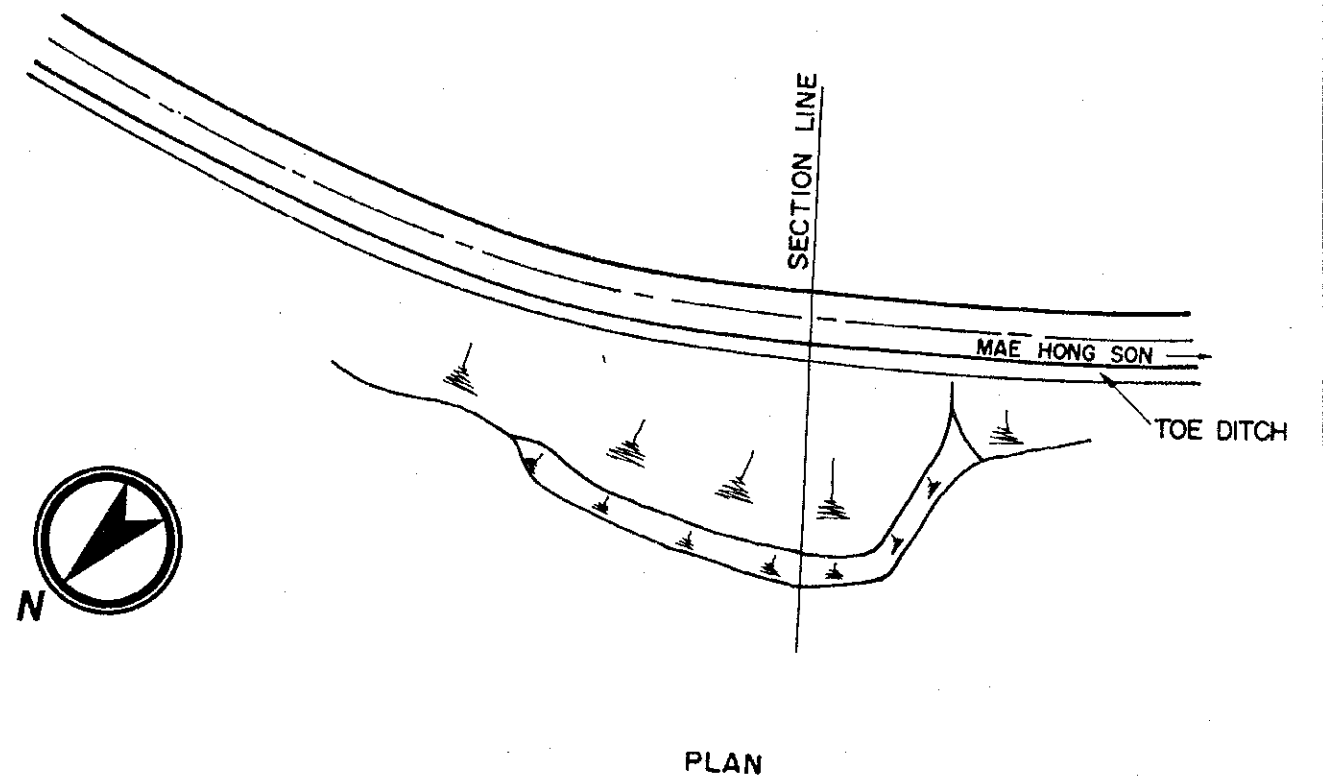
PLAN



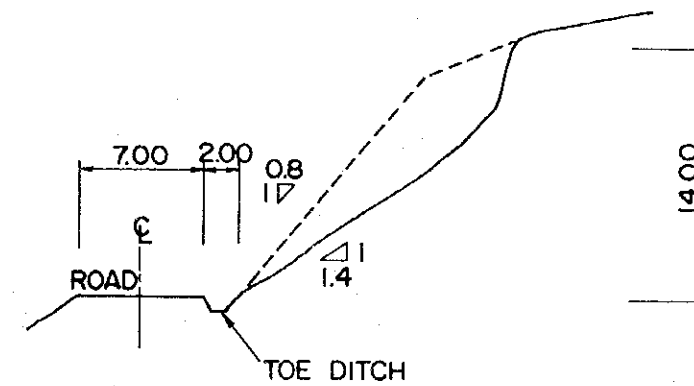
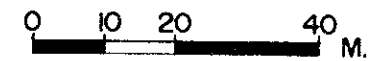
CROSS SECTION



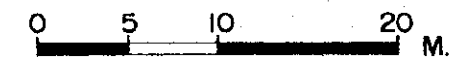
JICA RDPP STUDY		
SPOT NO.	KM.	SHEET NO.
1095/C6	157.700	14 OF 49
EXISTING CONDITION		
SD-2-8 LANDSLIDE ON CUT SLOPE		



PLAN



CROSS SECTION

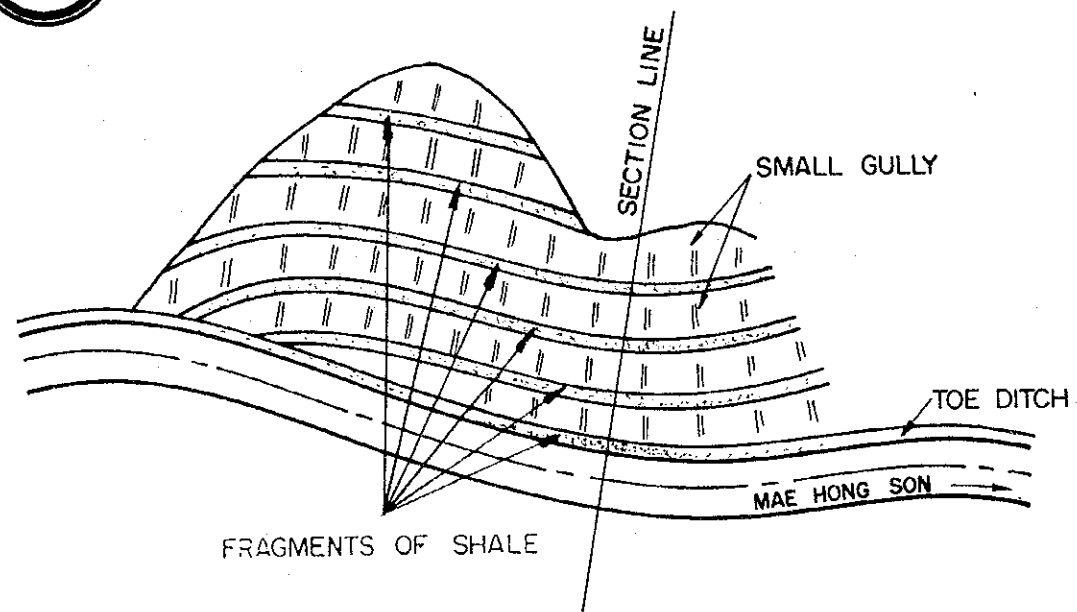


JICA RDPP STUDY

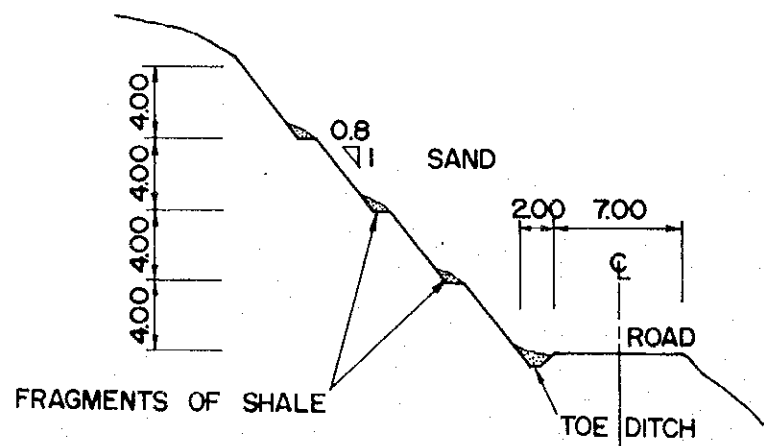
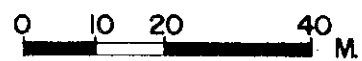
SPOT NO.	KM.	SHEET NO.
1095/C7	157.900	15 OF 49

EXISTING CONDITION

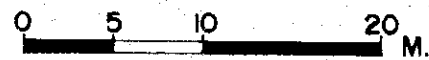
SD-2-3 EROSION ON CUT SLOPE



PLAN



CROSS SECTION

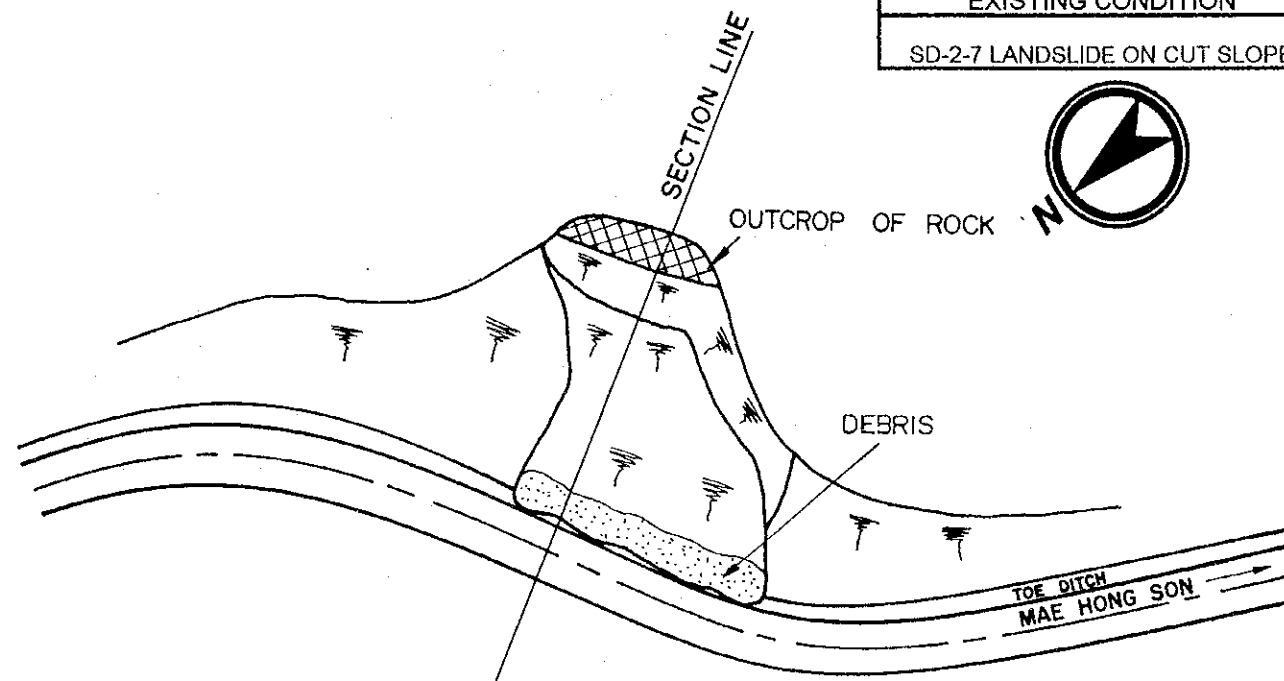


JICA RDPP STUDY

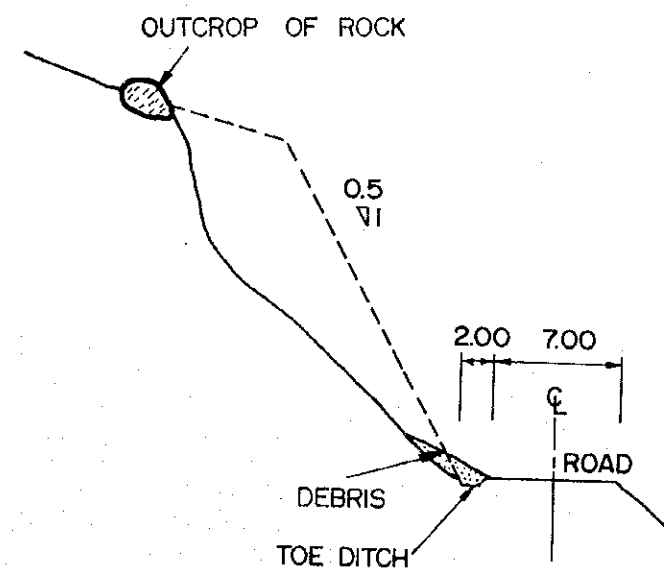
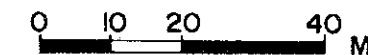
SPOT NO.	KM.	SHEET NO.
1095/C8	158.800	16 OF 49

EXISTING CONDITION

SD-2-7 LANDSLIDE ON CUT SLOPE



PLAN



CROSS SECTION

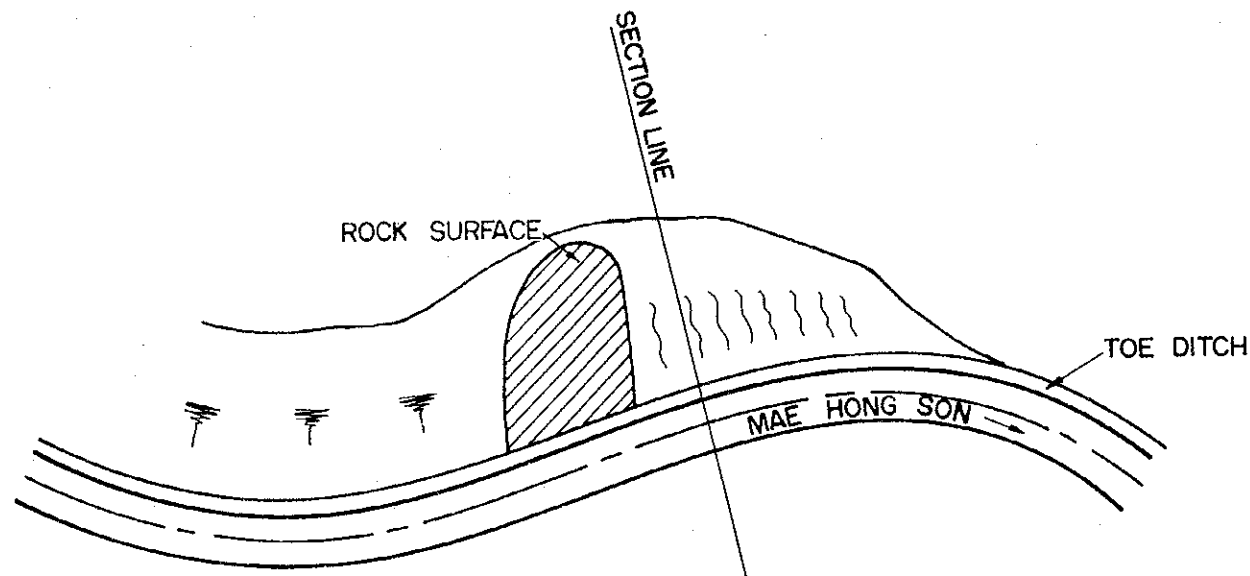


JICA RDPP STUDY

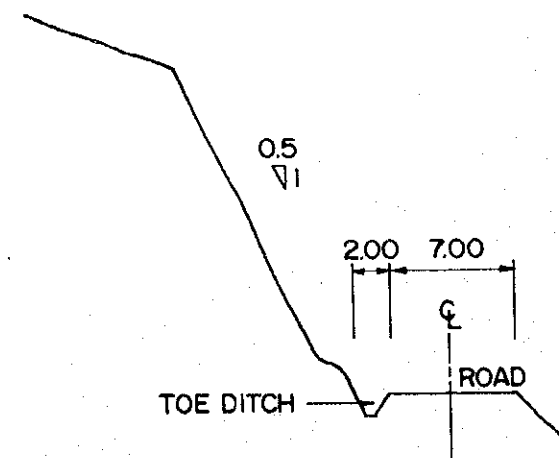
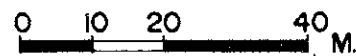
SPOT NO.	KM.	SHEET NO.
1095/C9	159.000	17 OF 49

EXISTING CONDITION

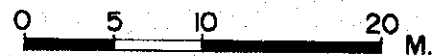
SD-2-2 EROSION ON CUT SLOPE



PLAN



CROSS SECTION

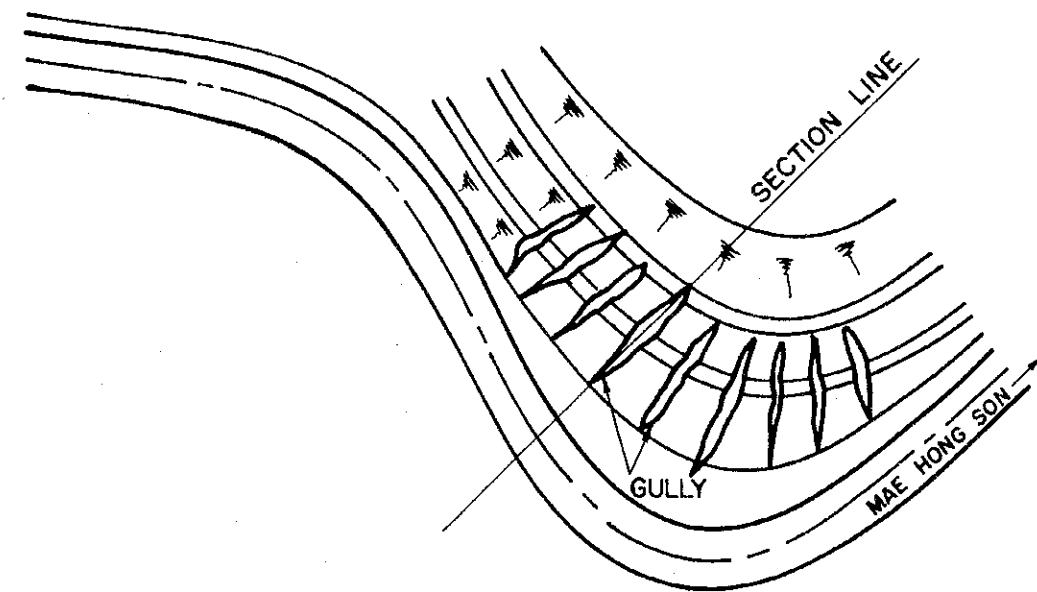


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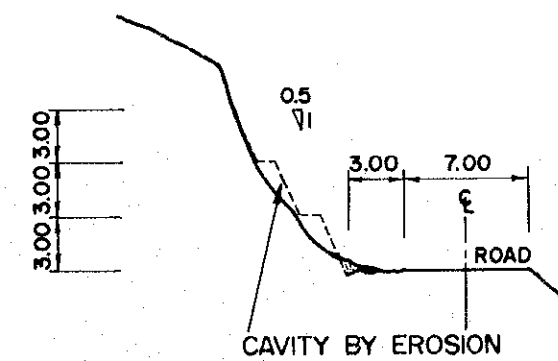
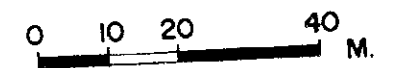
SPOT NO.	KM.	SHEET NO.
1095/C10	159.450	18 OF 49

EXISTING CONDITION

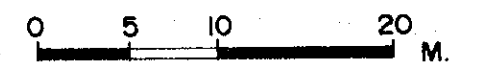
SD-2-3 EROSION ON CUT SLOPE



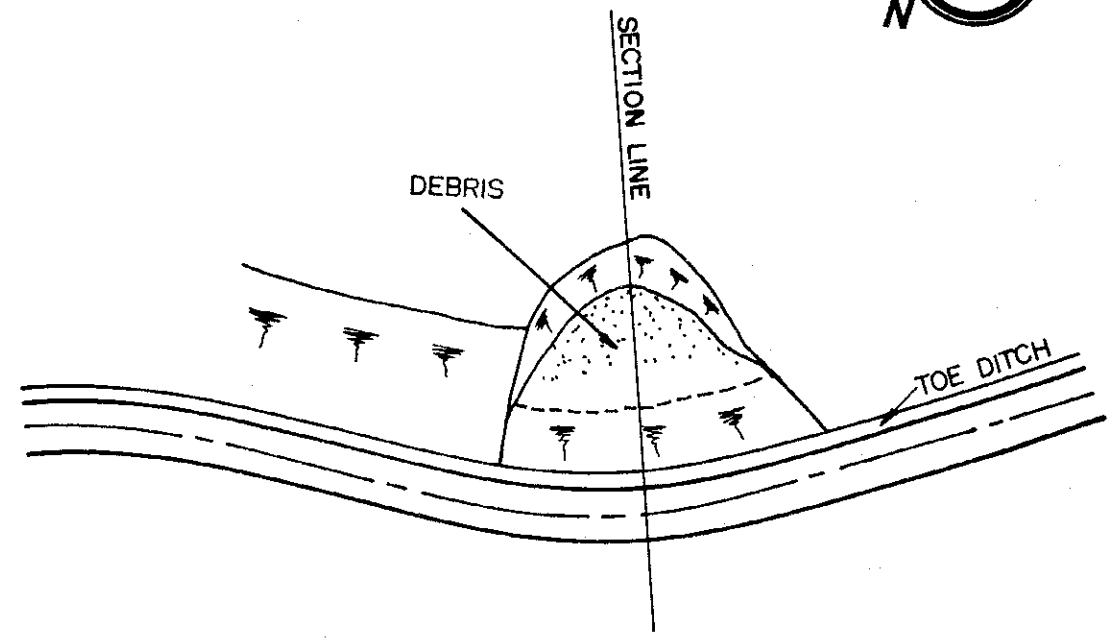
PLAN



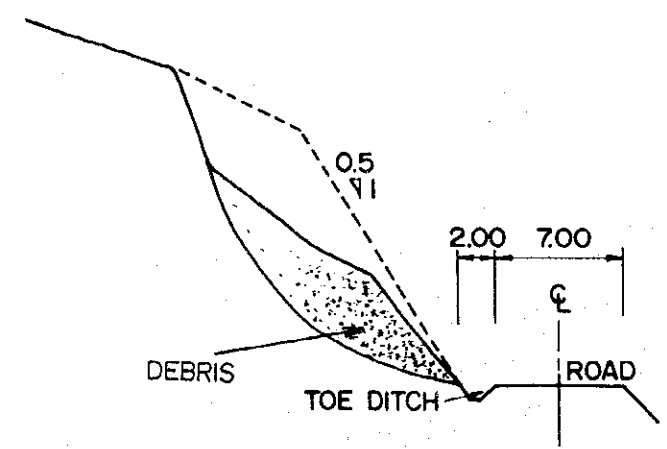
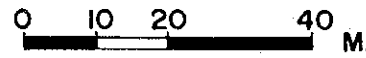
CROSS SECTION



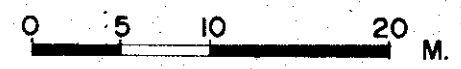
JICA RDPP STUDY		
SPOT NO.	KM.	SHEET NO.
1095/C11	159.900	19 OF 49
EXISTING CONDITION		
SD-2-6 LANDSLIDE ON CUT SLOPE		



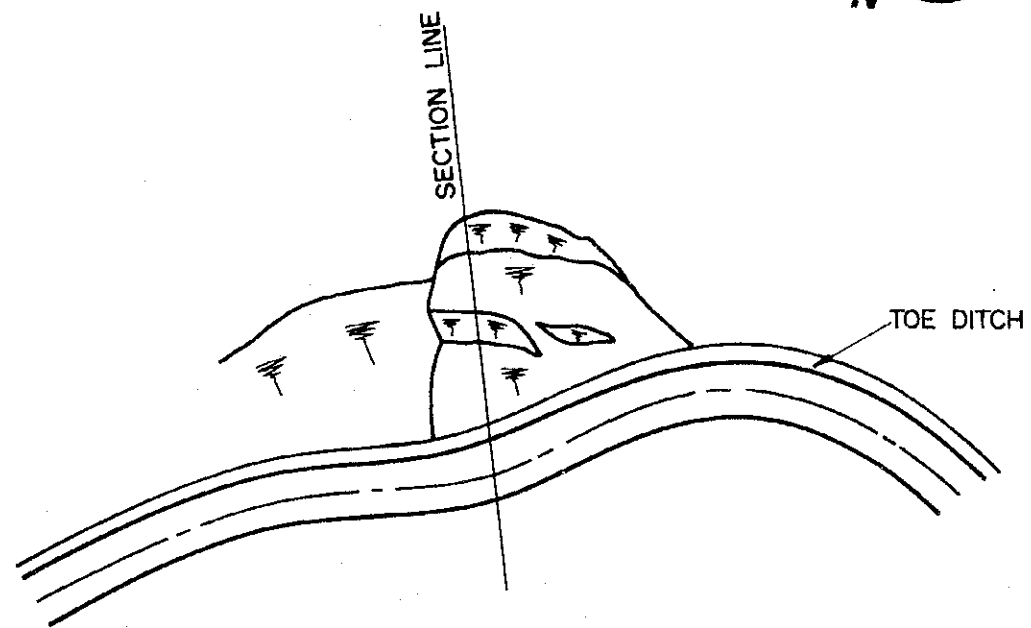
PLAN



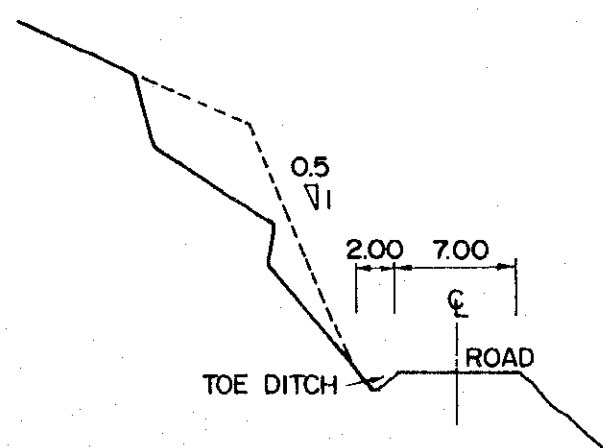
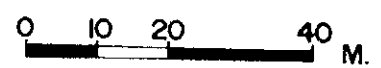
CROSS SECTION



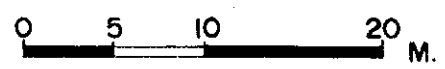
JICA RDPP STUDY		
SPOT NO.	KM.	SHEET NO.
1095/C12	160.000	20 OF 49
EXISTING CONDITION		
SD-2-7 LANDSLIDE ON CUT SLOPE		



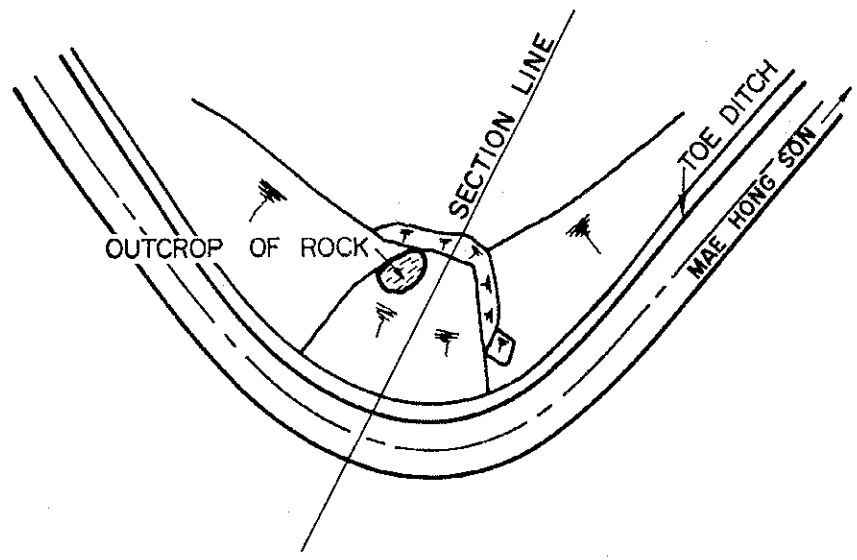
PLAN



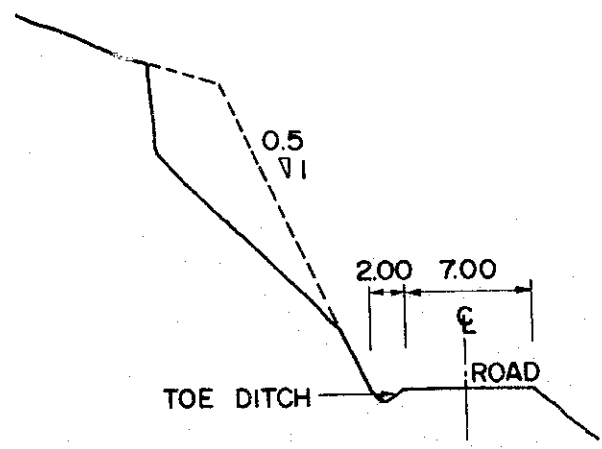
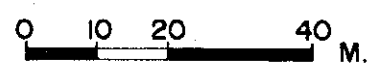
CROSS SECTION



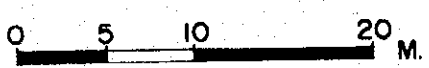
JICA RDPP STUDY		
SPOT NO.	KM.	SHEET NO.
1095/C13	160.500	21 OF 49
EXISTING CONDITION		
SD-2-8 LANDSLIDE ON CUT SLOPE		



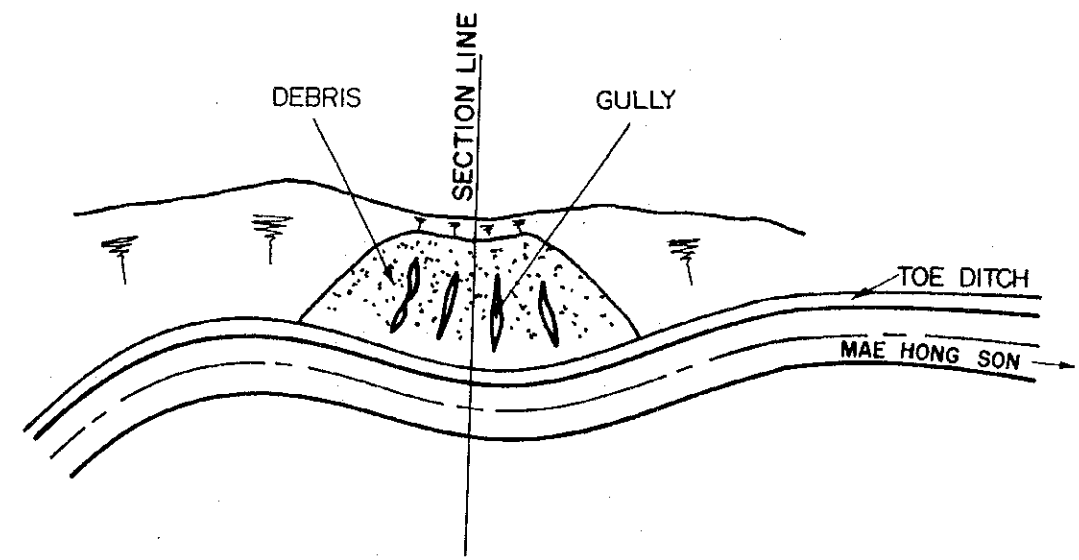
PLAN



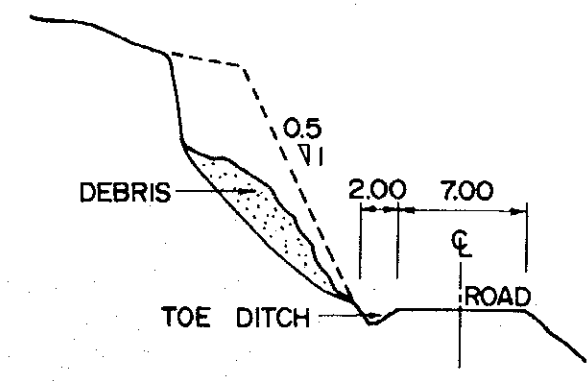
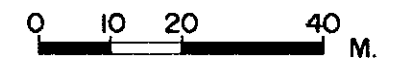
CROSS SECTION



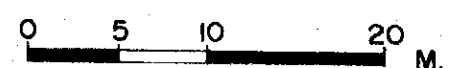
JICA RDPP STUDY		
SPOT NO.	KM.	SHEET NO.
1095/C14	160.600	22 OF 49
EXISTING CONDITION		
SD-2-7 LANDSLIDE ON CUT SLOPE		



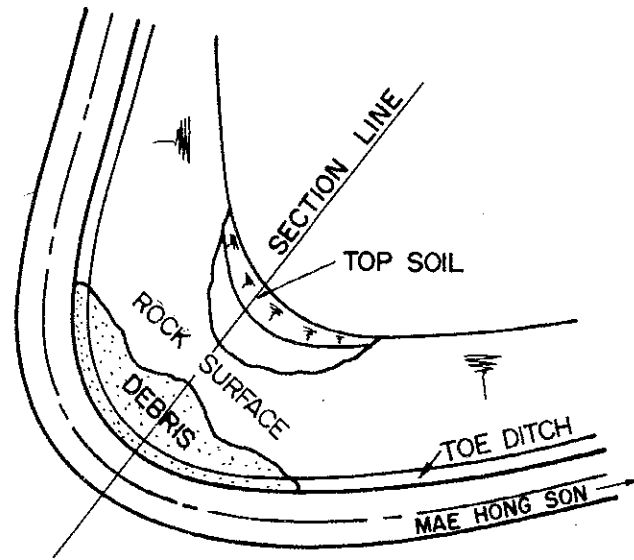
PLAN



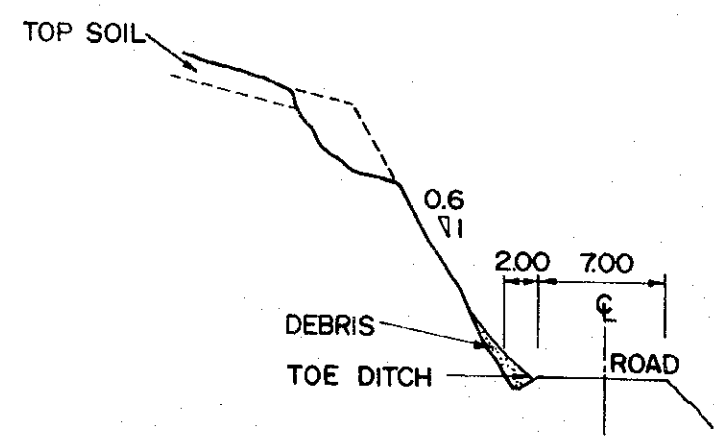
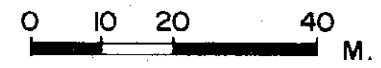
CROSS SECTION



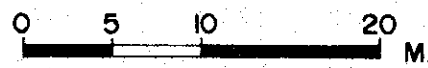
JICA RDPP STUDY		
SPOT NO.	KM.	SHEET NO.
1095/C15	160.800	23 OF 49
EXISTING CONDITION		
SD-2-6 LANDSLIDE ON CUT SLOPE		



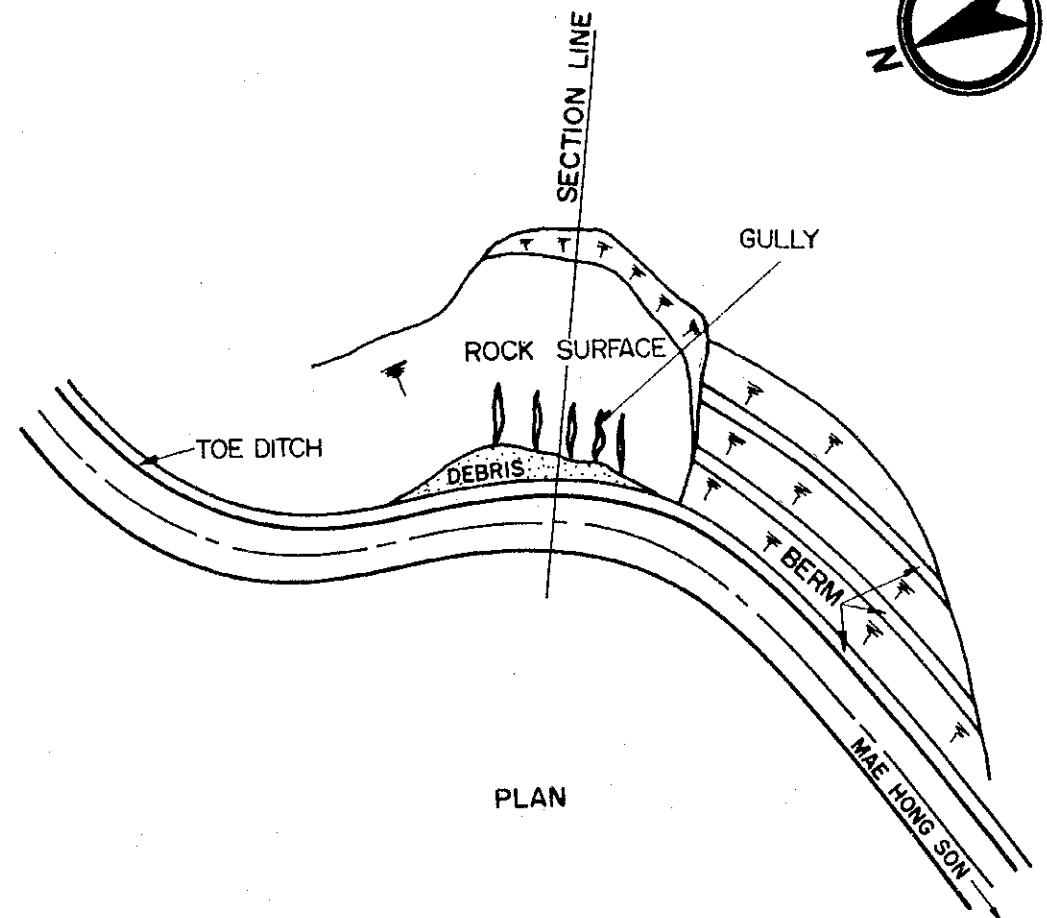
PLAN



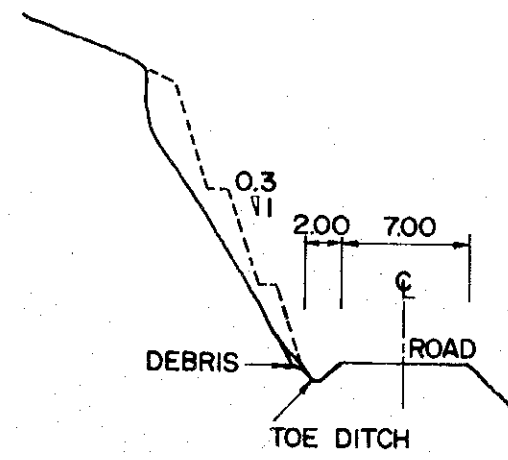
CROSS SECTION



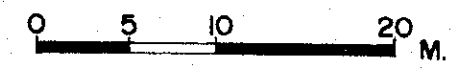
JICA RDPP STUDY		
SPOT NO.	KM.	SHEET NO.
1095/C16	160.850	24 OF 49
EXISTING CONDITION		
SD-2-7 LANDSLIDE ON CUT SLOPE		



PLAN



CROSS SECTION

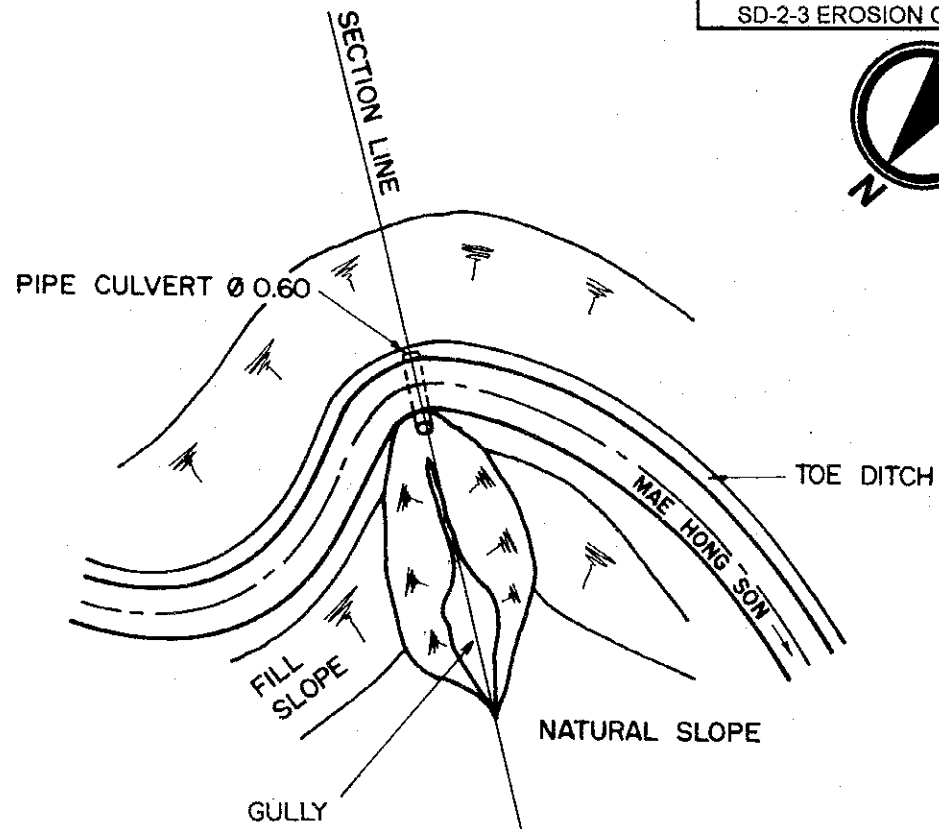


JICA RDPP STUDY

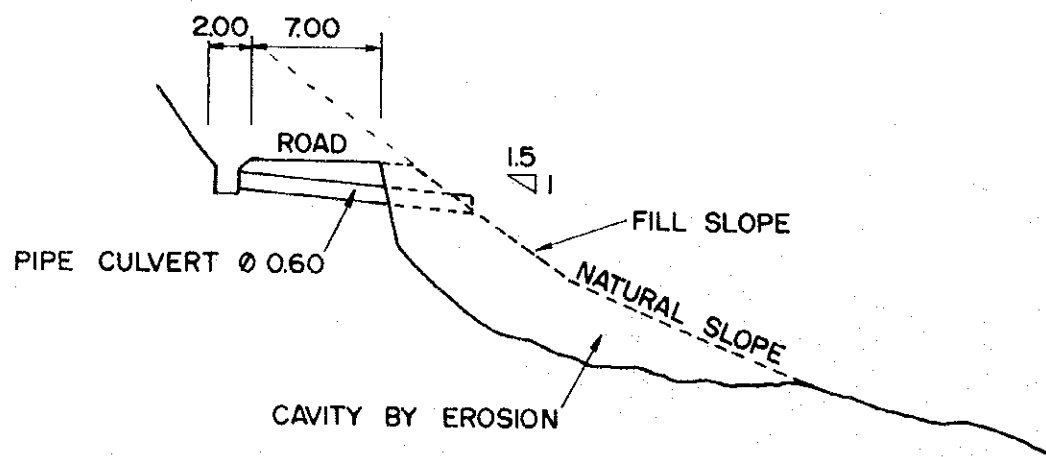
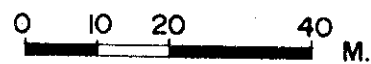
SPOT NO.	KM.	SHEET NO.
1095/C17	161.600	25 OF 49

EXISTING CONDITION

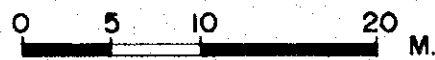
SD-2-3 EROSION ON CUT SLOPE



PLAN



CROSS SECTION

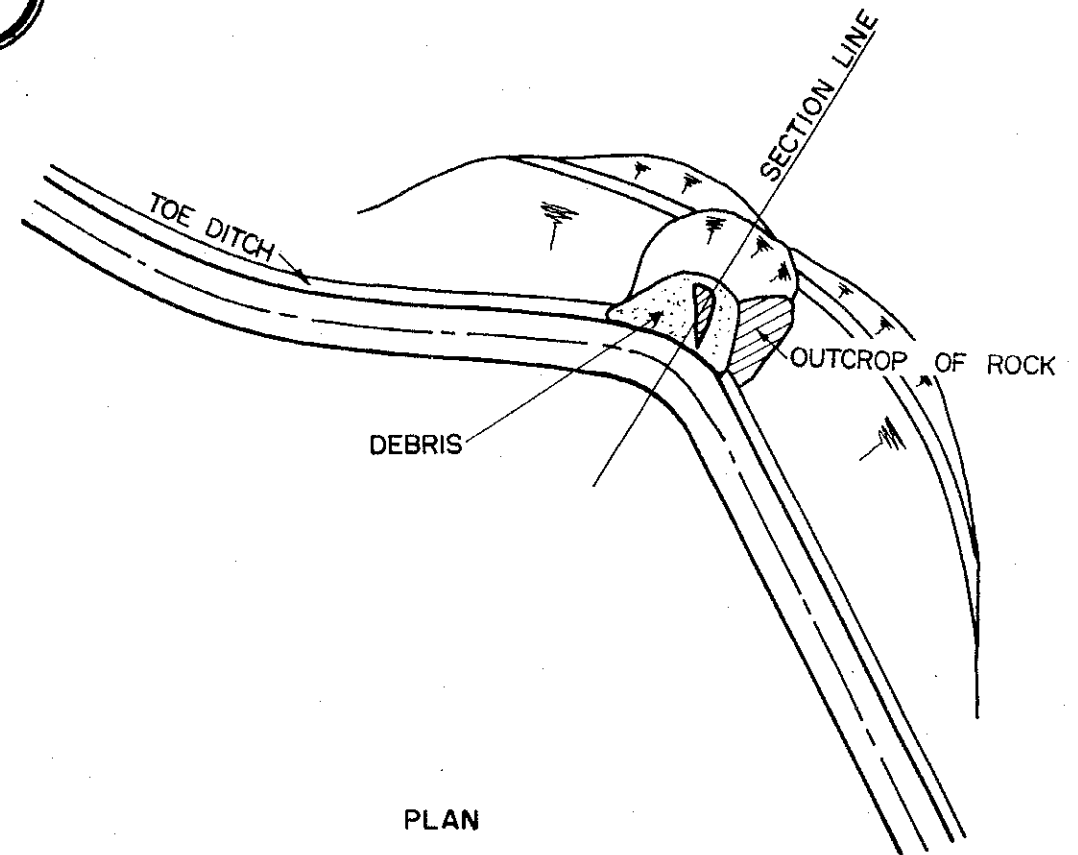


JICA RDPP STUDY

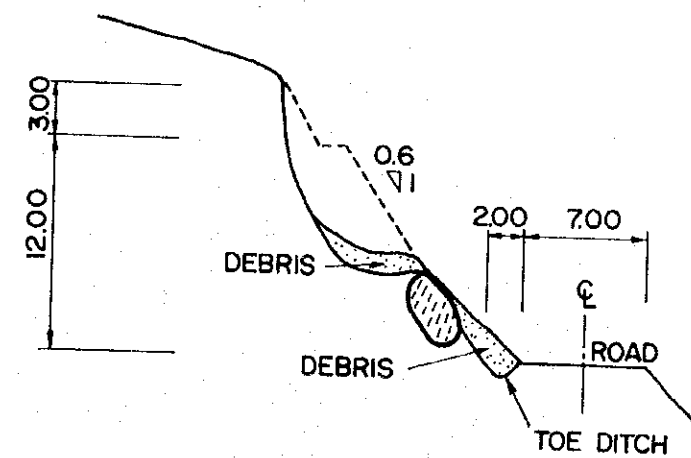
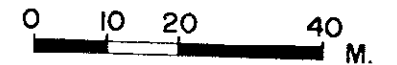
SPOT NO.	KM.	SHEET NO.
1095/C18	162.350	26 OF 49

EXISTING CONDITION

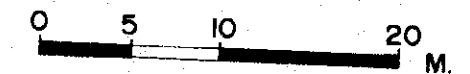
SD-2-6 LANDSLIDE ON CUT SLOPE



PLAN



CROSS SECTION

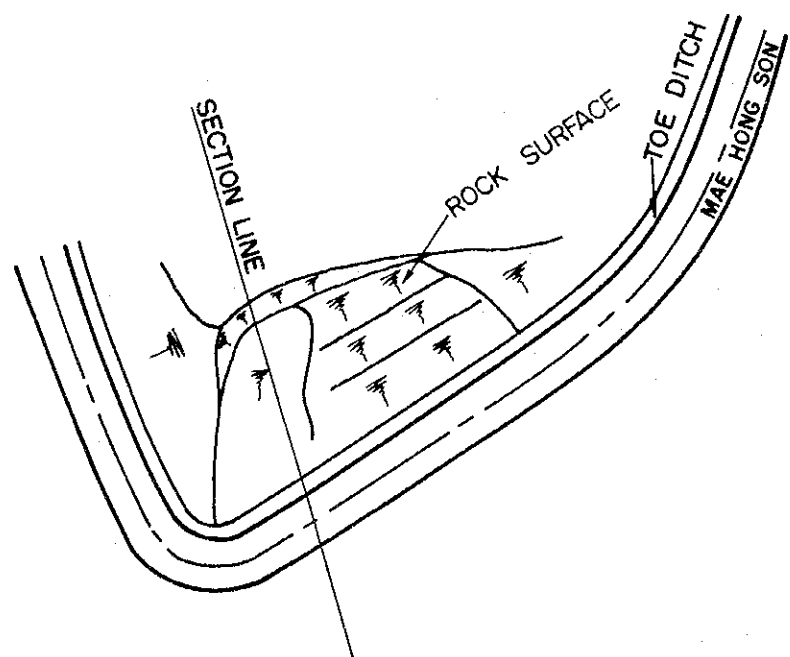


JICA RDPP STUDY

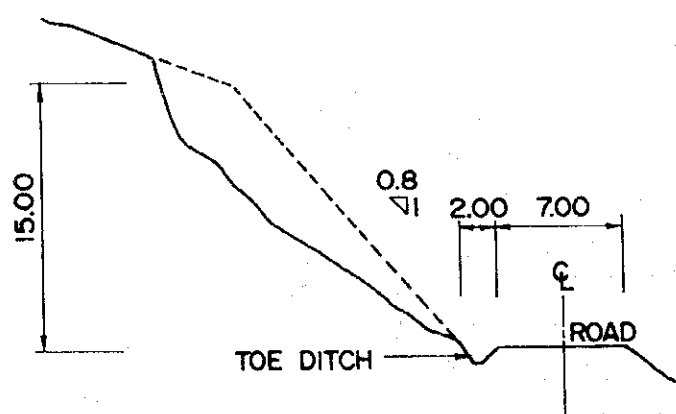
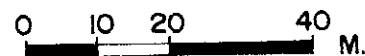
SPOT NO.	KM.	SHEET NO.
1095/C19	162.600	27 OF 49

EXISTING CONDITION

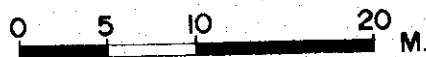
SD-2-7 LANDSLIDE ON CUT SLOPE



PLAN



CROSS SECTION

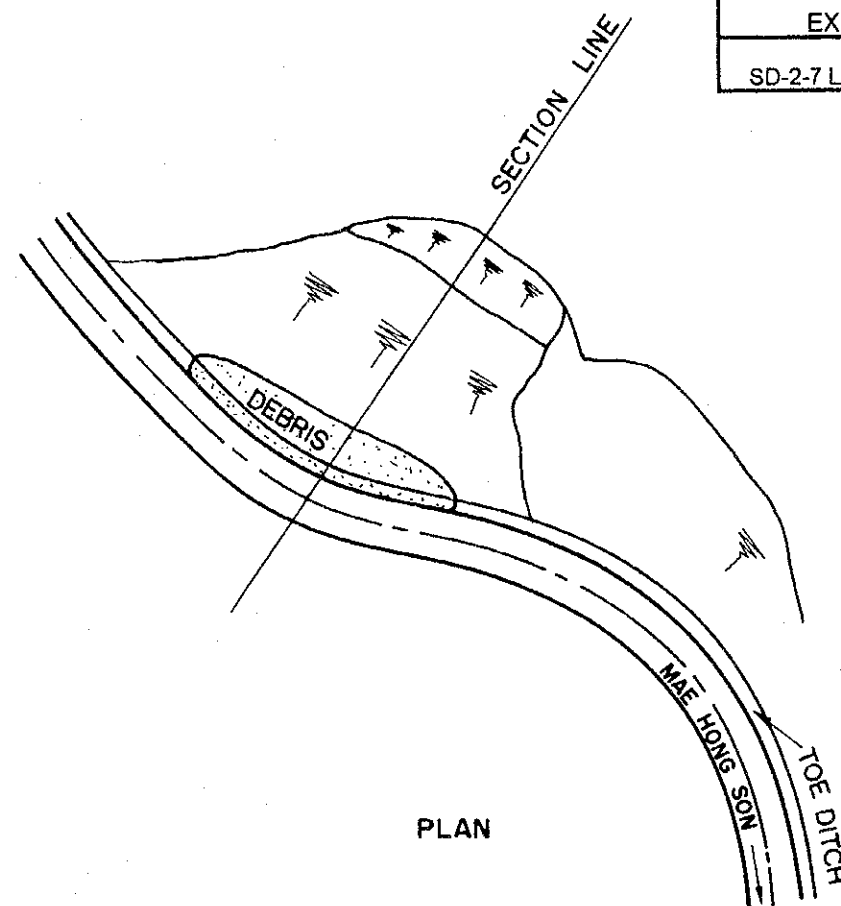


JICA RDPP STUDY

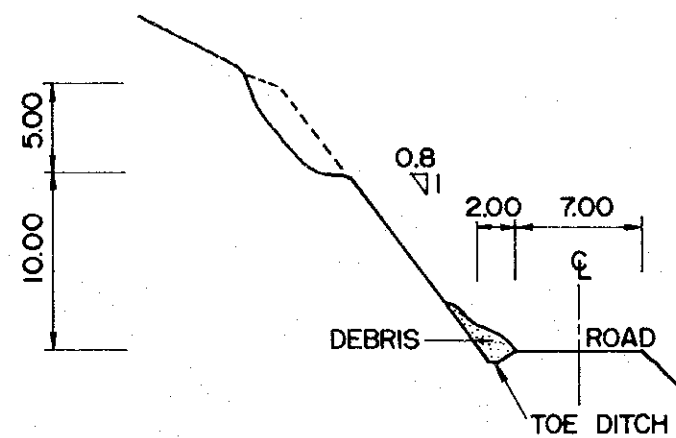
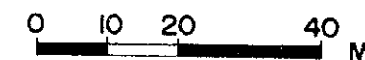
SPOT NO.	KM.	SHEET NO.
1095/C20	162.800	28 OF 49

EXISTING CONDITION

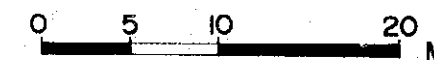
SD-2-7 LANDSLIDE ON CUT SLOPE



PLAN



CROSS SECTION

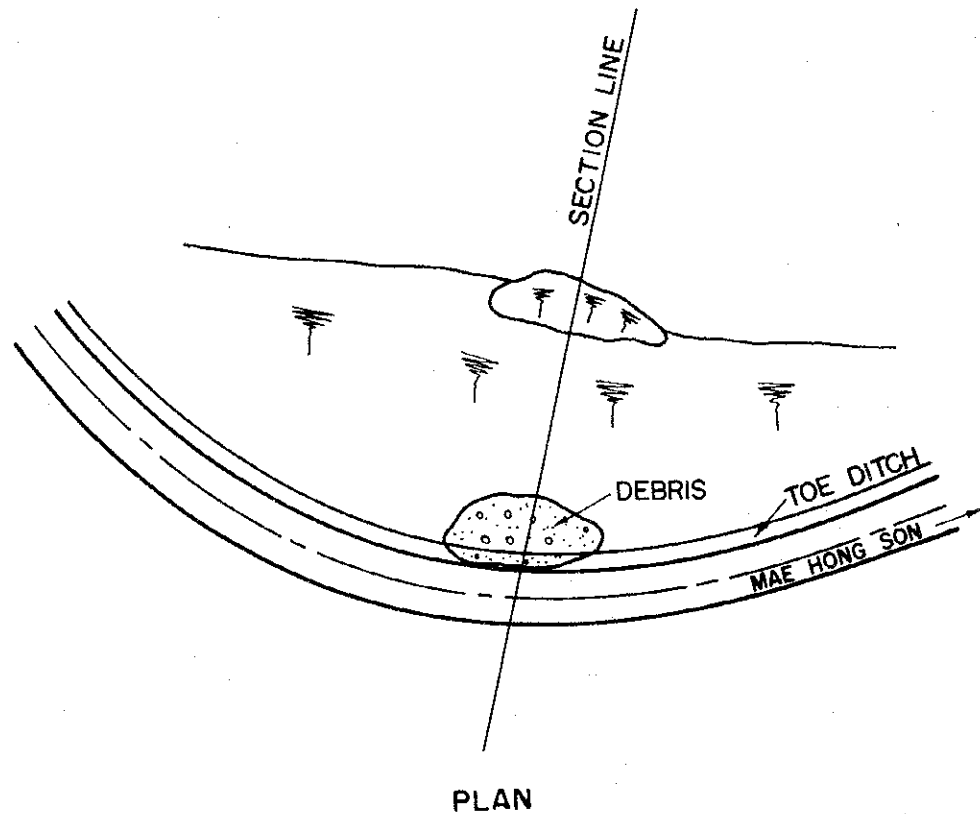


JICA RDPP STUDY

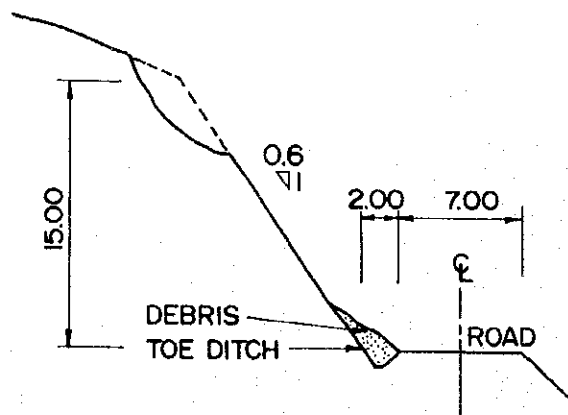
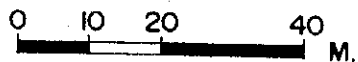
SPOT NO.	KM.	SHEET NO.
1095/C21	163.450	29 OF 49

EXISTING CONDITION

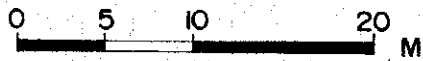
SD-2-6 LANDSLIDE ON CUT SLOPE



PLAN



CROSS SECTION

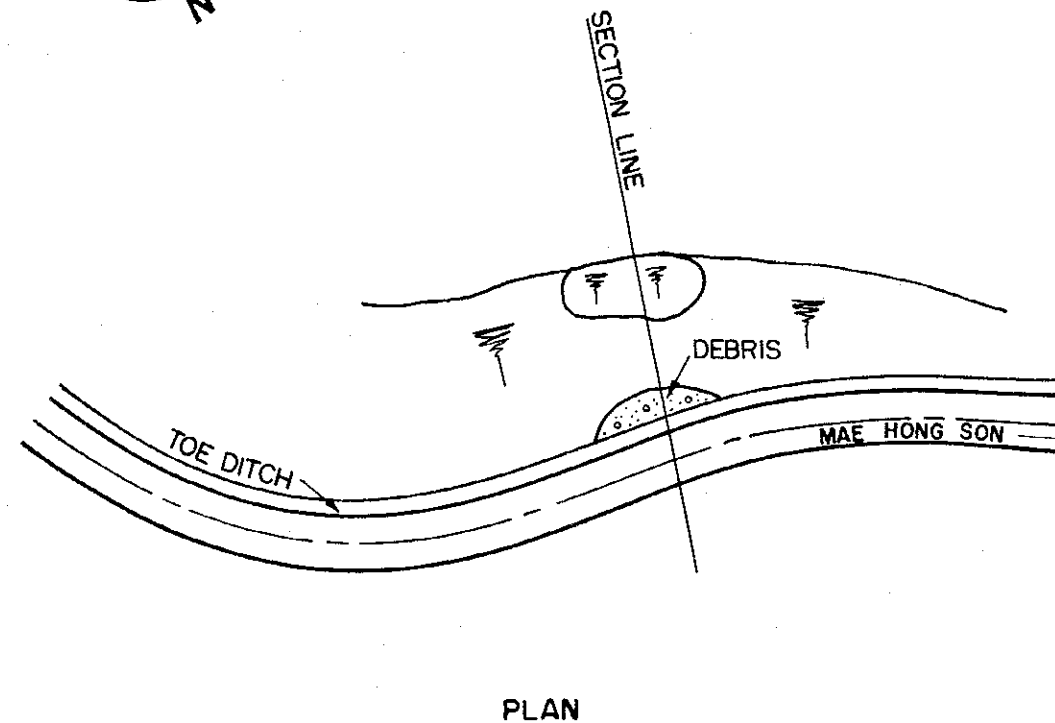


JICA RDPP STUDY

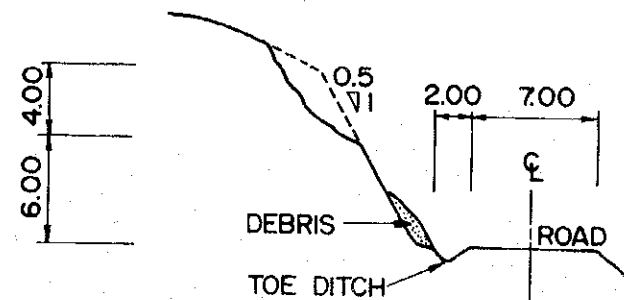
SPOT NO.	KM.	SHEET NO.
1095/C22	163.500	30 OF 49

EXISTING CONDITION

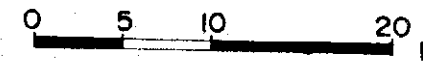
SD-2-6 LANDSLIDE ON CUT SLOPE



PLAN



CROSS SECTION

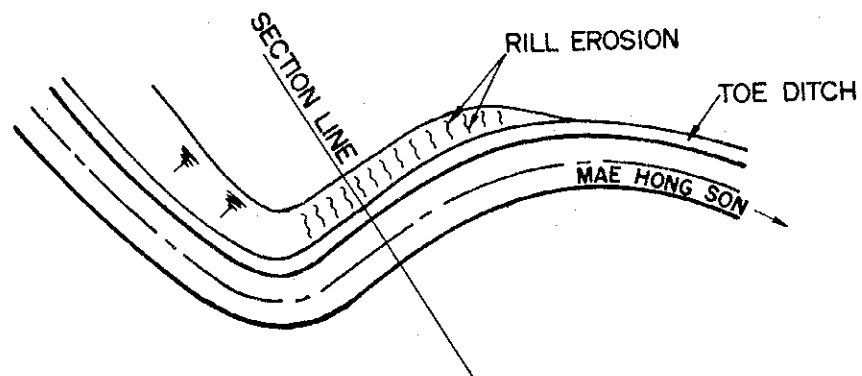


JICA RDPP STUDY

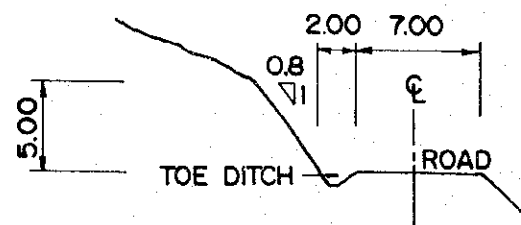
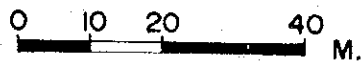
SPOT NO.	KM.	SHEET NO.
1095/C23	164.000	31 OF 49

EXISTING CONDITION

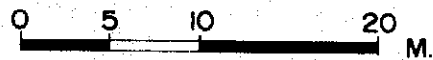
SD-2-2 EROSION ON CUT SLOPE



PLAN



CROSS SECTION

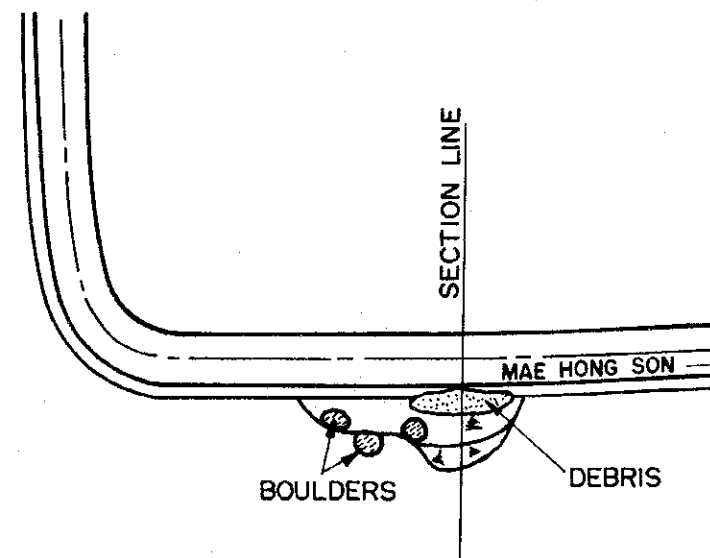


JICA RDPP STUDY

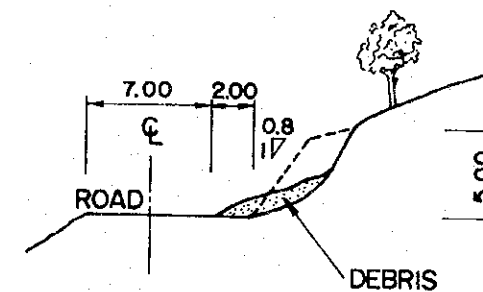
SPOT NO.	KM.	SHEET NO.
1095/C24	166.800	32 OF 49

EXISTING CONDITION

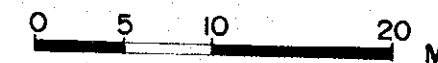
SD-2-6 LANDSLIDE ON CUT SLOPE



PLAN



CROSS SECTION

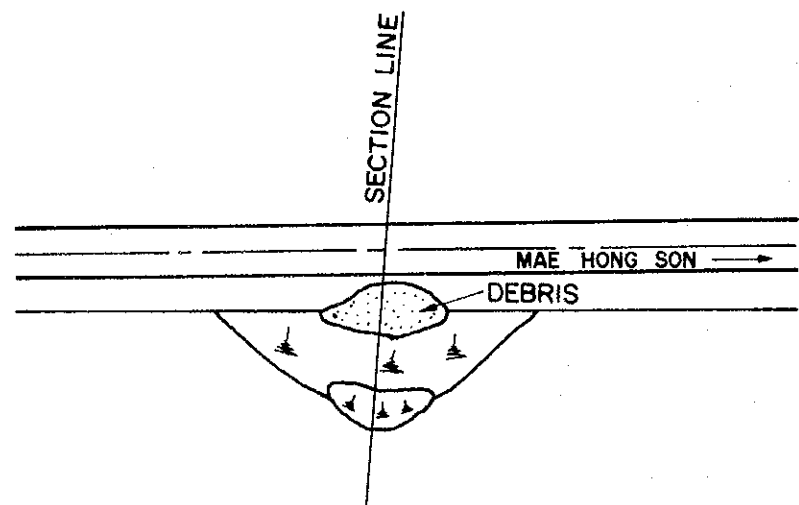


JICA RDPP STUDY

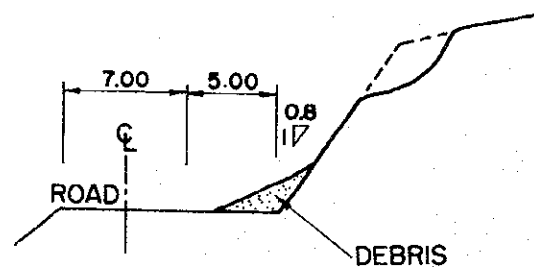
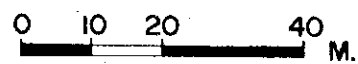
SPOT NO.	KM.	SHEET NO.
1095/C25	167.400	33 OF 49

EXISTING CONDITION

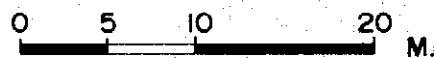
SD-2-6 LANDSLIDE ON CUT SLOPE



PLAN



CROSS SECTION

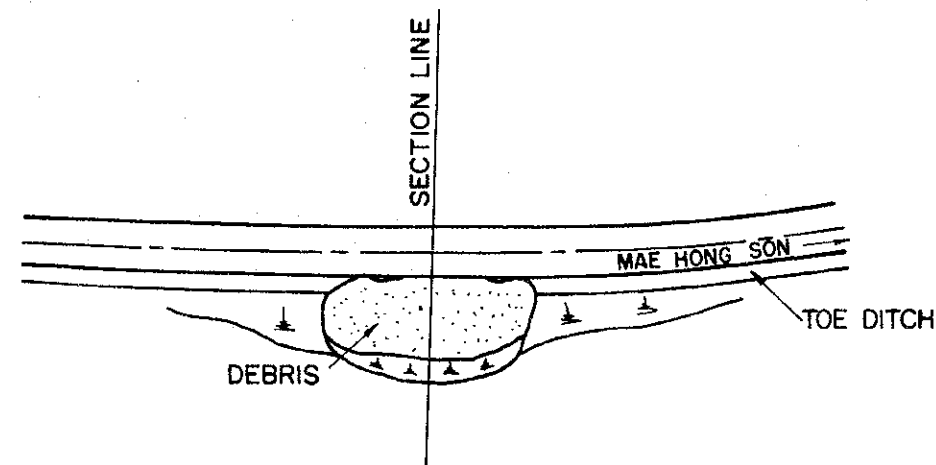


JICA RDPP STUDY

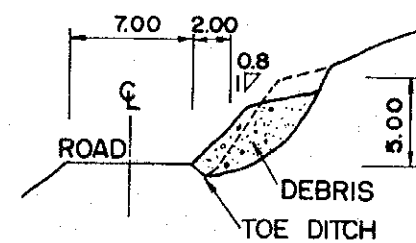
SPOT NO.	KM.	SHEET NO.
1095/C26	167.800	34 OF 49

EXISTING CONDITION

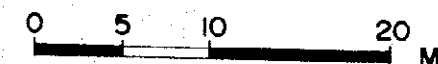
SD-2-6 LANDSLIDE ON CUT SLOPE



PLAN



CROSS SECTION

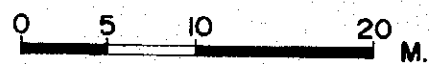
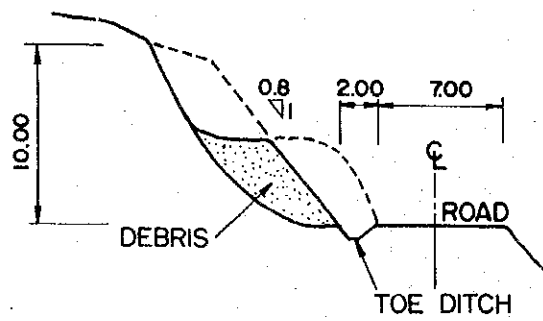
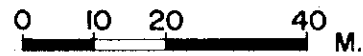
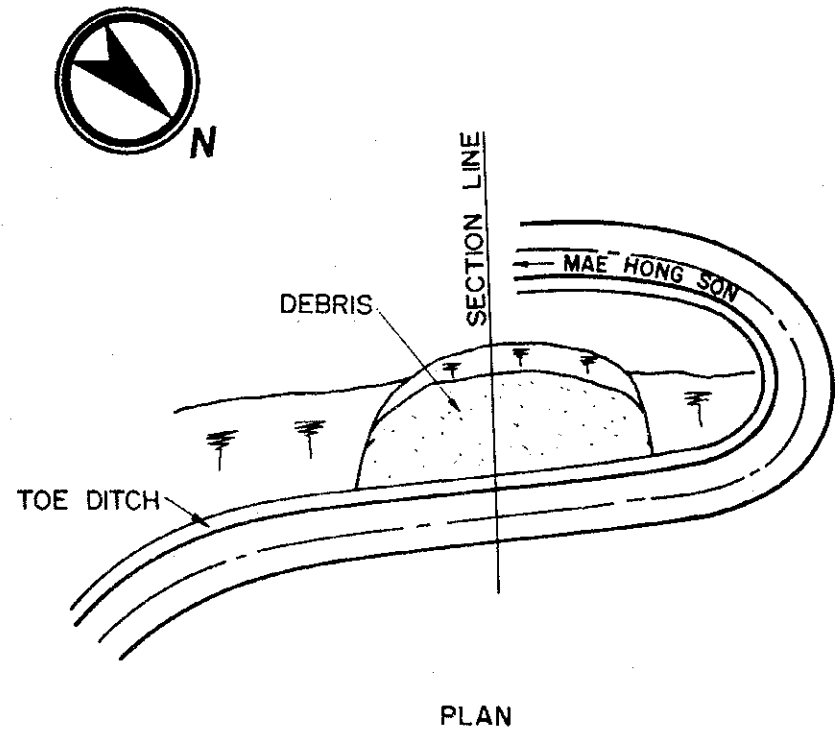


JICA RDPP STUDY

SPOT NO.	KM.	SHEET NO.
1095/C27	168.000	35 OF 49

EXISTING CONDITION

SD-2-6 LANDSLIDE ON CUT SLOPE

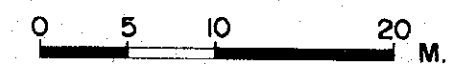
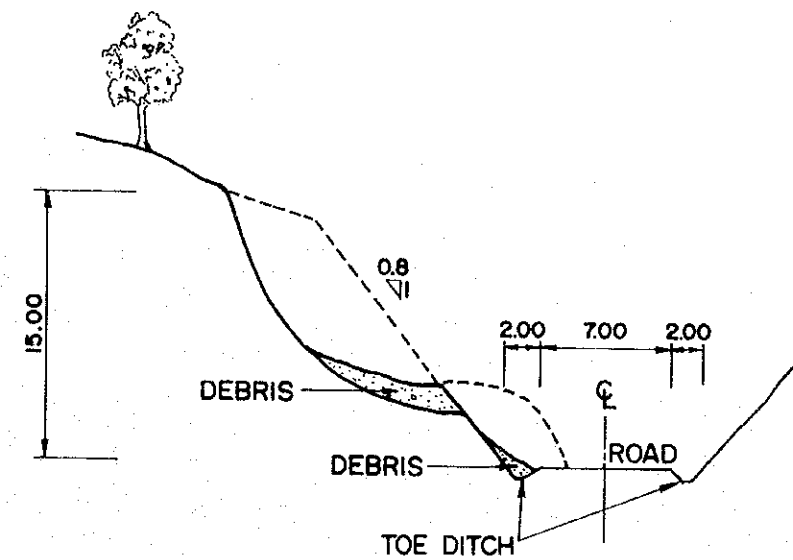
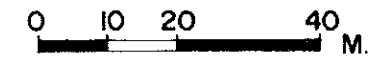
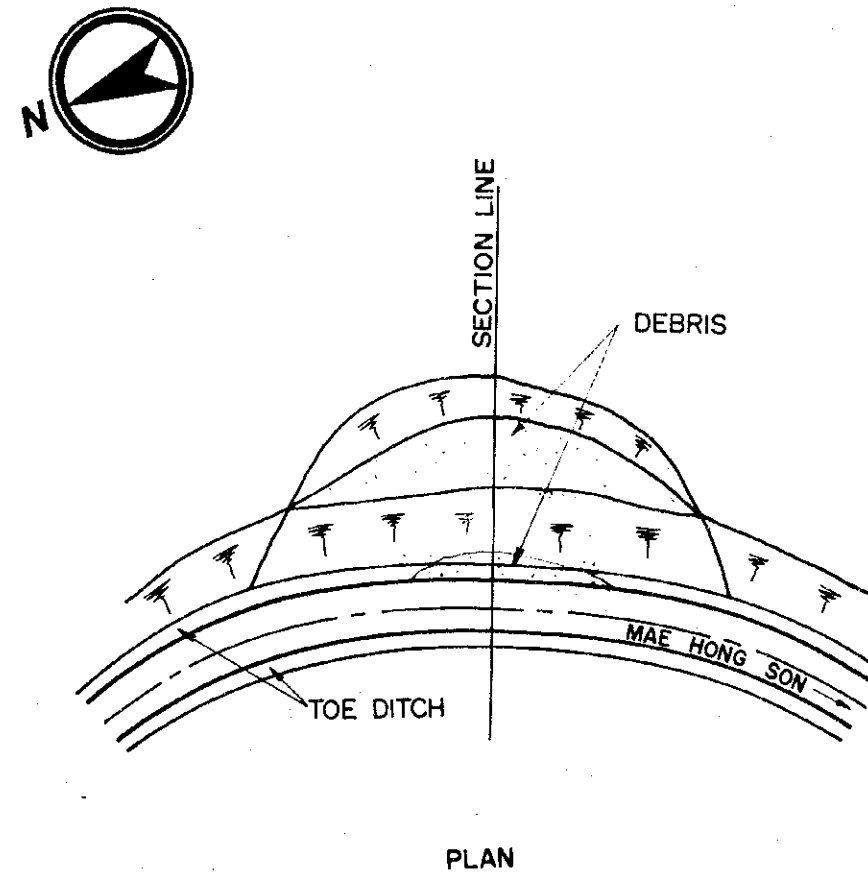


JICA RDPP STUDY

SPOT NO.	KM.	SHEET NO.
1095/C28	168.400	36 OF 49

EXISTING CONDITION

SD-2-7 LANDSLIDE ON CUT SLOPE

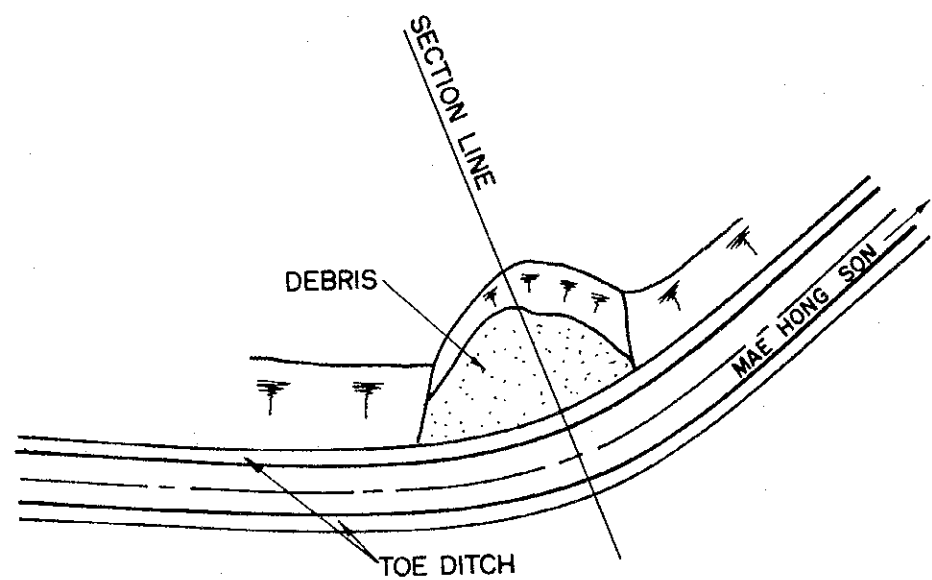


JICA RDPP STUDY

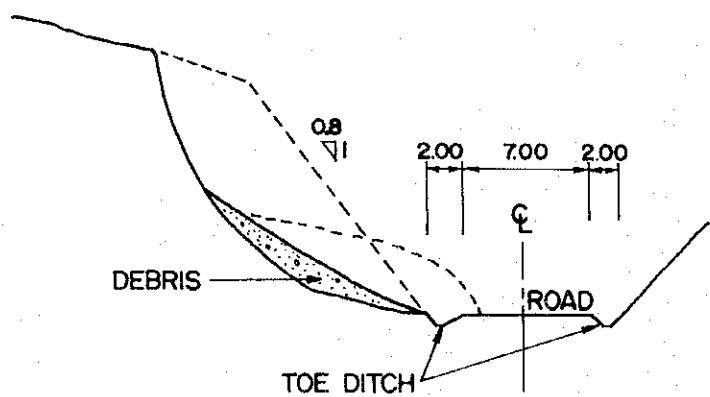
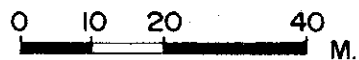
SPOT NO.	KM.	SHEET NO.
1095/C29	168.500	37 OF 49

EXISTING CONDITION

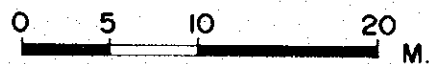
SD-2-6 LANDSLIDE ON CUT SLOPE



PLAN



CROSS SECTION

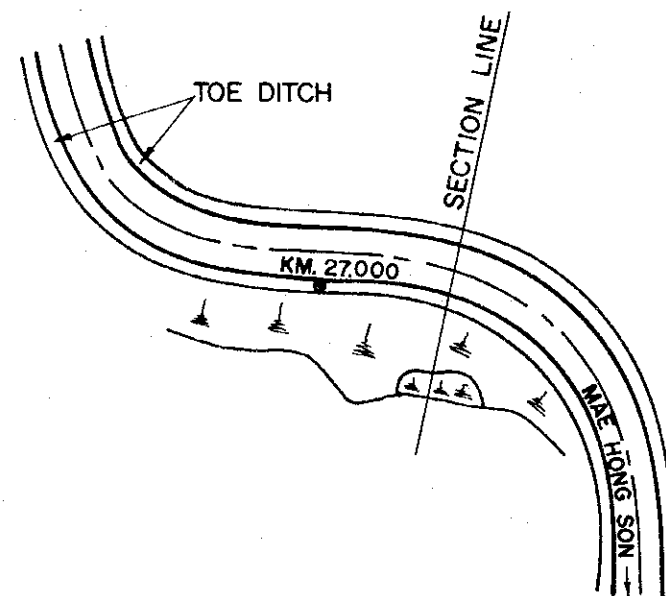


JICA RDPP STUDY

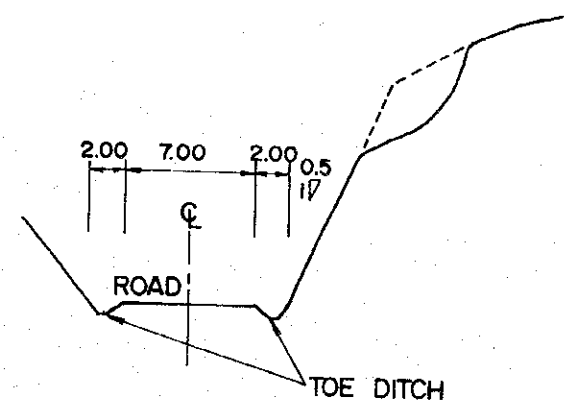
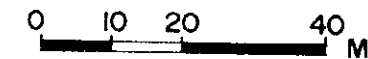
SPOT NO.	KM.	SHEET NO.
1095/C30	169.000	38 OF 49

EXISTING CONDITION

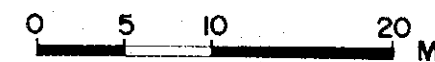
SD-2-6 LANDSLIDE ON CUT SLOPE



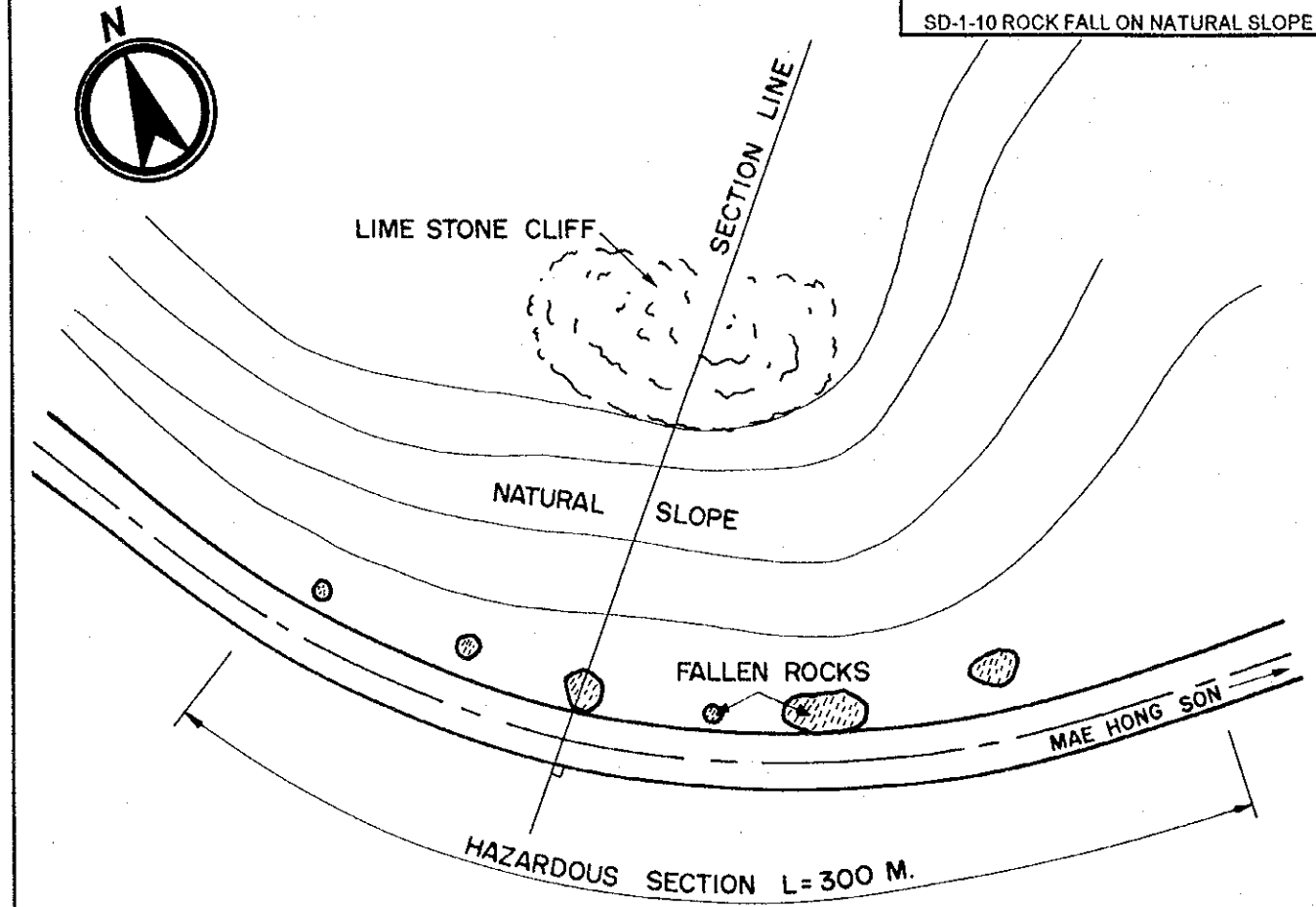
PLAN



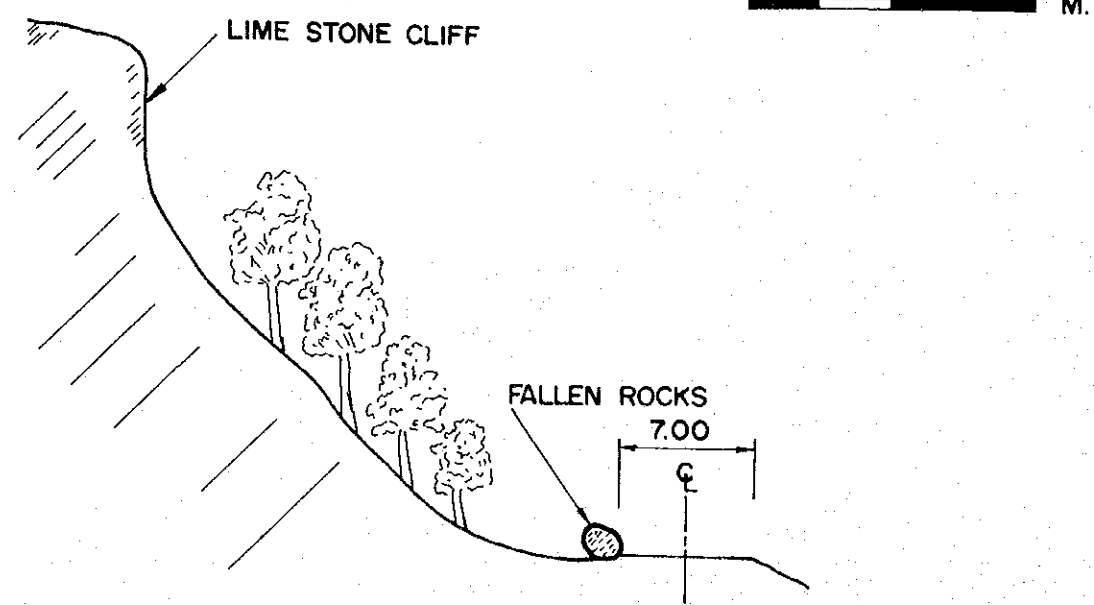
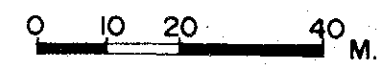
CROSS SECTION



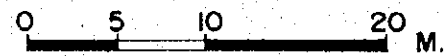
JICA RDPP STUDY		
SPOT NO.	KM.	SHEET NO.
1095/C31	170.000	39 OF 49
EXISTING CONDITION		
SD-1-10 ROCK FALL ON NATURAL SLOPE		



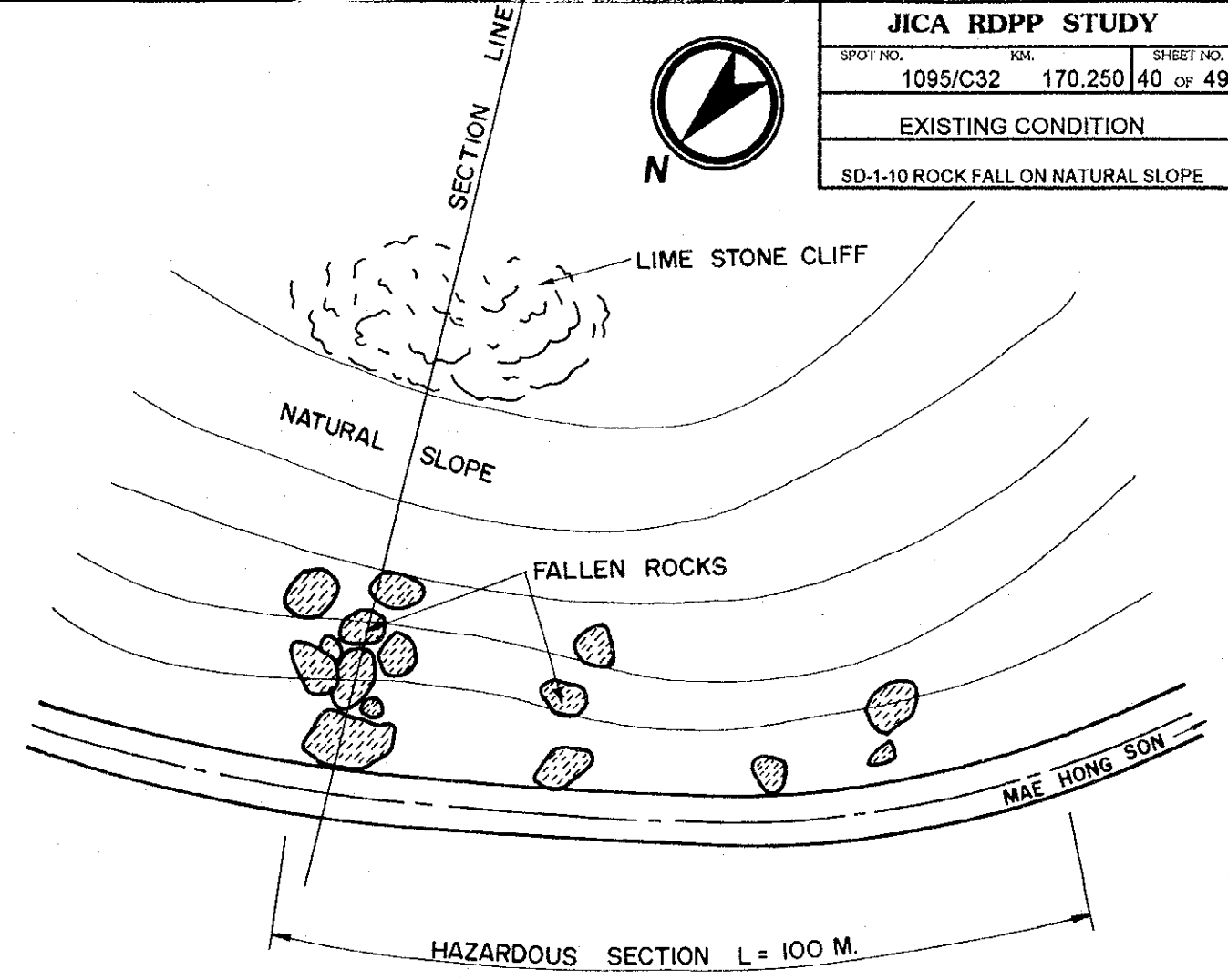
PLAN



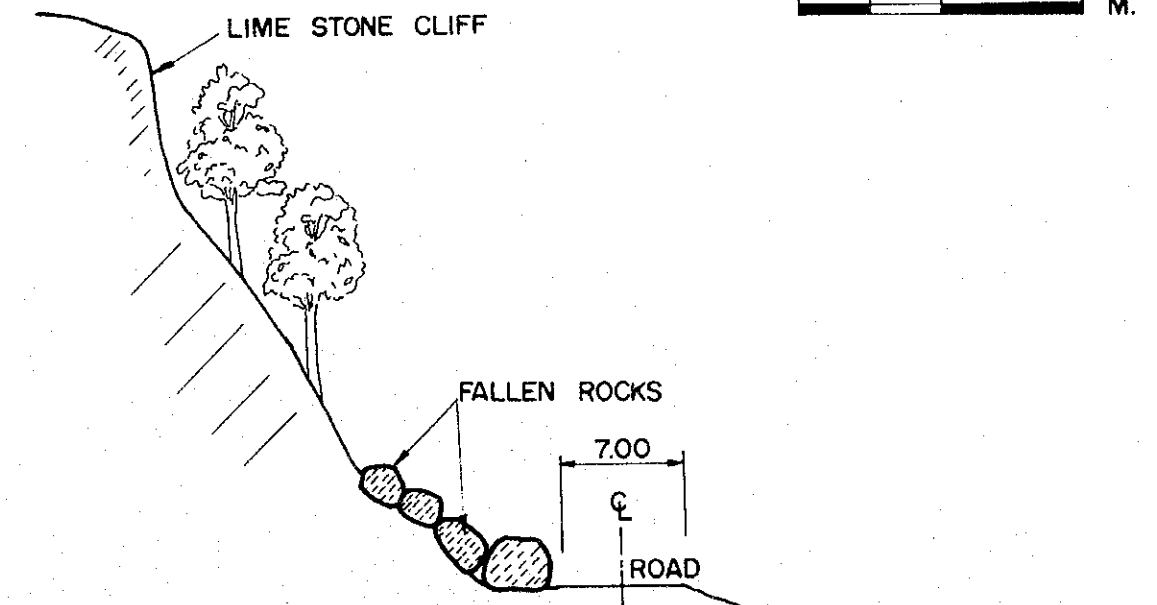
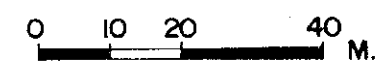
CROSS SECTION



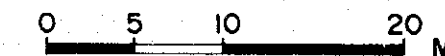
JICA RDPP STUDY		
SPOT NO.	KM.	SHEET NO.
1095/C32	170.250	40 OF 49
EXISTING CONDITION		
SD-1-10 ROCK FALL ON NATURAL SLOPE		



PLAN



CROSS SECTION

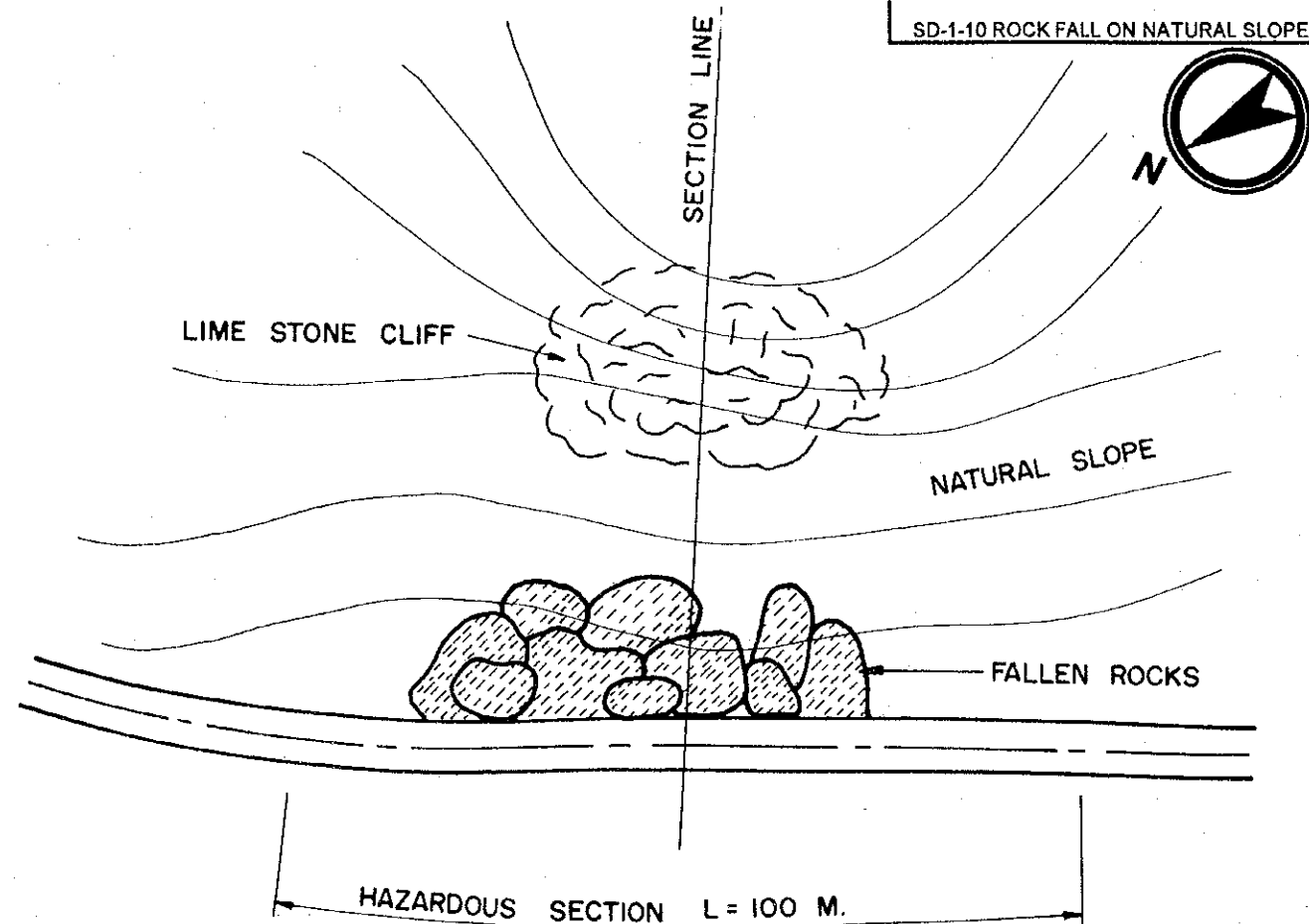


JICA RDPP STUDY

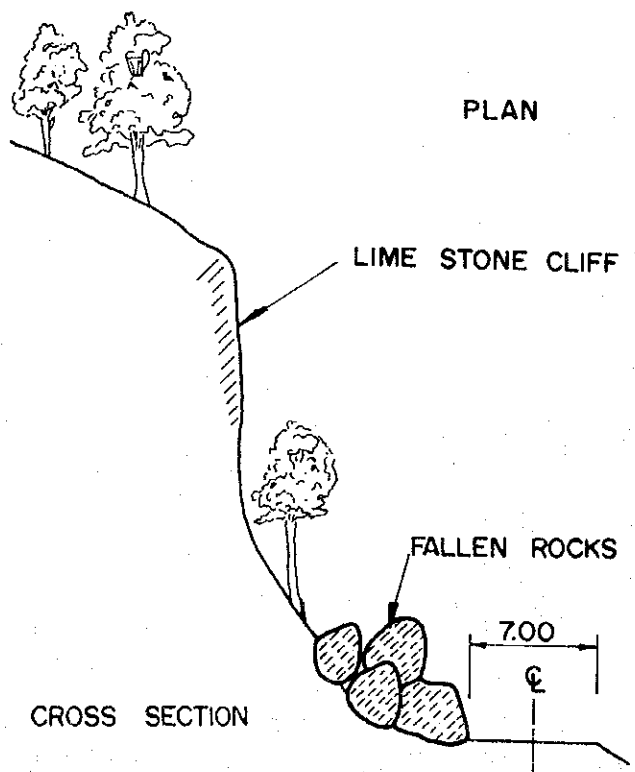
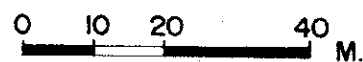
SPOT NO. 1095/C33 KM. 172.000 SHEET NO. 41 OF 49

EXISTING CONDITION

SD-1-10 ROCK FALL ON NATURAL SLOPE



PLAN



CROSS SECTION

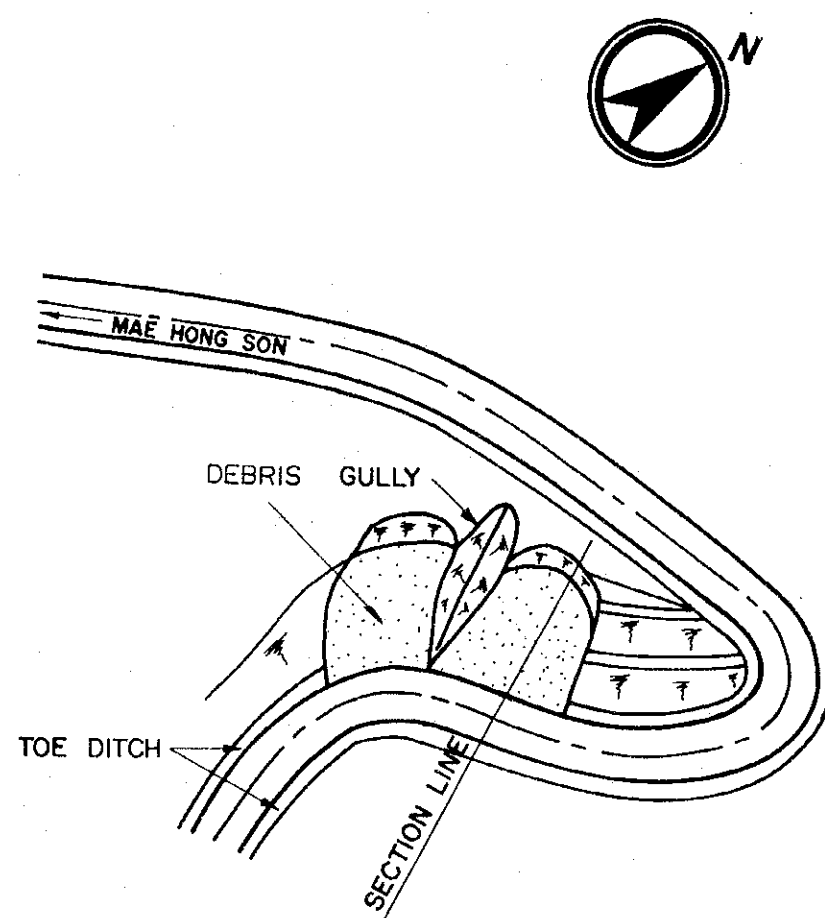


JICA RDPP STUDY

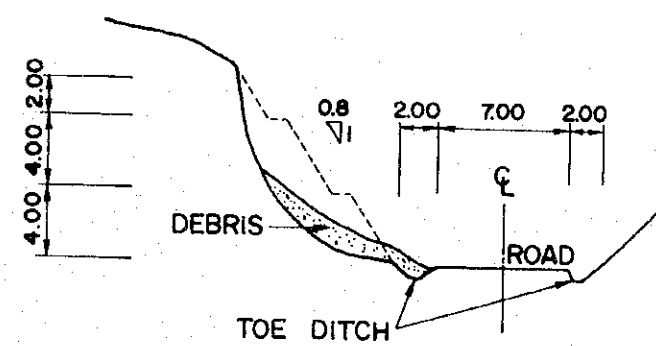
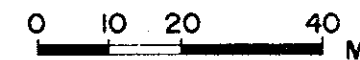
SPOT NO. 1095/C34 KM. 177.100 SHEET NO. 42 OF 49

EXISTING CONDITION

SD-2-7 LAND SLIDE ON CUT SLOPE



PLAN



CROSS SECTION

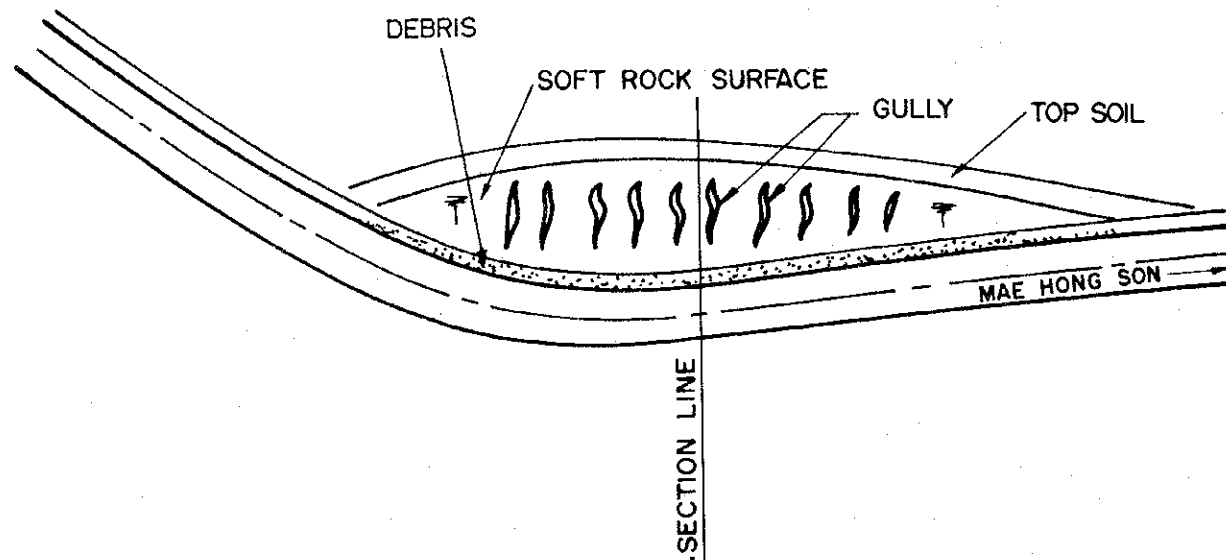


JICA RDPP STUDY

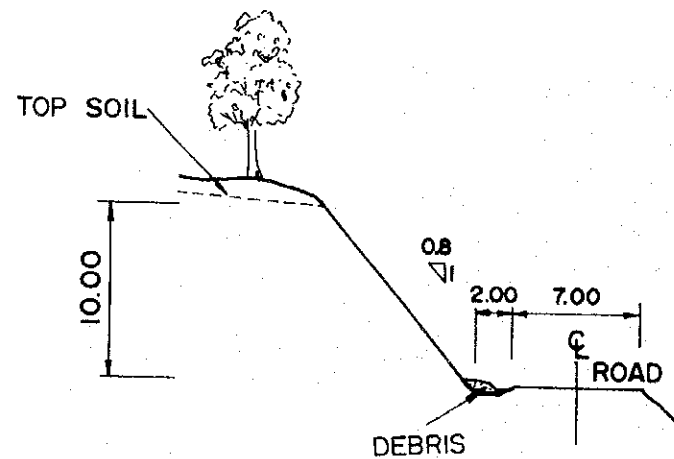
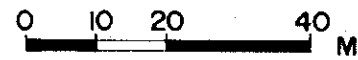
SPOT NO.	KM.	SHEET NO.
1095/C35	177.800	43 OF 49

EXISTING CONDITION

SD-2-3 EROSION ON CUT SLOPE



PLAN



CROSS SECTION

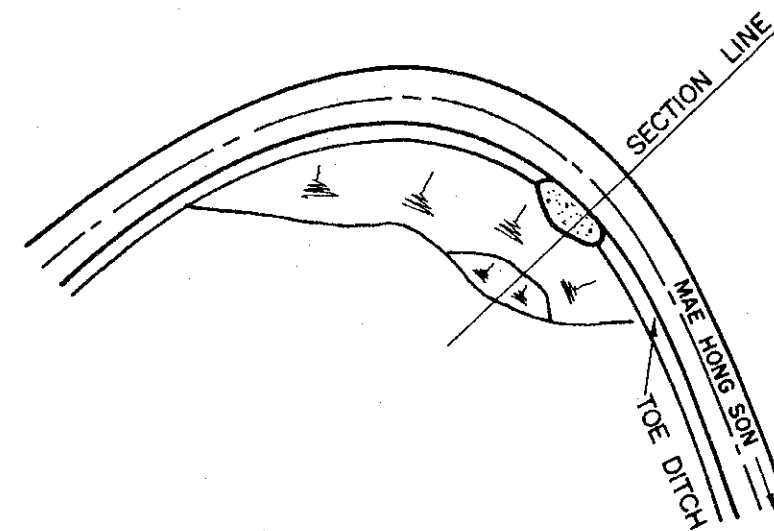


JICA RDPP STUDY

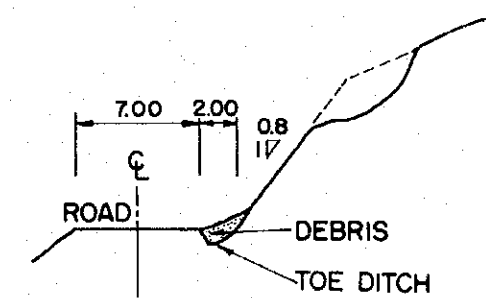
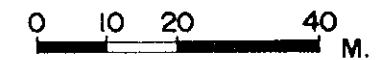
SPOT NO.	KM.	SHEET NO.
1095/C36	178.900	44 OF 49

EXISTING CONDITION

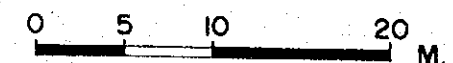
SD-2-6 LANDSLIDE ON CUT SLOPE



PLAN



CROSS SECTION

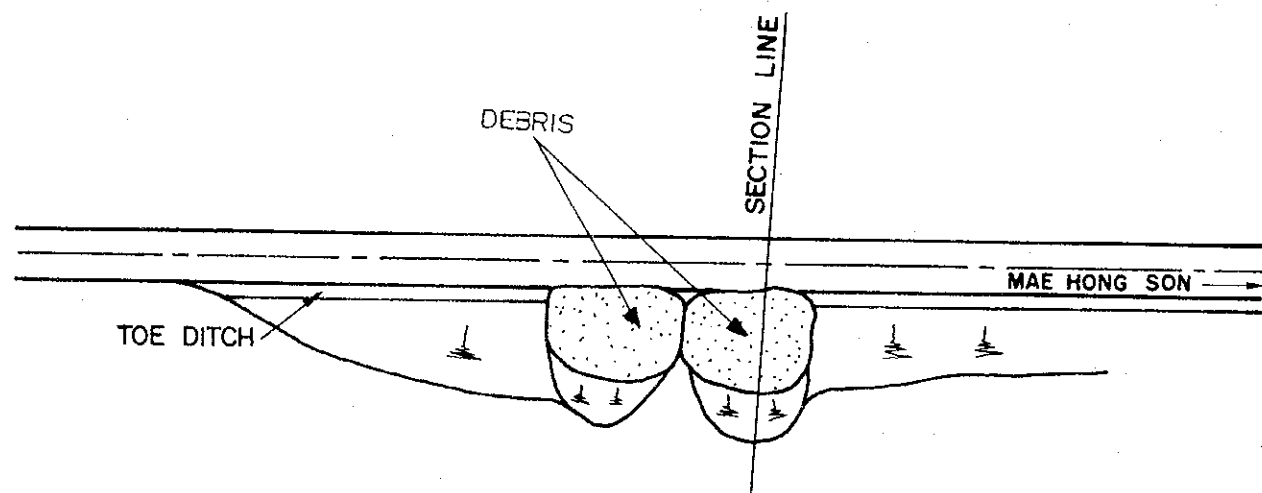


JICA RDPP STUDY

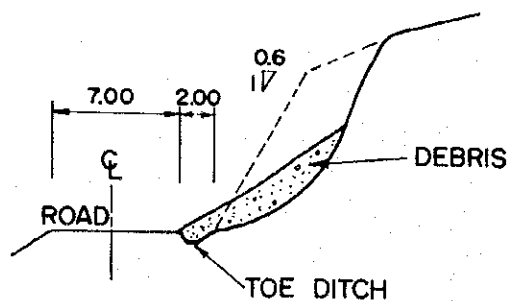
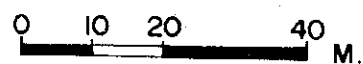
SPOT NO.	KM.	SHEET NO.
1095/C37	179.100	45 OF 49

EXISTING CONDITION

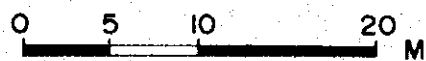
SD-2-6 LANDSLIDE ON CUT SLOPE



PLAN



CROSS SECTION

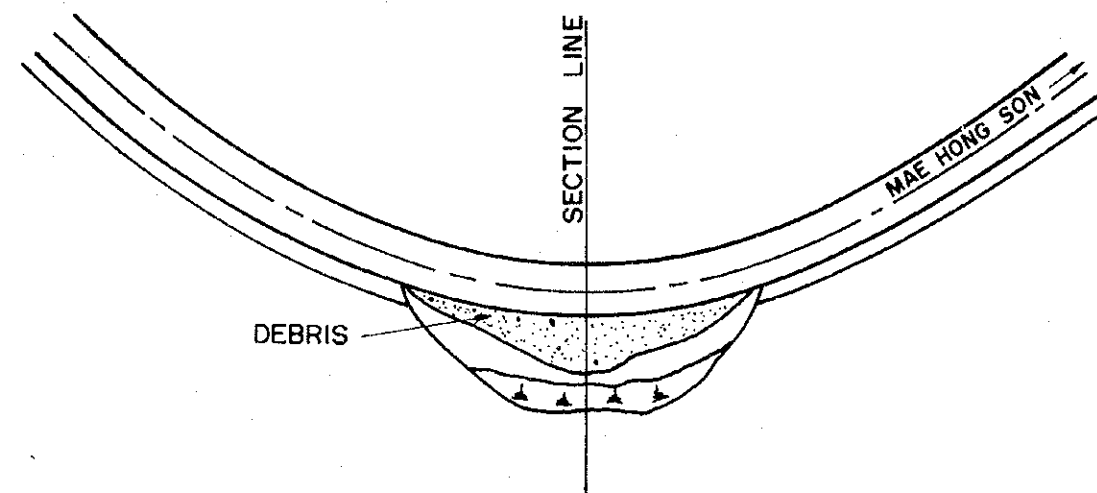


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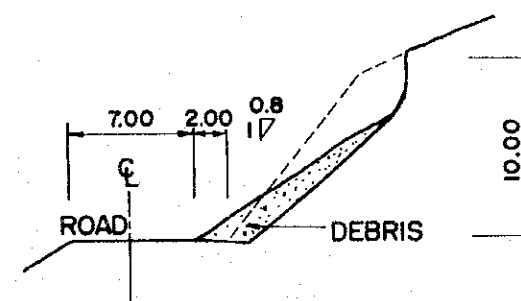
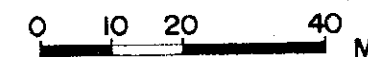
SPOT NO.	KM.	SHEET NO.
1095/C38	179.200	46 OF 49

EXISTING CONDITION

SD-2-7 LAND SLIDE ON CUT SLOPE



PLAN



CROSS SECTION

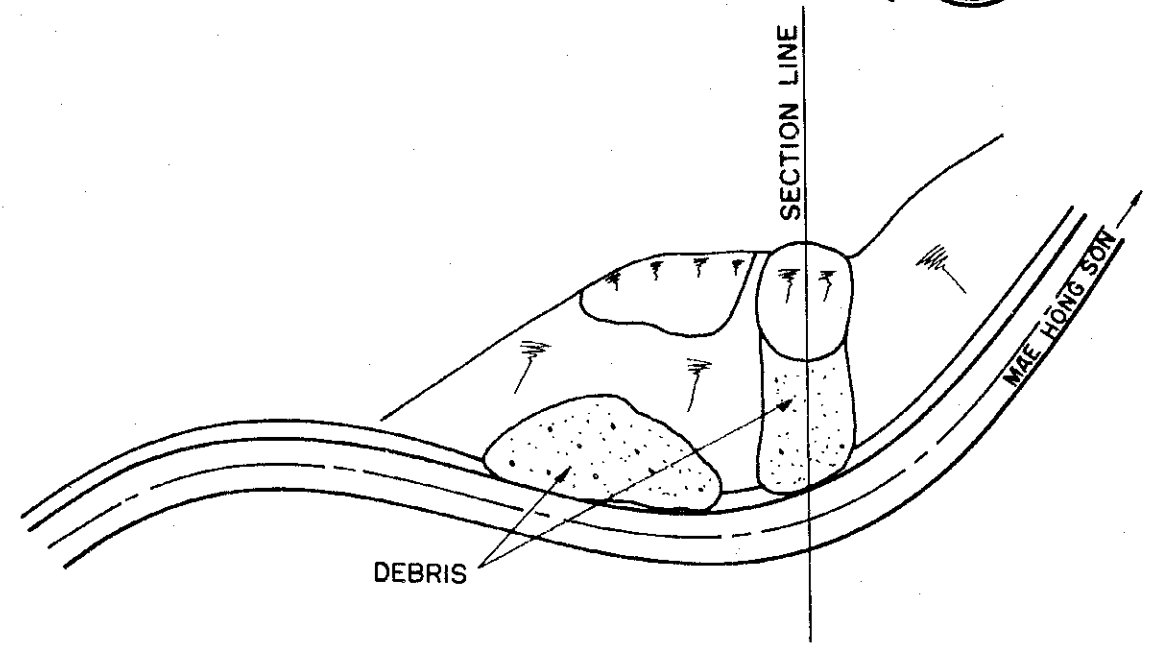


JICA RDPP STUDY

SPOT NO.	KM.	SHEET NO.
1095/C39	179.400	47 OF 49

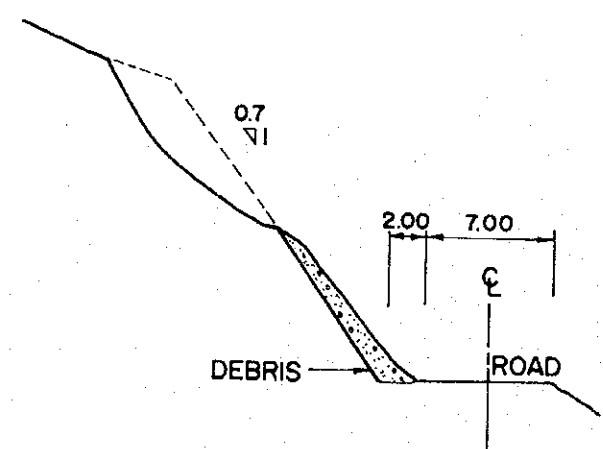
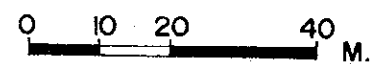
EXISTING CONDITION

SD-2-6 LANDSLIDE ON CUT SLOPE



DEBRIS

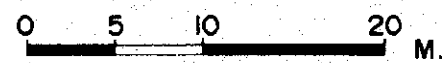
PLAN



DEBRIS

ROAD

CROSS SECTION

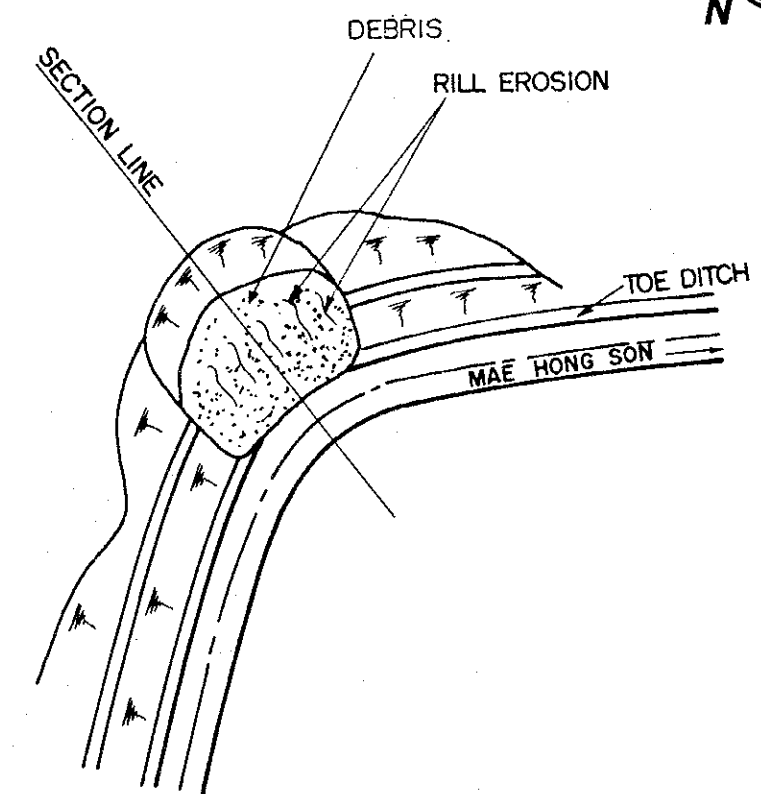
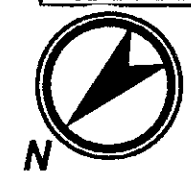


JICA RDPP STUDY

SPOT NO.	KM.	SHEET NO.
1095/C40	179.500	48 OF 49

EXISTING CONDITION

SD-2-6 LANDSLIDE ON CUT SLOPE



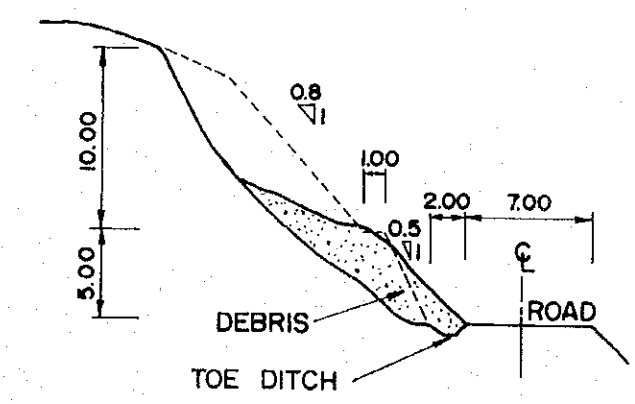
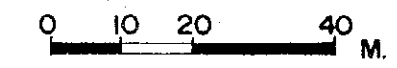
DEBRIS

RILL EROSION

TOE DITCH

MAE HONG SON

PLAN

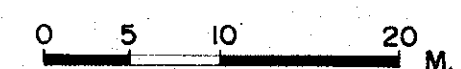


DEBRIS

TOE DITCH

ROAD

CROSS SECTION

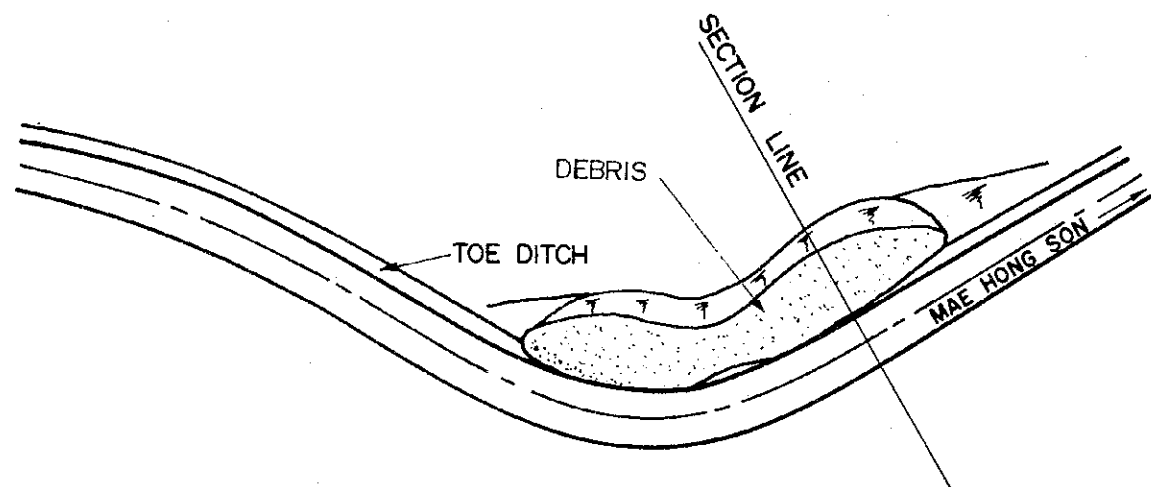


JICA RDPP STUDY

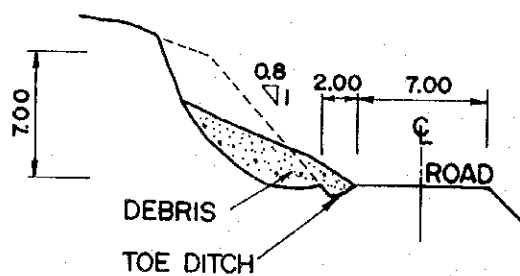
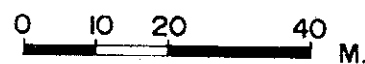
SPOT NO. 1095/C41 KM. 180.250 SHEET NO. 49 OF 49

EXISTING CONDITION

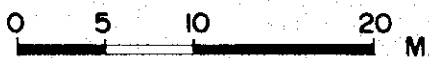
SD-2-6 LANDSLIDE ON CUT SLOPE



PLAN



CROSS SECTION

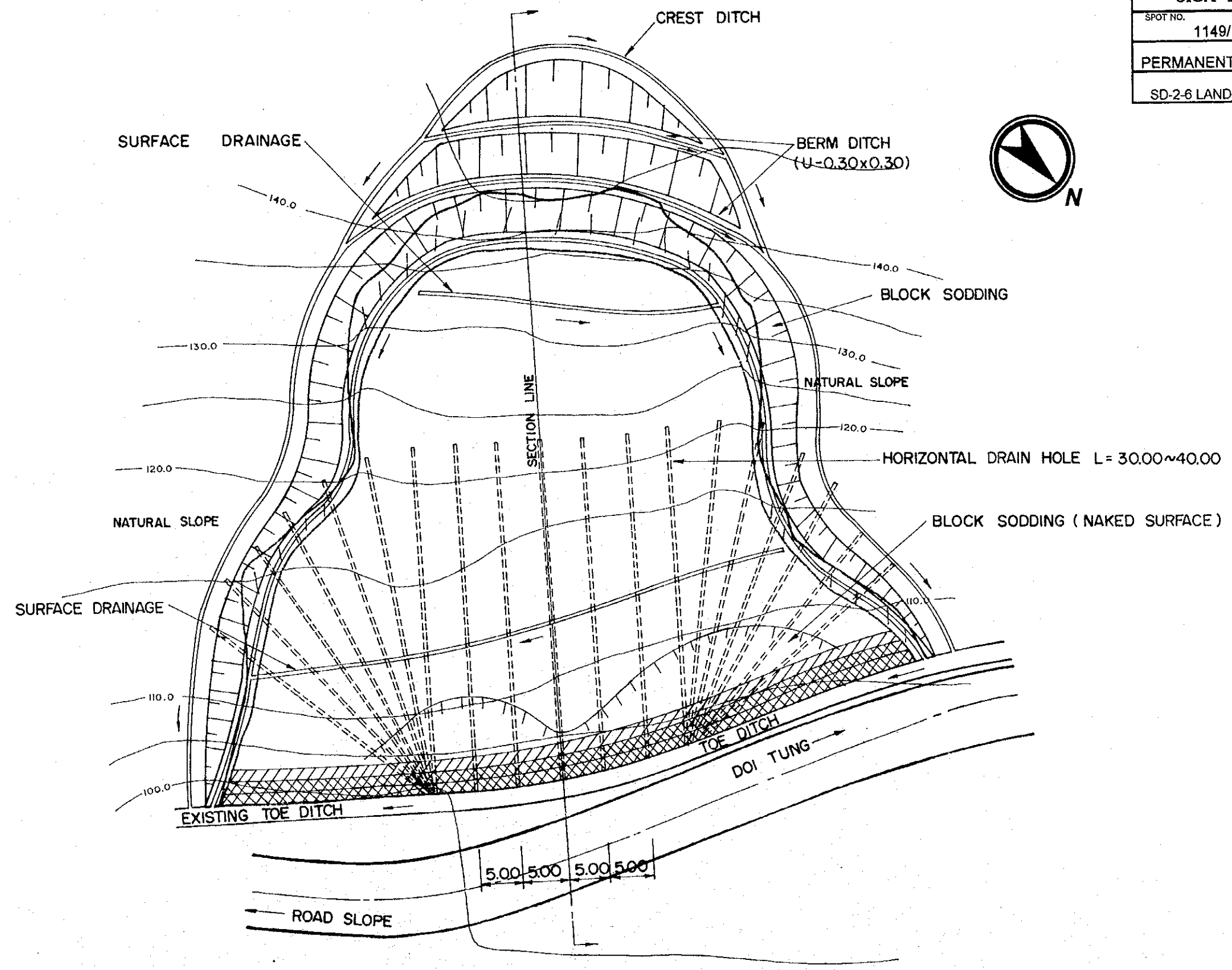


IV. Preliminary Design for Route 1149

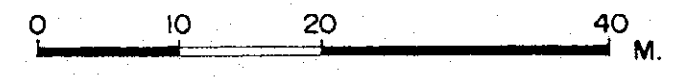
1. Location of Disaster Spots

2. Drawings

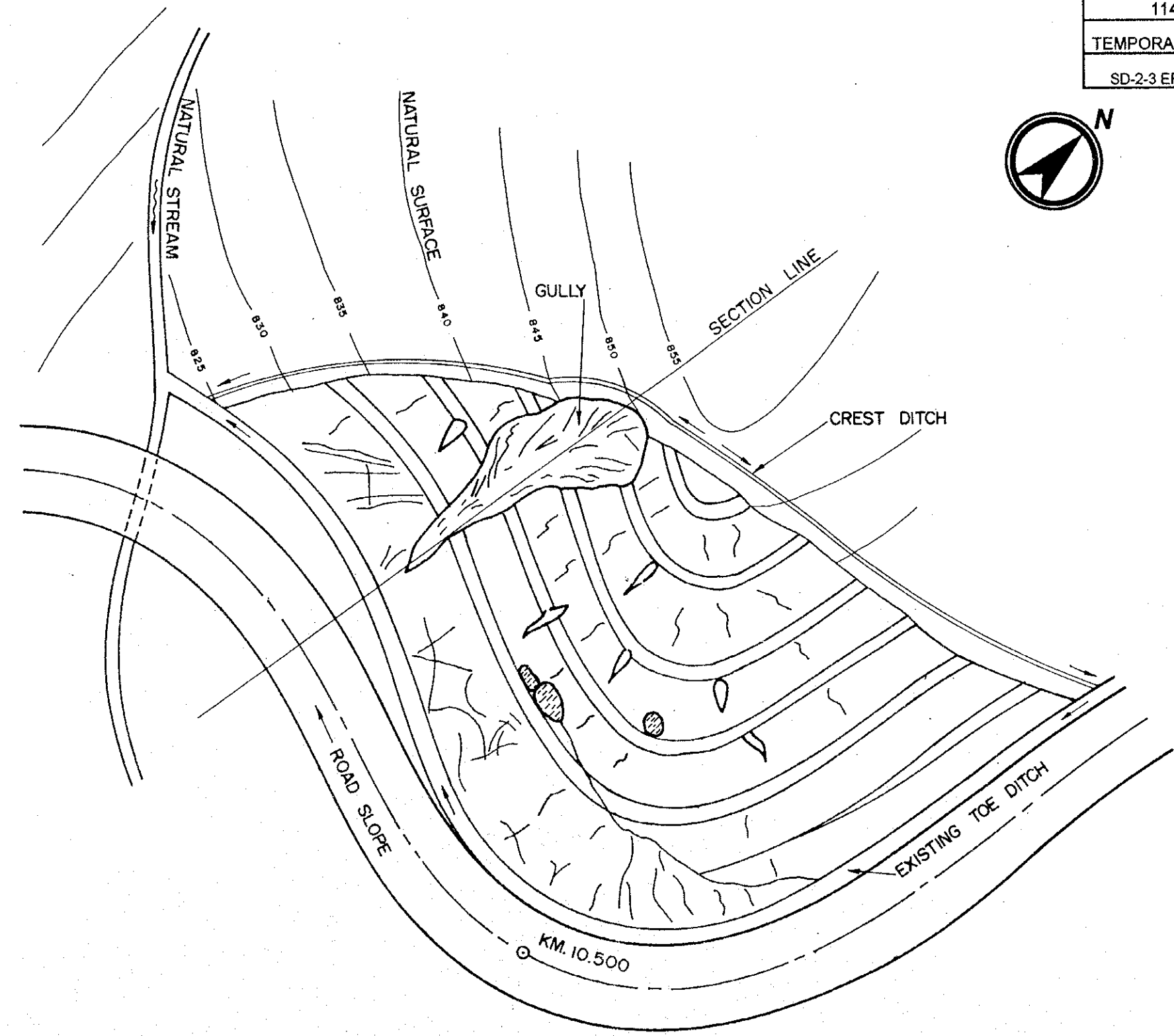
JICA RDPP STUDY			
SPOT NO.	KM.	SHEET NO.	
1149/1	5.200	1 OF 16	
PERMANENT REPAIR WORK (1/2)			
SD-2-6 LANDSLIDE ON CUT SLOPE			



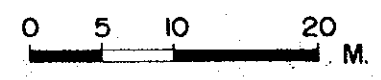
PLAN SCALE 1:500



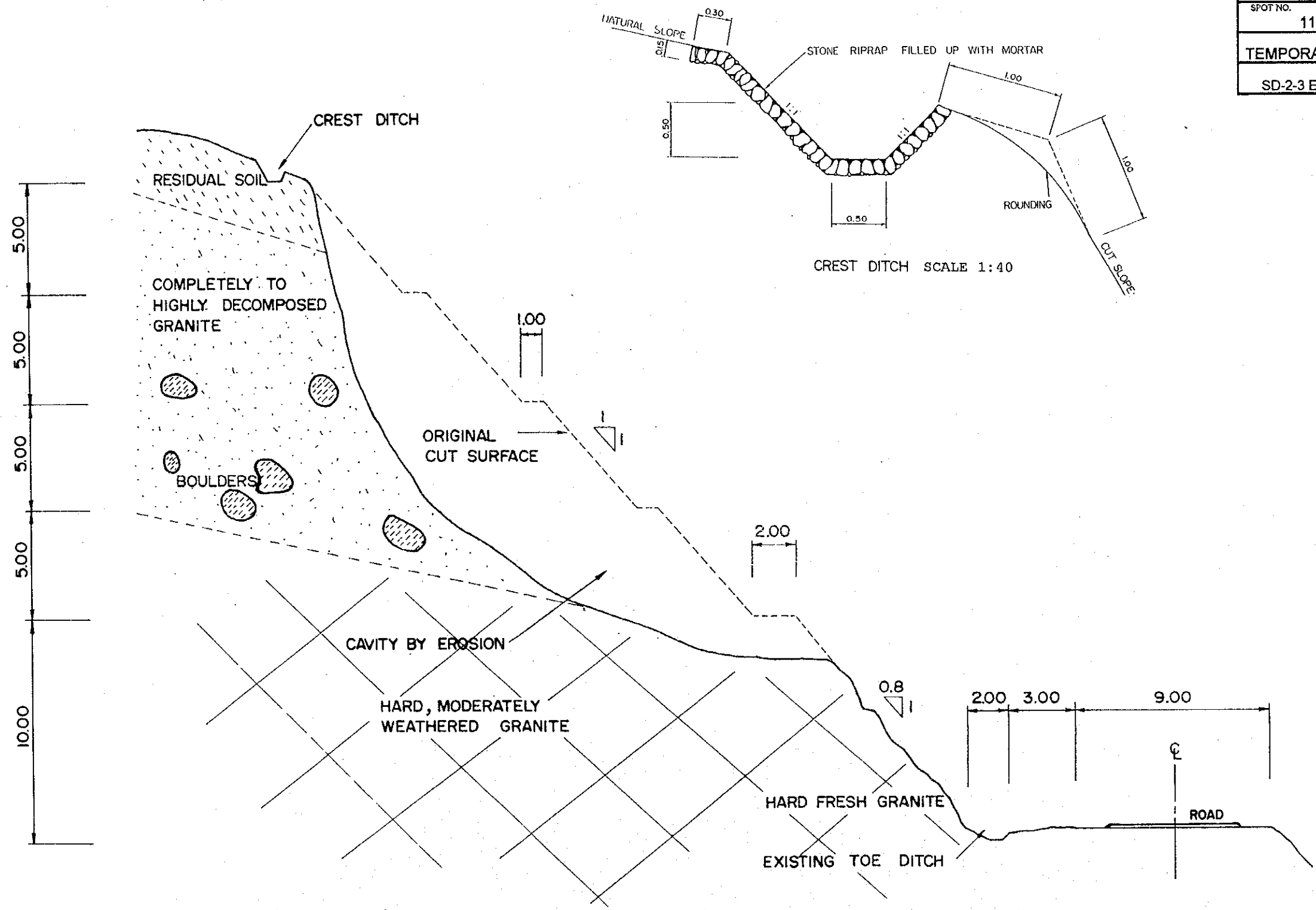
JICA RDPP STUDY		
SPOT NO.	KM.	SHEET NO.
1149/2	10.472	3 OF 16
TEMPORARY REPAIR WORK (1/2)		
SD-2-3 EROSION ON CUT SLOPE		



PLAN SCALE 1:500

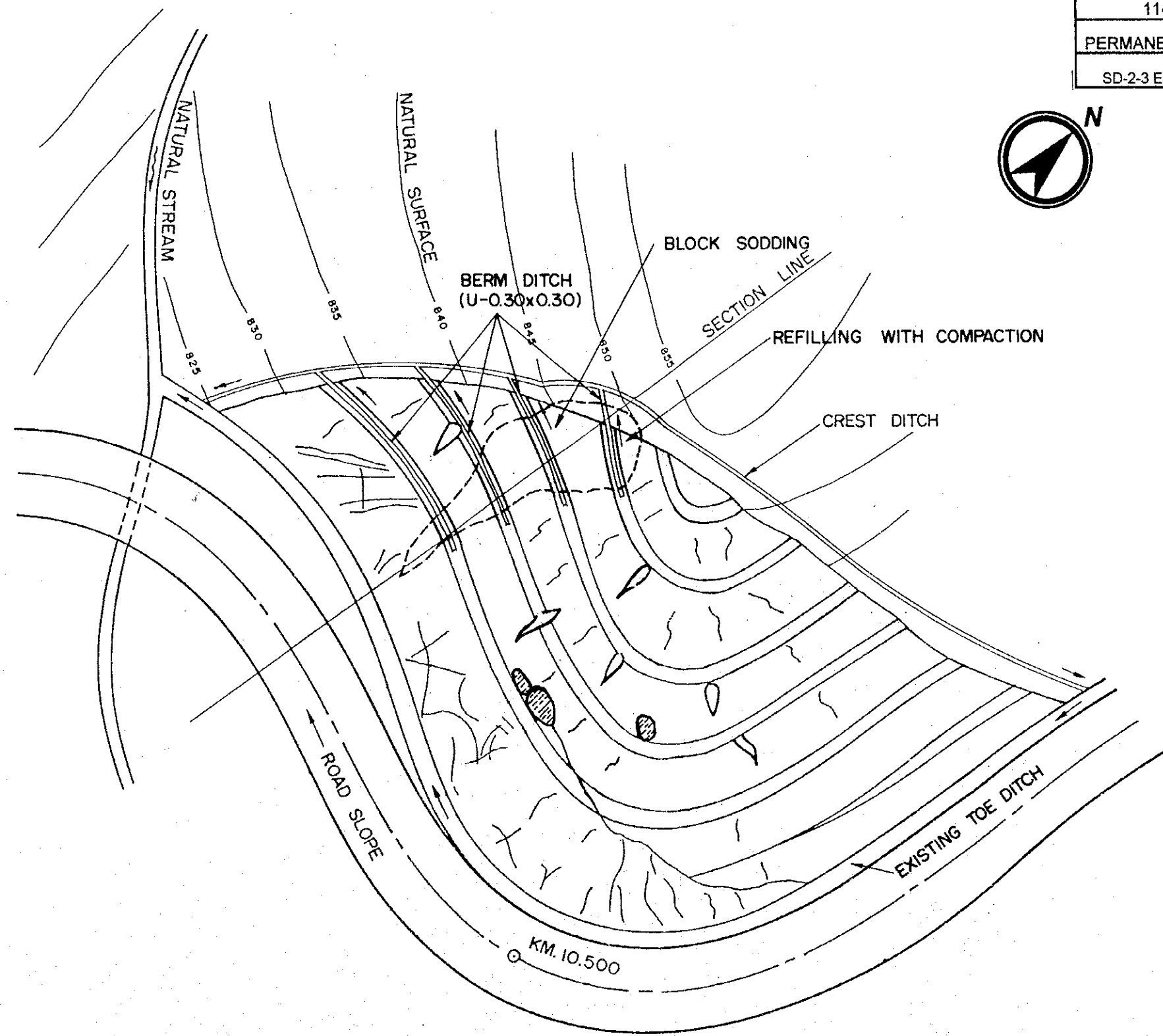


JICA RDPP STUDY		
SPOT NO.	KM.	SHEET NO.
1149/2	10.472	4 OF 16
TEMPORARY REPAIR WORK (2/2)		
SD-2-3 EROSION ON CUT SLOPE		

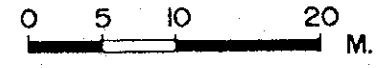


CROSS SECTION SCALE 1:200

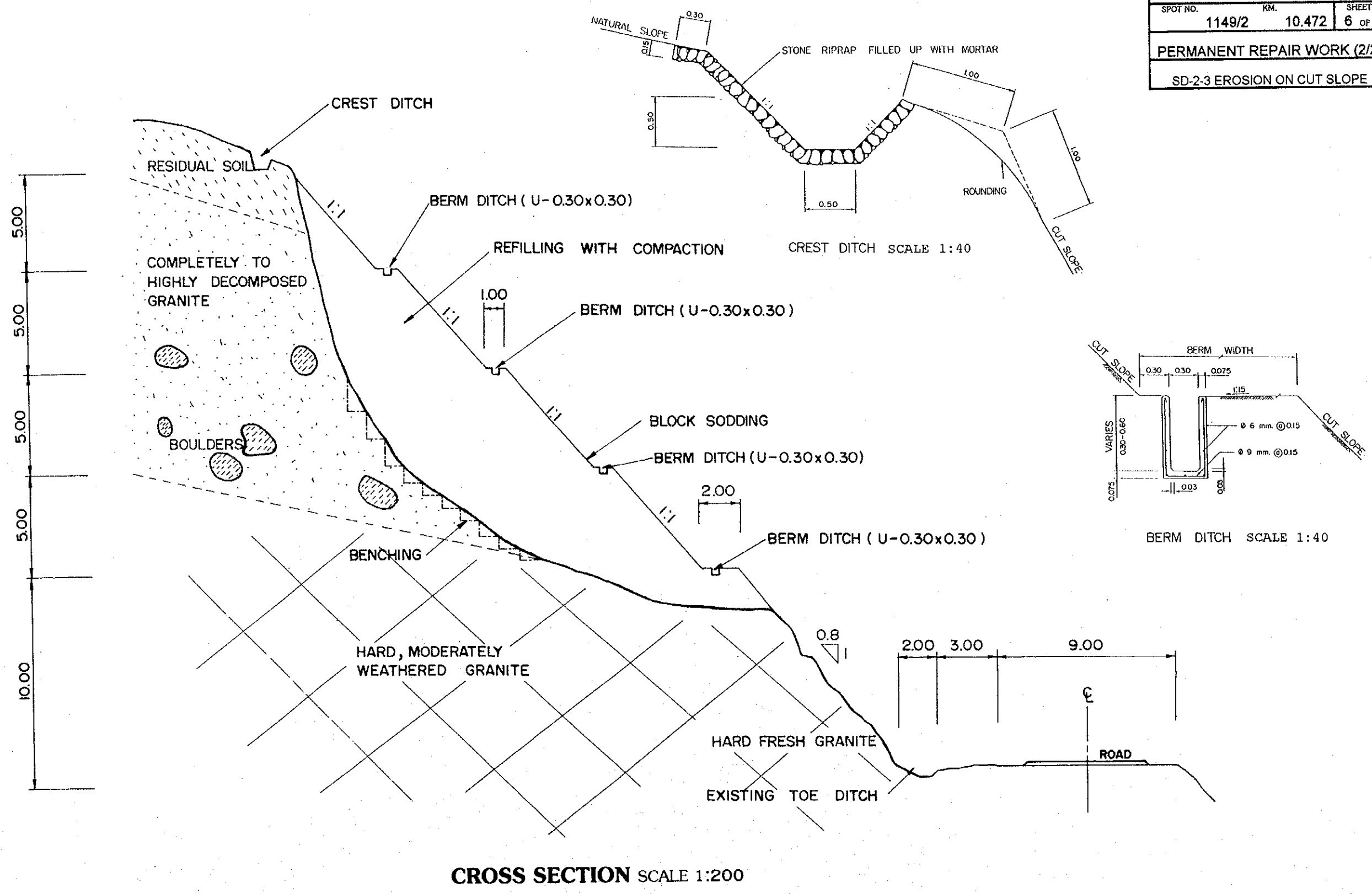
JICA RDPP STUDY		
SPOT NO.	KM.	SHEET NO.
1149/2	10.472	5 OF 16
PERMANENT REPAIR WORK (1/2)		
SD-2-3 EROSION ON CUT SLOPE		



PLAN SCALE 1:500



JICA RDPP STUDY		
SPOT NO.	KM.	SHEET NO.
1149/2	10.472	6 OF 16
PERMANENT REPAIR WORK (2/2)		
SD-2-3 EROSION ON CUT SLOPE		



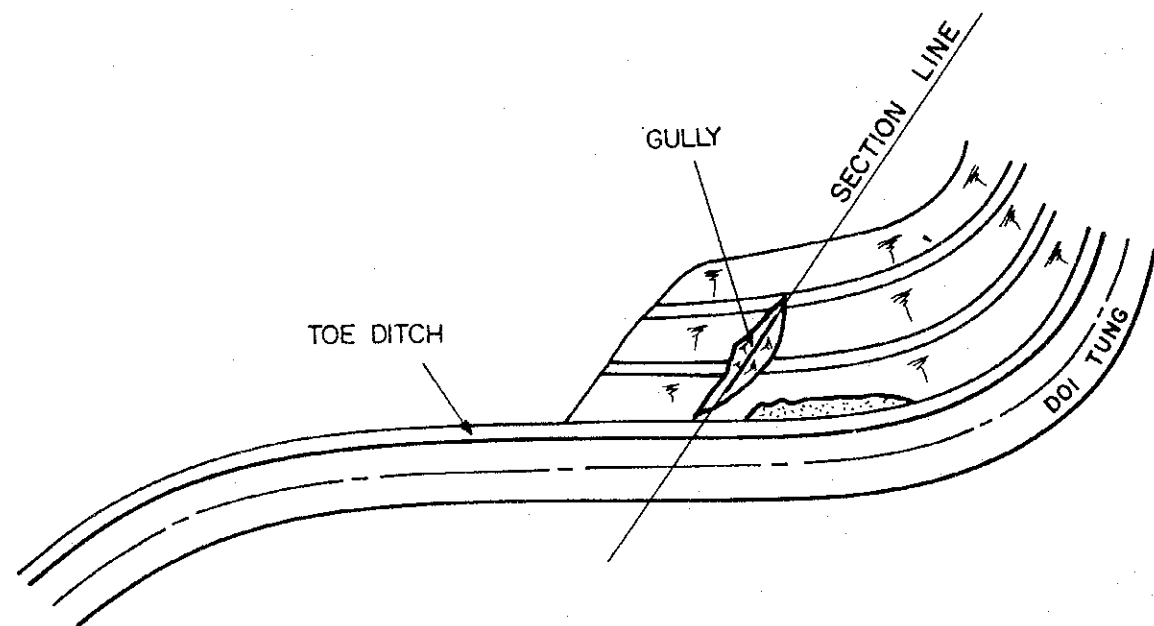
3. Existing Condition

JICA RDPP STUDY

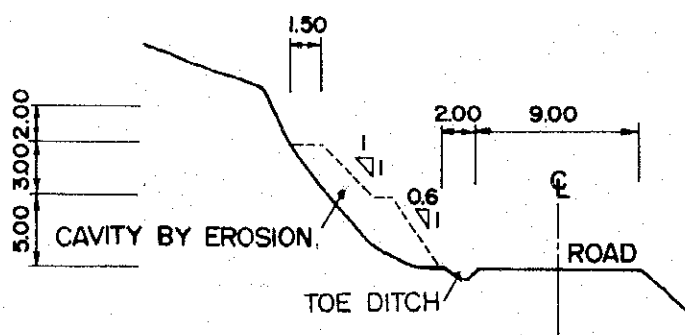
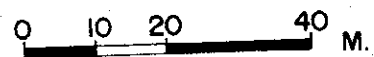
SPOT NO.	KM.	SHEET NO.
1149/C1	4.200	7 OF 16

EXISTING CONDITION

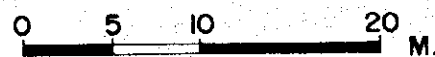
SD-2-3 EROSION ON CUT SLOPE



PLAN



CROSS SECTION

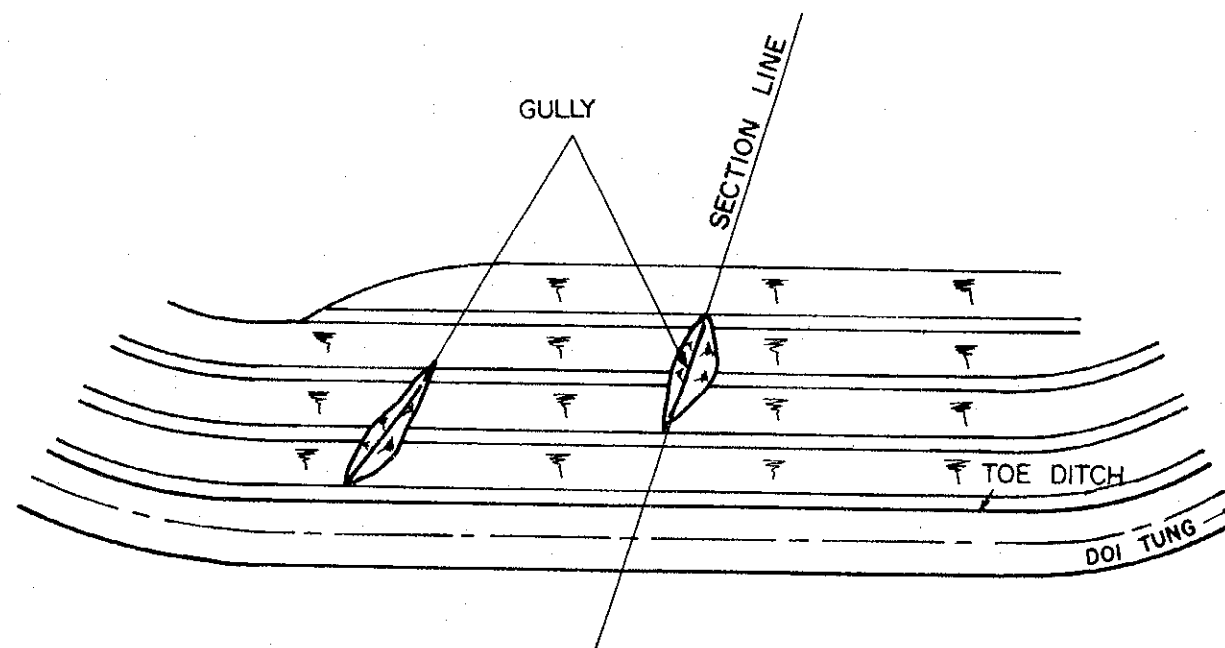


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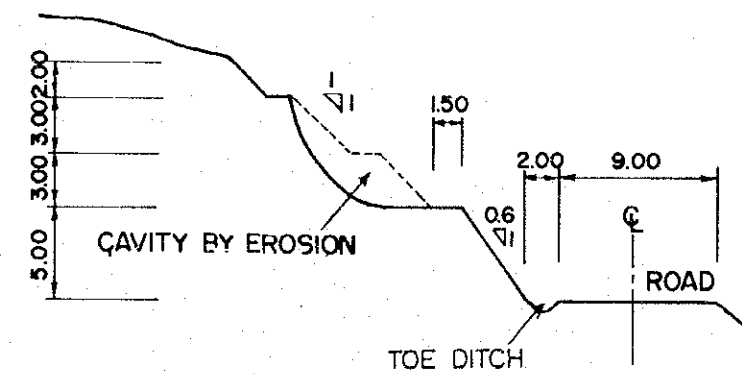
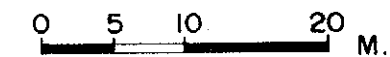
SPOT NO.	KM.	SHEET NO.
1149/C2	4.500	8 OF 16

EXISTING CONDITION

SD-2-3 EROSION ON CUT SLOPE



PLAN



CROSS SECTION

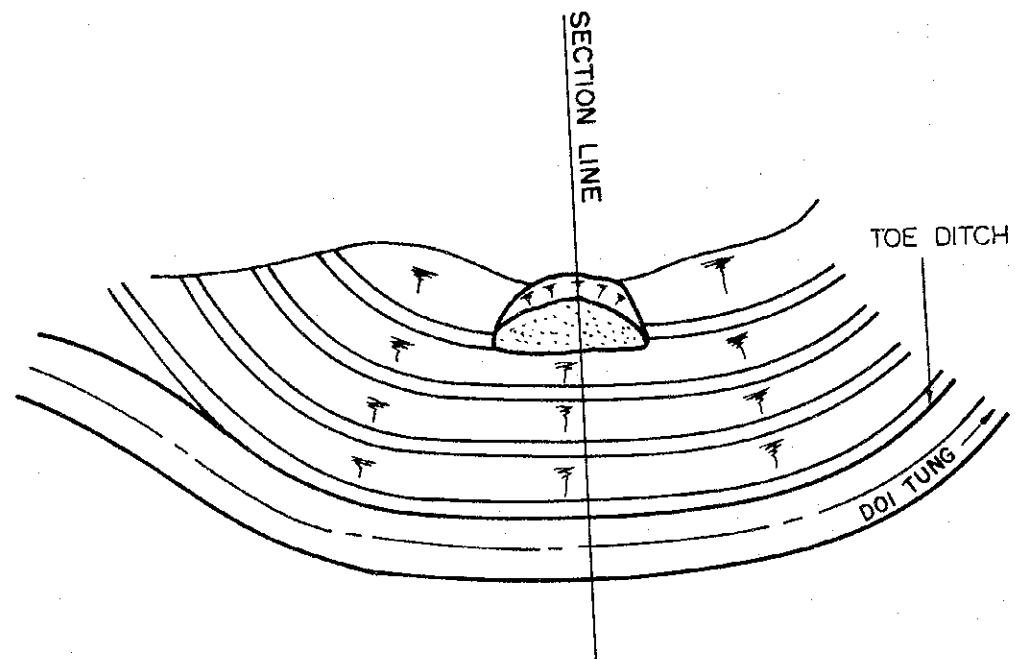


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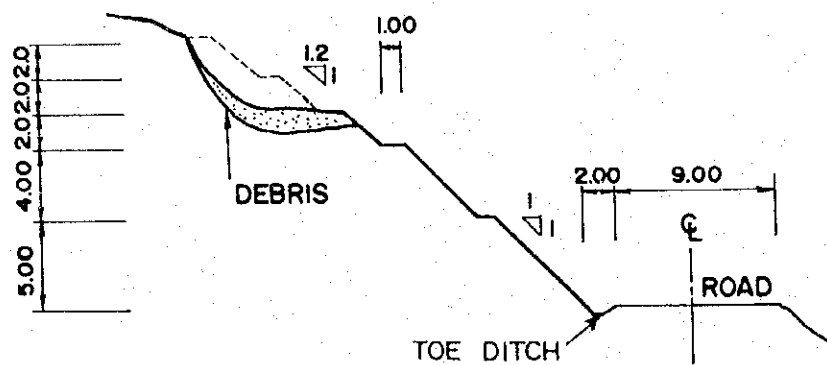
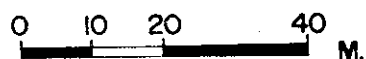
SPOT NO.	KM.	SHEET NO.
1149/C3	4.600	9 OF 16

EXISTING CONDITION

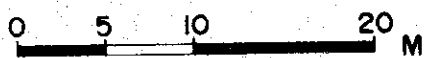
SD-2-3 EROSION ON CUT SLOPE



PLAN



CROSS SECTION

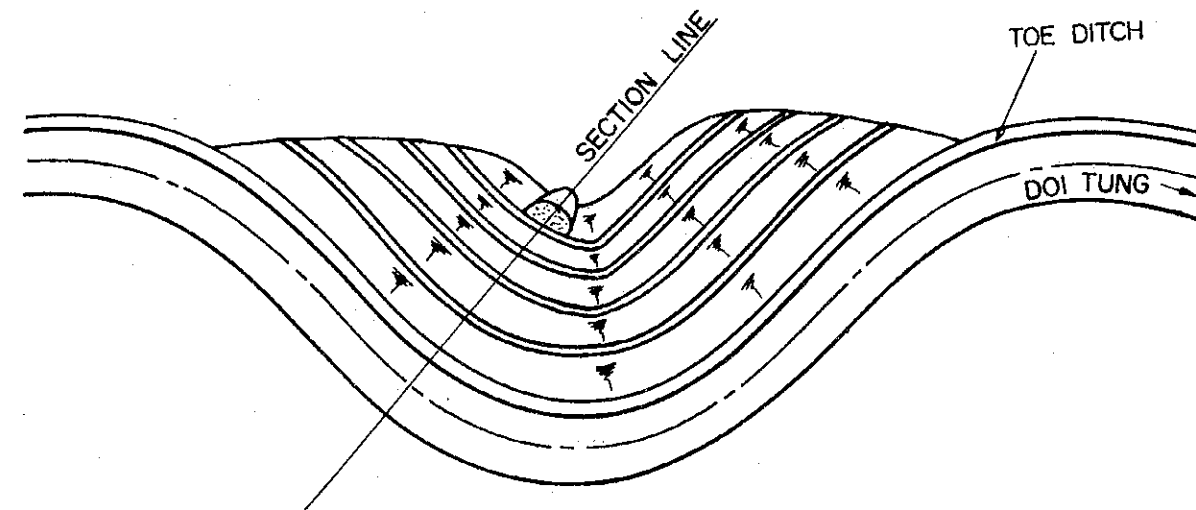


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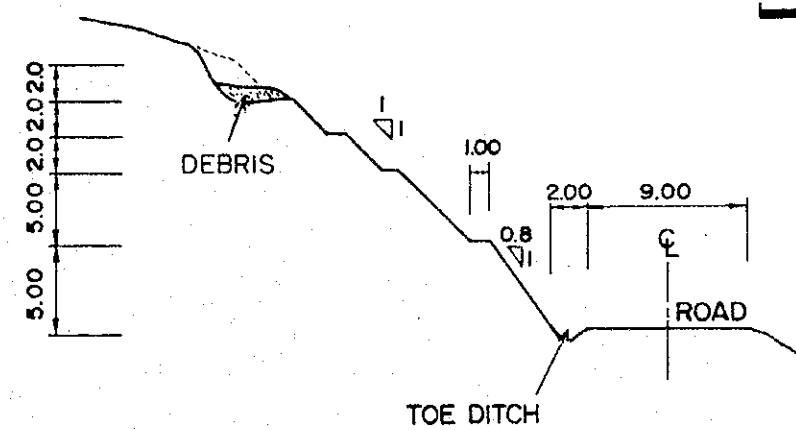
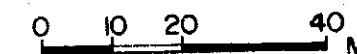
SPOT NO.	KM.	SHEET NO.
1149/C4	5.450	10 OF 16

EXISTING CONDITION

SD-2-3 EROSION ON CUT SLOPE



PLAN



CROSS SECTION

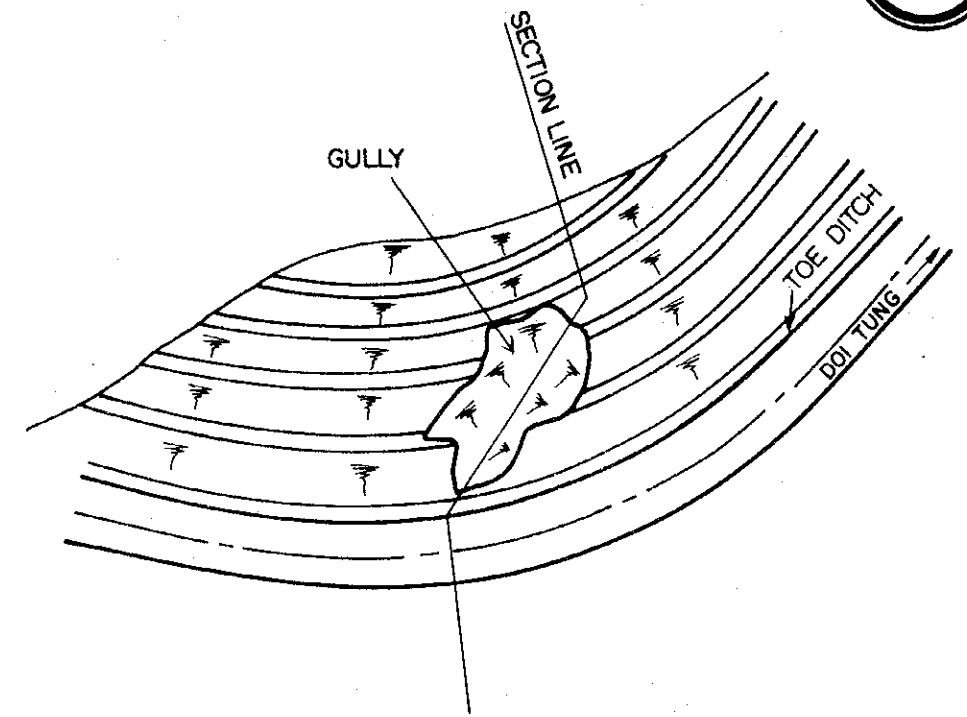


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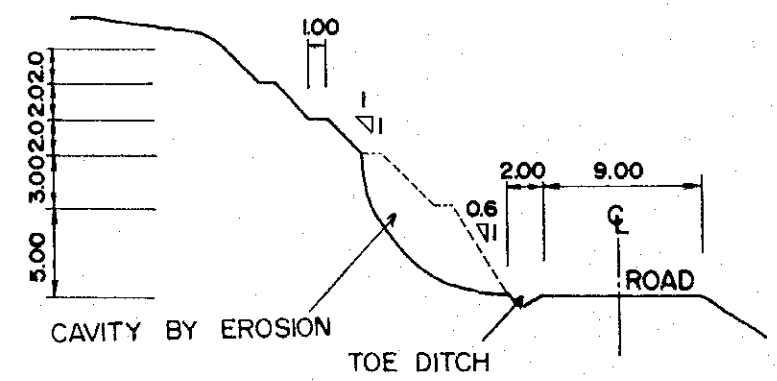
SPOT NO.	KM.	SHEET NO.
1149/C5	6.700	11 OF 16

EXISTING CONDITION

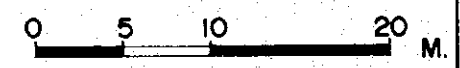
SD-2-3 EROSION ON CUT SLOPE



PLAN



CROSS SECTION

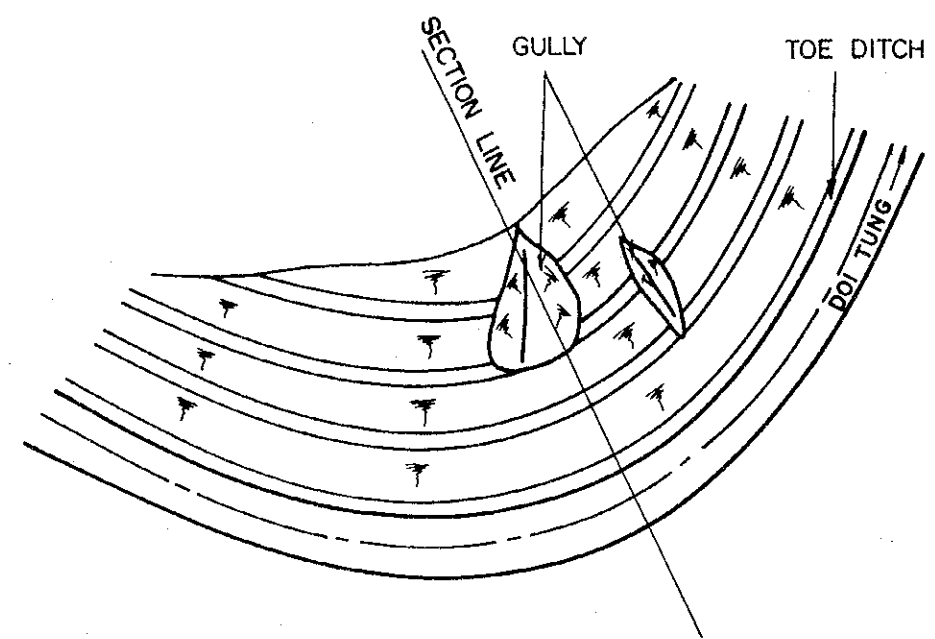


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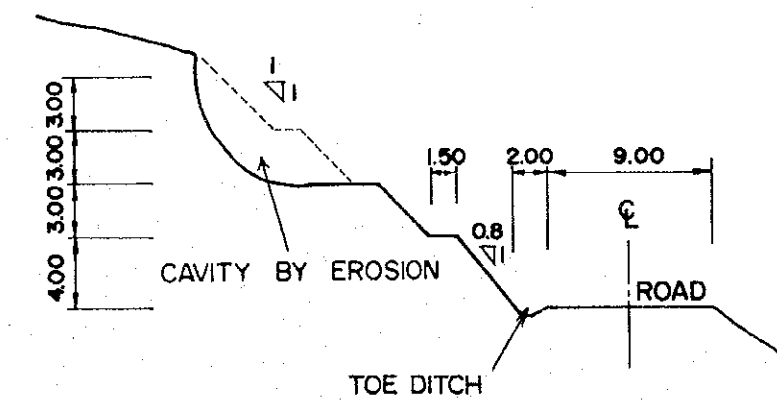
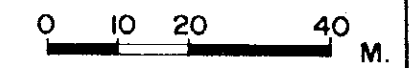
SPOT NO.	KM.	SHEET NO.
1149/C6	8.700	12 OF 16

EXISTING CONDITION

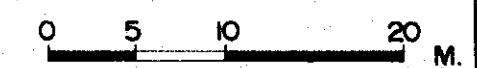
SD-2-3 EROSION ON CUT SLOPE



PLAN



CROSS SECTION

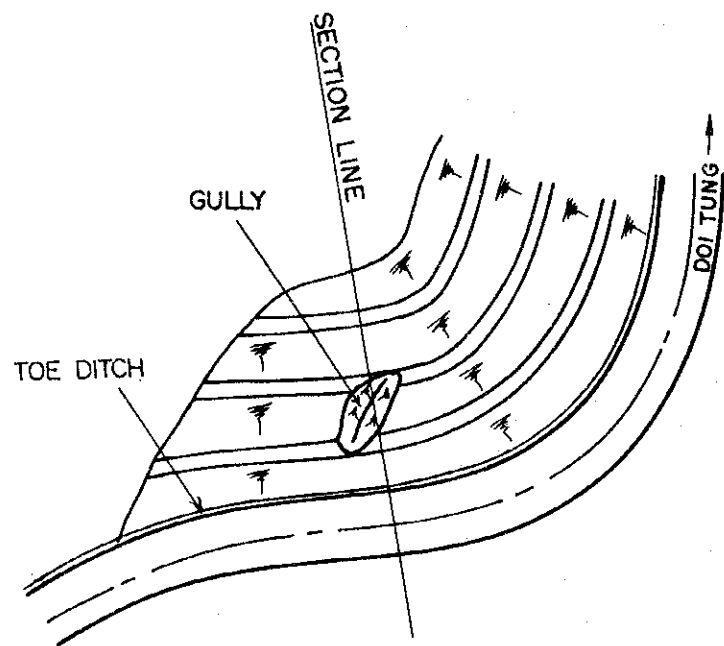


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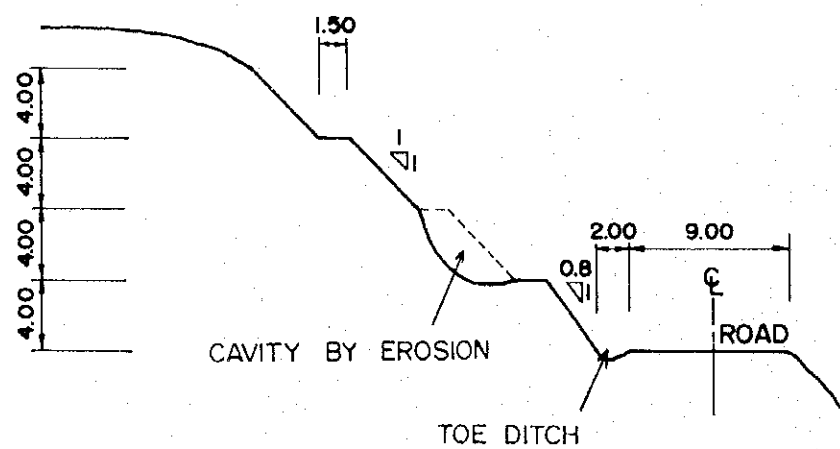
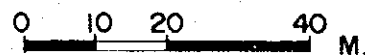
SPOT NO.	KM.	SHEET NO.
1149/C7	9.350	13 OF 16

EXISTING CONDITION

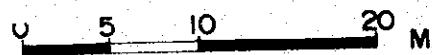
SD-2-3 EROSION ON CUT SLOPE



PLAN



CROSS SECTION

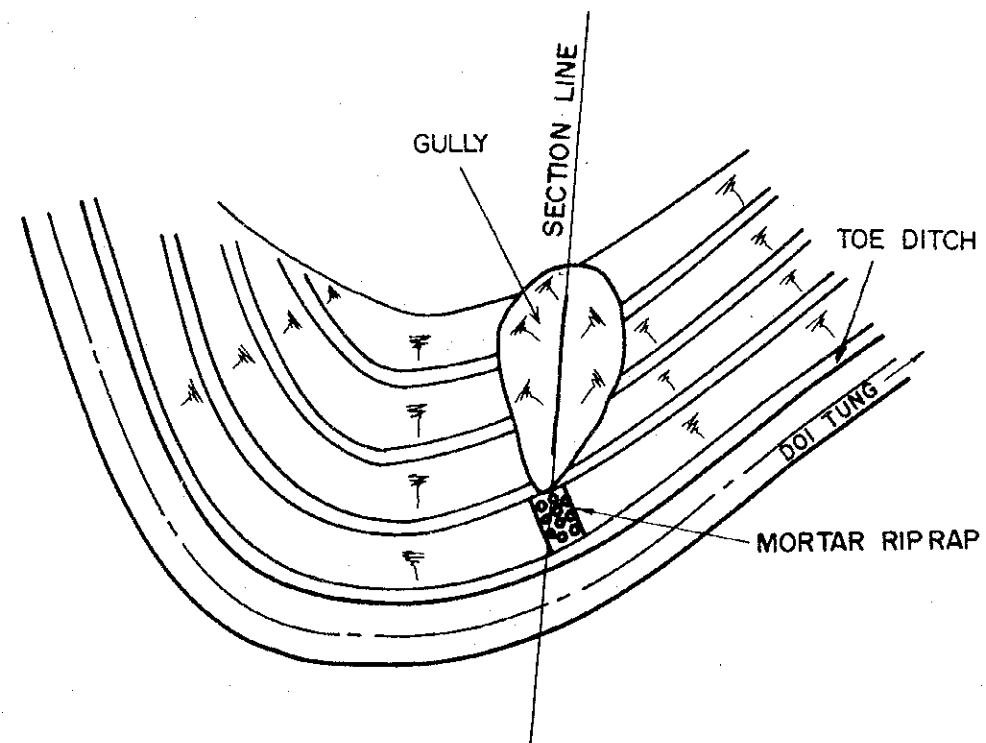


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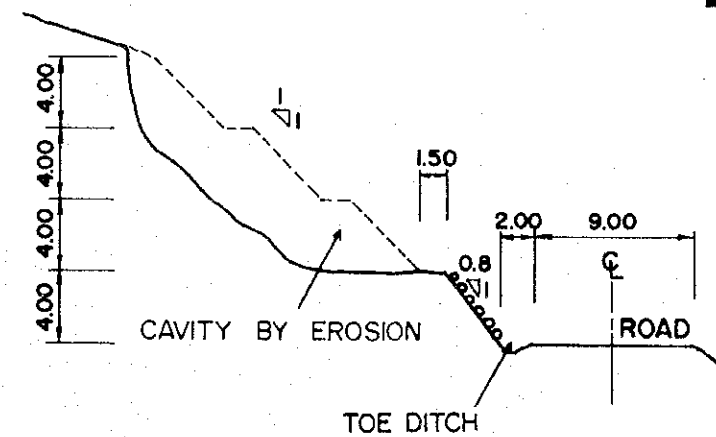
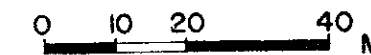
SPOT NO.	KM.	SHEET NO.
1149/C8	9.500	14 OF 16

EXISTING CONDITION

SD-2-3 EROSION ON CUT SLOPE



PLAN



CROSS SECTION



JICA RDPP STUDY

SPOT NO.	KM.	SHEET NO.
1149/C9	9.700	15 OF 16

EXISTING CONDITION

SD-2-3 EROSION ON CUT SLOPE

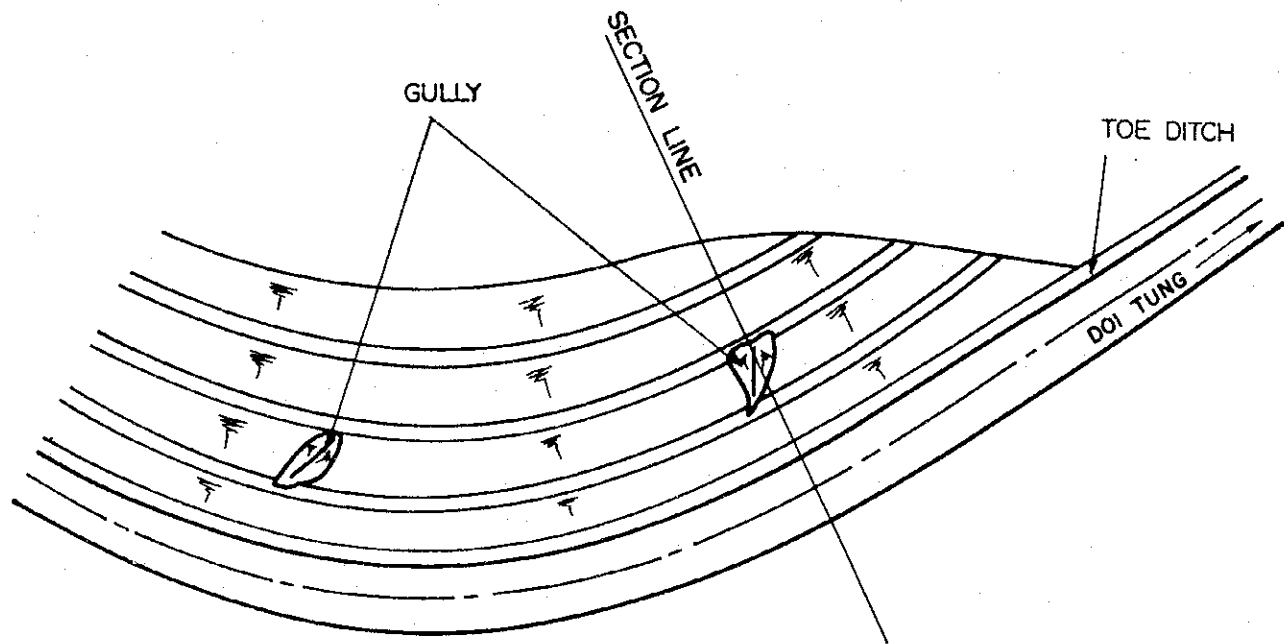


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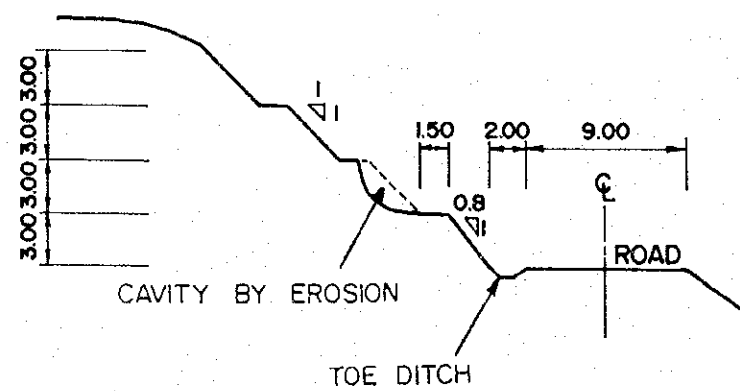
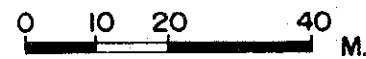
SPOT NO.	KM.	SHEET NO.
1149/C10	11.700	16 OF 16

EXISTING CONDITION

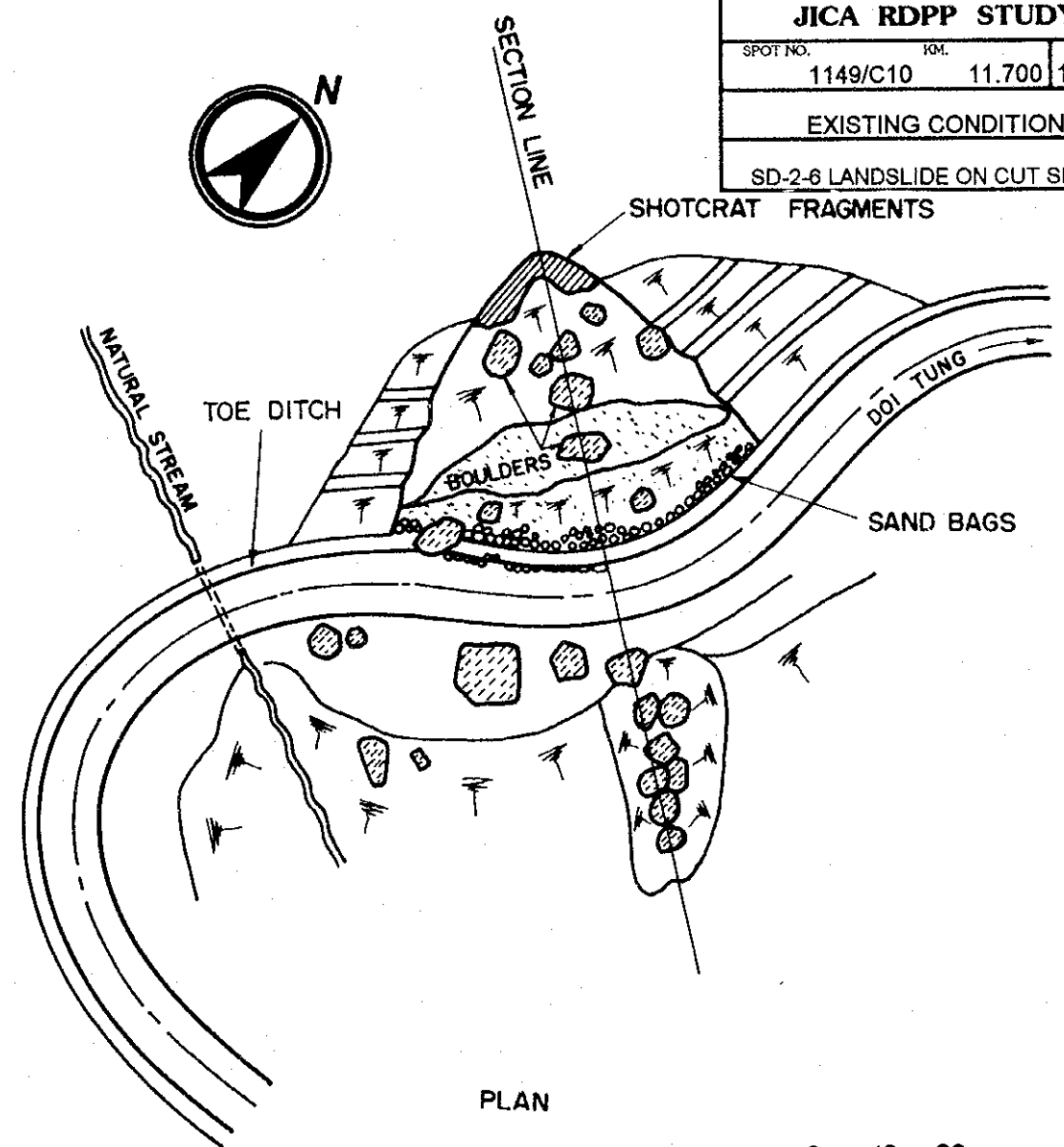
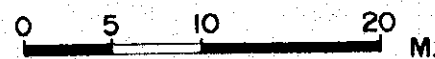
SD-2-6 LANDSLIDE ON CUT SLOPE



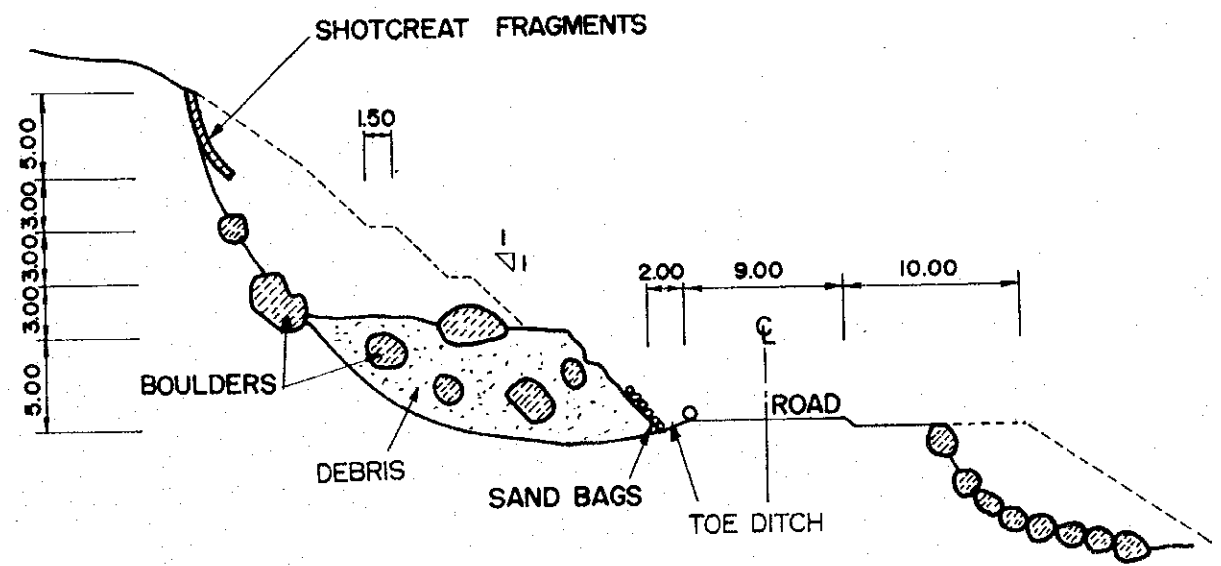
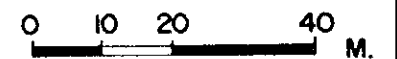
PLAN



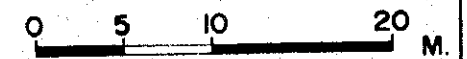
CROSS SECTION



PLAN



CROSS SECTION



V. Preliminary Design for Route 1256

1. Location of Disaster Spots

