

	1991 (H3)		1992 (H4)		1993 (H5)		1994 (H6)		Allocation	Remarks
	Nos	Item No.	Nos	Item No.	Nos	Item No.	Nos	Item No.		
9. Vehicle										
- Truck with a crane	1	◎							DOR	
- Microbus	1	◎							MB	
- Four wheel drive vehicle	3	◎			1	◎			MB	
- Bicycle	3	◎							MB	
- Motor Bike	3	◎							MB	
- Car					1	◎			MB	
10. Other Necessary Equipment										
- Drafter	1	○							MB	
- Photo copy machine	1	◎			2	◎			MB/HL	
- Typewriter	1	◎							MB	
- Working tables, lockers, chairs	1	◎							MB	
- Stationery etc.	1	○	1	○						
- Refrigerator	1	◎							MB	
- Transparent fable-	1	○	1	○					MB	
- Zinc coating test apparatus					1	◎			TD	
- Gravimetric set										
- Thermometers									TD	
- Pocket type										
- Metal thermometer										
- Chisels									TD	
- Tension test for steel bar									TD	
- Electrical balance									TD	
500g										
1kg										
5kg										

○ : Japan ◎ : Nepal △ : Provided by HMG/N

HL: Hydraulic Lab. MB: Main Building TD: Technical Development Building DOR: Dep. of Road DOI: Dep. of Irrigation

APPENDIX 7 MASTER PLAN OF PROJECT TYPE TECHNICAL COOPERATION

Master Plan (3-1)

D P T C

D P T C

D P T C

Activities	FIRST YEAR SECOND YEAR THIRD YEAR FOURTH YEAR FIFTH YEAR												Remarks
	Year	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	
(Training)	Month	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul
1. General Course		Sep											Achievement
2. Advanced Course				Apr-Jun				Mar-May					
3. Intensive Course				Jan				Jan					
(Technology Development)													
1. SABO													
a) Nakhu Khola	Survey			Survey				Model Construction					Achievement
b) Trisuli	Survey			Survey/Design				Model Construction					Achievement
c) Siwalik	Data Collection			Selection of Model Area				Survey				Preparation of Guidelines	Achievement
2. LANDSLIDE													
a) 48km from Kathmandu along Trisuli Road	Survey			Survey				Master Plan				Model Construction	Achievement
b) 19km from Kathmandu along Trisuli Road	Survey			Detailed Survey				Preparation of Guidelines					Achievement
c) Upstream of Butwal along Tinau River	Survey			Survey				Survey				Master Plan	Achievement

D P T C

D P T C

D P T C

D P T C ————— D P T C ————— D P T C ————— Master Plan (3-2)

Activities	FIFTH YEAR												Remarks
	1991	1992	1992	1992	1993	1993	1994	1994	1994	1995	1995	1996	
	Month	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul
3. RIVER ENGINEERING													
a) Bagmati River	Survey	■		Survey		Master Plan				■	Construction	1996	Achivement
b) Improvement of construction method/materials	Survey	■		Survey			Survey		Survey		Conclusion		Achivement
c) Study on river works in Terai	Survey	■		Survey			Survey						Achivement
4. PREPARATION OF TECHNICAL STANDARDS													
a) Preparation of technical standards	Collection	■		Collection / Review			Review / Revision		Review / Revision		Review / Revision		Achivement
(Information)													
1. DATA BASE													
a) Data Base	Data Collection	■		Development of software		Establishment							Achivement
2. PUBLIC RELATIONS													
a) Public relations	Brochure	■		Brochure, Calendar Disaster Annual Report									Achivement

III. Master Plan (3-3)

Activities	FIRST YEAR 1991-1992		SECOND YEAR 1992-1993		THIRD YEAR 1993-1994		FOURTH YEAR 1994-1995		FIFTH YEAR 1995-1996		Remarks
	Year	Month	Year	Month	Year	Month	Year	Month	Year	Month	
(Others)											
1. SEMINARS											
a) Organization of seminars			ESCAP Seminar, Joint seminar, Roving Seminar								ESCAP Seminar Joint Seminar Roving Seminar ■ Achievement
2. PARTICIPATION IN INTERNATIONAL CONFERENCE/SYMPOSIUM											
a) Participation in international conference/symposium					I AHR						I AHR International Association for Hydraulic Research ■ Achievement
3. EXCHANGE OF TECHNOLOGY/MANAGEMENT											
a) Exchange of Technology / Management			Indonesia STC								■ Achievement

APPENDIX 8 DISASTER RECORD IN NEPAL

Disaster in Nepal 1983 - 1992

Type of Disaster	Types of Loss							
	People Dead	People Injured	Houses Destroyed	Families Affected	Land Affected	Public Infra-Structures	Property Destroyed	Livestock Loss
	(No.)	(No.)	(No.)	(No.)	(No.)	(No.)	(Mil. Rs.)	(No.)
1983								
Fire	69	-	12	-	-	-	NA	-
Flood/Landslide	293	-	NA	-	-	-	240.00	248
Epidemic	217	-	-	-	-	-	49.00	-
Other	-	-	-	-	-	-	-	-
Total	579	-	42	-	-	-	289.00	248
1984								
Fire	57	NA	3,031	-	-	-	11.60	433
Flood/Landslide	363	NA	7,566	NA	12,418	869	37.00	3,114
Epidemic	521	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Total	1,387	-	10,597	-	12,418	869	48.60	3,547
1985								
Fire	52	-	2,546	-	-	-	-	-
Flood/Landslide	420	-	4,620	-	13,544	173	58.10	3,058
Epidemic	915	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Total	1,387	-	7,166	-	13,544	173	72.70	3,399
1986								
Fire	96	-	385	-	-	-	7.2	4,680
Flood/Landslide	315	-	3,035	-	13,158	436	15.85	1,886
Epidemic	101	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Total	1518	-	3,370	-	13,158	436	22.87	6,566
1987								
Fire	62	-	2,499	-	-	-	4.6	418
Epidemic	391	162	33,731	96,151	188,579	421	-	1,434
Other	426	-	-	885	-	-	-	-
Total	881	162	36,220	97,036	188,579	421	-	5,374
1988								
Fire	23	-	1,221	-	-	-	12.2	349
Flood/Landslide	328	162	33,731	4,113	-	-	10,873.10	530
Earthquake	721	-	-	66,000	-	-	50,000.00	1,566
Stampede	71	162	36,220	-	-	-	-	-
Avalanches	14	4	85	84	-	-	-	343
Total	1,584	12,543	108,801	70,197	-	4,365	60,885.80	2,788

Type of Disaster	Types of Loss							
	Peop le Dead	People Injured	Houses Destroy ed	Familie s Affected	Land Affected	Public Infrac- Struct ures	Property Destroy ed	Live stock Loss
	(No.)	(No.)	(No.)	(No.)	(No.)	(No.)	(Mil. Rs.)	(No.)
1989								
Fire	109	16	12,594	NA	-	-	1,614.03	773
Flood/Landslide	680	-	6,024	NA	-	-	2,504.84	1,512
Epidendies	879	2,986	-	-	-	-	-	-
Wondstores	5	-	174	NA	-	-	23.88	92
Thunderstorms	23	8	13	NA	-	-	5.47	398
Avalanches	20	4	179	NA	-	-	23.61	1,467
Total	1,716	3,014	18,974	-	-	-	4,171.83	4,240
1990								
Fire	46	2	3,236	3,233	-	-	-	409
Flood/Landslide	307	26	3,060	5,165	1,131.33	-	53	314
Epidendies	503	151	-	-	-	-	-	41
Hailstones	6	-	1	-	-	-	-	11
Others	51	17	53	59	-	-	-	92
Total	913	196	6,352	8,461	1,131.33	-	53	867
1991								
Fire	90	17	4,606	4,451	NA	14	19.2	404
Flood/Landslide	93	12	817	1,621	NA	25	21.2	36
Epidendies	725	2,205	-	233	-	-	0.01	2
Hailstones	12	3	58	529	-	2	1.6	-
Others	51	19	15	51	-	1	0.8	200
Total								
1992								
Fire	97	-	13,876	10,959	-	3	39.98	10,957
Flood/Landslide	71	-	88	545	26	1,690	1.078	545
Epidendies	1,128	-	-	-	-	-	-	41
Thunderstorms	19	-	13	15	-	-	0.40	11
Windstorm	1	-	17	16	-	14	1.17	92
Earthquake	2	-	3	3	-	-	4,800	867
Total								

出典 : Ministry of Home
National disaster section

TABLE NO. 1 : DATA OF WATER INDUCED DISASTERS : 1992 (Courtesy: Ministry of Home)
WATER INDUCED DISASTER PREVENTION TECHNICAL CENTRE [DPTC]

S.No.	DISTRICTS	NAME OF TOWN OR VILLAGE	DATE	TYPE OF DISASTER	HUMAN DEAD Nos.	PERSON INJURED Nos.	HOUSES DESTROYED Nos.	FAMILY AFFECTED Nos.	DAMAGE TO AGRICULTURE	ANIMALS Nos.	PUB. LAND	DAMAGE TO ESTIMATED COST NRs.
1	Achham	Darna	30 July	Flood	2			1		2		
2	Achham	Kuinka	21 Aug.	Flood			1				1 School	50000
3	Achham	Binayak-2	30 July	Flood			3	3				48000
4	Baglung	Dumek	17 July	Landslide				1		3		30000
5	Baglung	Daling	6 Aug.	Landslide				10				66600
6	Baitadi	Bhuviraj	29 July	Landslide	2			1				
7	Bajhang	Kalukhet	27 Aug.	Landslide	3	2						
8	Bajhang	Chainpoor	28 July	FL/Lan.	1			1				
9	Bajhang	Loda	28 Aug.	Flood			2	2				235000
10	Bajura	Haradi-5	4 Sept.	Landslide		1	1	1				
11	Bajura	Bharatji	June	Flood	3			3		1		30000
12	Bardia	Golachakraiya	Sept.	Flood					18			
13	Bhojpur	Timma	31 July	Flood			1	1				4000
14	Bhojpur	Thulopkhar	17 July	Flood			1	1			Farm	40000
15	Bhojpur	Chinakhu	16 July	Flood			1	1				22850
16	Bhojpur	Bhaisipankha	17 July	Landslide								22000
17	Bhojpur	Kaule	22 Aug.	Flood				5				235000
18	Dadeldhura	Ramghat	2 Aug.	Flood	1							
19	Dadeldhura	Bisalla-8	23 July	Landslide	3	2	2	2				20440
20	Darchula	Rapla	7 Sept.	Landslide				3			Land	46660
21	Dhading	Jogimara	2 Aug.	Landslide	28(?)						1 Bus	
22	Dolakha	Magapauwa	16 Aug.	Landslide			1	1				4500
23	Dolakha	Charikot-2	23 Aug.	Landslide			1	1				1500
24	Dolakha	Mati	20 July	Landslide			1	8				2500
25	Dolokha	Charikot	17 Aug.	Landslide			2	2				15000
26	Dolokha	Mejung (6,7)	17 Aug.	Landslide			2	2				16000
27	Dolpa	Bhawani	23 July	Landslide	1			1				
28	Dolpa	Juphal	3 Sept.	Landslide	2			2				
29	Doti	Kalema-8	10 July	Flood	1		1	1				
30	Gorkha	Gorakhpali	2 Aug.	Flood							Prison (party)	
31	Gulmi	Jhapak	27 Aug.	Landslide	1	1		1			School	
32	Gulmi	Bharbung	6 Aug.	Landslide			8	100	5	48		129700
33	Humla	Srinagar	3 Sept.	Flood				3			1 Bridge	6520
34	Jajarkot	Subanali-1	Aug.	Flood				17		6	4 Ghutta	57000
35	Jajarkot	Paik	28 Aug.	Flood	1			1				

TABLE NO. 1 (CONTINUED)

S.No.	DISTRICTS	NAME OF TOWN OR VILLAGE	DATE	TYPE OF DISASTER	HUMAN DEAD Nos.	PERSON INJURED Nos.	HOUSES DESTROYED Nos.	FAMILY AFFECTED Nos.	DAMAGE TO AGRICULTURE Hectares	LOSSES OF ANIMALS Nos.	DAMAGE TO PUB. LAND	ESTIMATED COST NRs.
36	Jajarkot	Daha VDC.	31 July	Flood			1	1		16		80000
37	Jajarkot	Nayakwada	20 Aug.	Flood					15.5			
38	Jhapa	Shivagun	28 Aug.	Flood				6	10			1580000
39	Jhapa	Shivagun	28 Aug.	Flood					13			1788500
40	Jumla	Malikathada	29 Aug.	Flood			3	3				196796
41	Jumla	Kankamundari-4,7	18 Aug.	Flood			1	1				18675
42	Kalikot	Kotewada	19 July	Flood	2			2				75874
43	Kanchanpur	Chadani-3	25 Aug.	Flood				11	3			217210
44	Kaski	Ghandruk-9	3 Sept	Landslide	5		1	1				
45	Khotang	Ratanchour	27 Aug.	Landslide				1				13200
46	Khotang	Sundel	4 July	Flood	4	4	3	4	4	59		
47	Makwanpur	Kharikhet	24 Aug.	Flood	1			1				
48	Manang	Chame	18 July	F/L				11			1 Bridge	182000
49	Manang	Narkhola	17 July	F/L							1 Bridge	
50	Manang	Dharepani-3	18 July	F/L								40000
51	Manang	Thoche	18 July	Landslide				4	0.15			30000
52	Manang	Talebagarchap	18 July	Landslide				6	0.1			47000
53	Manang	Narkhola	17 July	Landslide							1 Bridge	
54	Mugu	Karki Bada -5	5 July	Flood	3			1				
55	Nuwakot	Rautbesi-7	28 July	Landslide	4		1	1				
56	Nuwakot	Ukhu-8	29 July	Landslide	12	3	7	4		1		120000
57	Okhaldhunga	Gamnangtar	Aug.	Flood					0.2			10000
58	Okhaldhunga	Adheri-5	Aug.	Flood				10				412000
59	Okhaldhunga	Bhadraure	Aug.	Flood							3 Canals	30000
60	Okhaldhunga	Barnalu	8 July	Landslide	1		1	1				
61	Okhaldhunga	Bigutar	15 July	Landslide			1	1		4		5000
62	Okhaldhunga	Elendu	2 July	Landslide				2				210000
63	Panchthar	Thaila	12 July	Landslide	1							
64	Parbat	Deupur	1 Aug.	Landslide			3	3		2		42800
65	Parbat	Deurali	5 Aug.	Landslide				1	0.6			10000
66	Ramechhap	Phoolgasi	25 July	Landslide		2	1					20500
67	Rasuwa	Lindre Khola	31 Aug.	Flood							1 Bridge	
68	Rasuwa	Doda Village	23 Aug.	Flood				4			1 Bridge	
69	Rolpa	Jinawang	23 Aug.	Landslide	3	1	2	2	0.7	4		120245
70	Rolpa	Libang	25 July	Flood	1			1				

TABLE NO. 1 (CONTINUED)

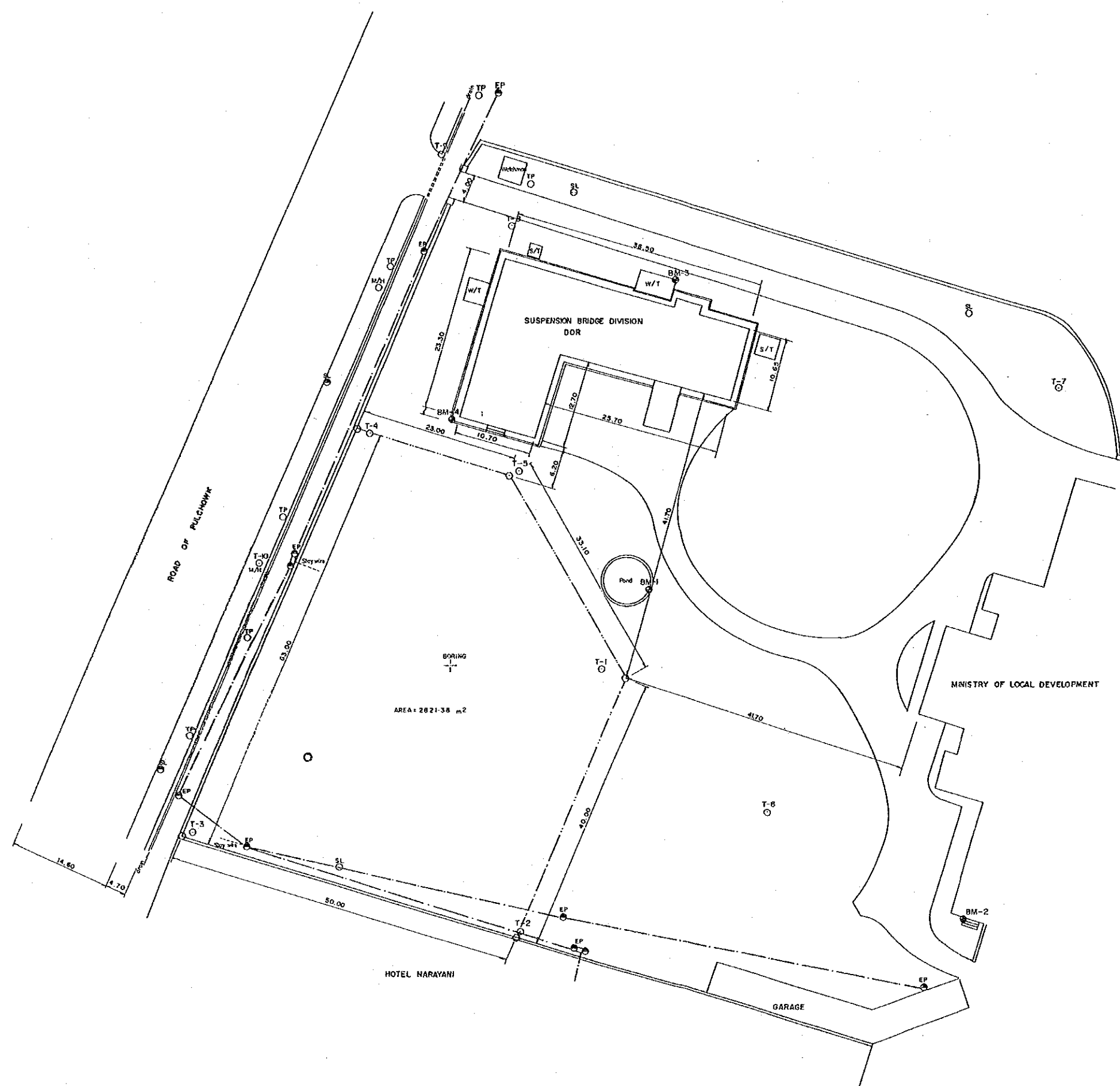
S.No.	DISTRICTS	NAME OF TOWN OR VILLAGE	DATE	TYPE OF DISASTER	HUMAN DEAD Nos.	INJURED Nos.	HOUSES DESTROYED Nos.	FAMILY AFFECTED Nos.	DAMAGE TO AGRILAND Hec.	LOSSES OF ANIMALS Nos.	DAMAGE TO PUB. LAND	ESTIMATED COST NRs.
71	Rukum	Shorakh-9	4 Sept	Landslide			2	2				23000
72	Rukum	Kholagau	23 June	Flood				49			Crops	262500
73	Rukum	Baphikot	24 Aug.	Flood				7				200000
74	Rukum	Bhurundanda	26 Aug.	Flood							1 School	100000
75	Rukum	Thuli VDC	31 Aug.	Landslide			3	71			28 Ghatta	400000
76	Sindhupalchok	Thokarpa	7 Aug.	Flood			1	1				25000
77	Sindhupalchok	Golche	15 July	Landslide			7	7		53		215000
78	Sindhupalchok	Sagachok	7 Aug.	Flood				1		1		1500
79	Sindhupalchok	Thulopakhar	4 Aug.	Landslide			1	1				20000
80	Sindhupalchok	Phulpingdanda	21 Aug.	Flood			1	1		1		15000
81	Sindhupalchok	Tatopani	10 July	F/L	1			1				
82	Sindhupalchok	Bhotserpa	24 Aug.	Landslide			1			1		
83	Solukhumbu	Densa	15 July	Landslide			10	70				
84	Solukhumbu	Chaurikharka	23 July	F/L								
85	Solukhumbu	Chaurikharka	21 July	Landslide			1	2				35000
86	Solukhumbu	Belghari	16 July	Landslide			4	4				71000
87	Solukhumbu	Pawal	7 July	Landslide	7		1	1				418430
88	Solukhumbu	Chaurikharka	19 July	Flood							5 Bridges	
89	Solukhumbu	Sotang-6	21 July	Landslide			7	7				220000
90	Solukhumbu	Sotang	4 July	Landslide	1		1	8				135000
91	Surkhet	Brendra nagar	9 Sept	Flood			3	33				37981
92	Syania	Keurai	2 Aug.	Landslide			1	1		4		45000
93	Tajlung	Khumlamboo	31 July	Flood						2		35000
94	Tajlung	Mamangkhe	31 July	Flood				1				22950
95	Tajlung	Tapechok	31 July	Landslide				20			Farm	722600
96	Tajlung	Khurumbu	4 July	Flood	1		1	1				
97	Tehrathum	Simle	14 July	Landslide			1			2		12000
98	Tehrathum	Jajale-8	14 July	Landslide				35	9.87			930000
99	Tehrathum	Thokulung	14 July	Flood	2			1				
100	Tehrathum	Bzulipawar	19 July	Landslide								500000
101	Udayapur	Rampurthokila-7	14 July	Landslide				3	0.76			23000
102	Udayapur	Gaighat	18 July	Flood	1			1				
Total					71	17	96	590	133.88	180		10736931

* NOTE : Dead/missing person which were reported to be 28 from a landslide at Jogimara, in Dhading district are unconfirmed.

APPENDIX 9 SURVEY MAP

— Pulchouk Site—

— Godawari Site —



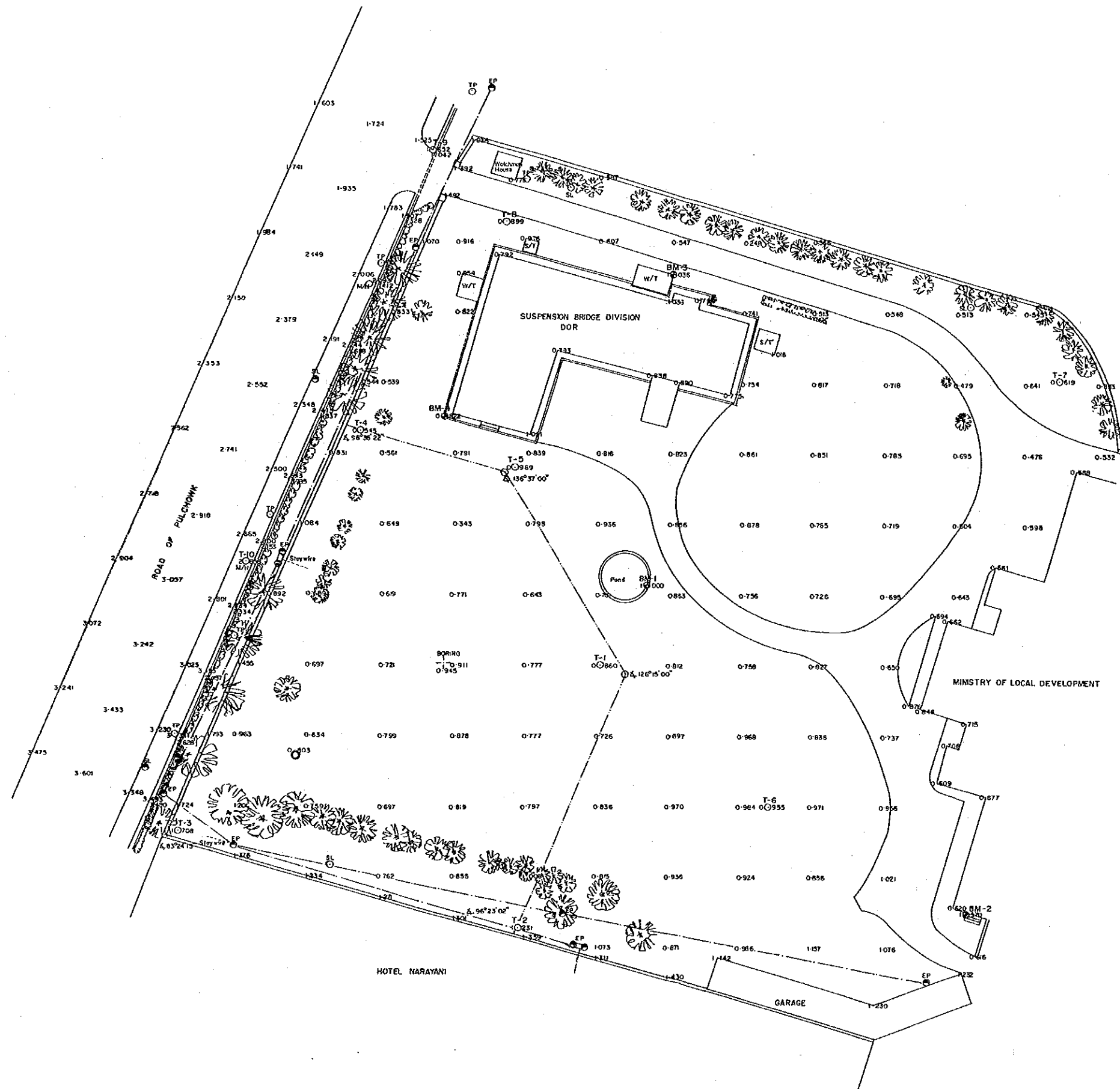
- LEGEND**
- T-1 ○ Traverse Point
 - New Point
 - BM-1 ● Benchmark
 - EP ● Electric Pole
 - EP ● Transformer
 - SL ● Street Light
 - OSL ○ Street Lamp (not in use)
 - OTP ○ Telephone Pole
 - Power Line
 - S/T Sepic Tank
 - W/T Water Tank
 - M/H Sener Man Hole
 - Boundary for Proposed Site

NEPAL WATER INDUCED DISASTER
PREVENTION TECHNICAL CENTRE
AT
PULCHOWK, LALITPUR

PROPOSED SITE FOR
MAIN BUILDING
AT
PULCHOWK, LALITPUR

DEC CO. (PVT) LTD.
G.P.O. BOX 3820, KATHMANDU, NEPAL

DESIGNED :	SURVEYED : R. L. THAPA
DRAWN : R. L. THAPA	CHECKED :
APPROVED :	SCALE : 1:300
DATE :	OWG. NO. :



LEGEND

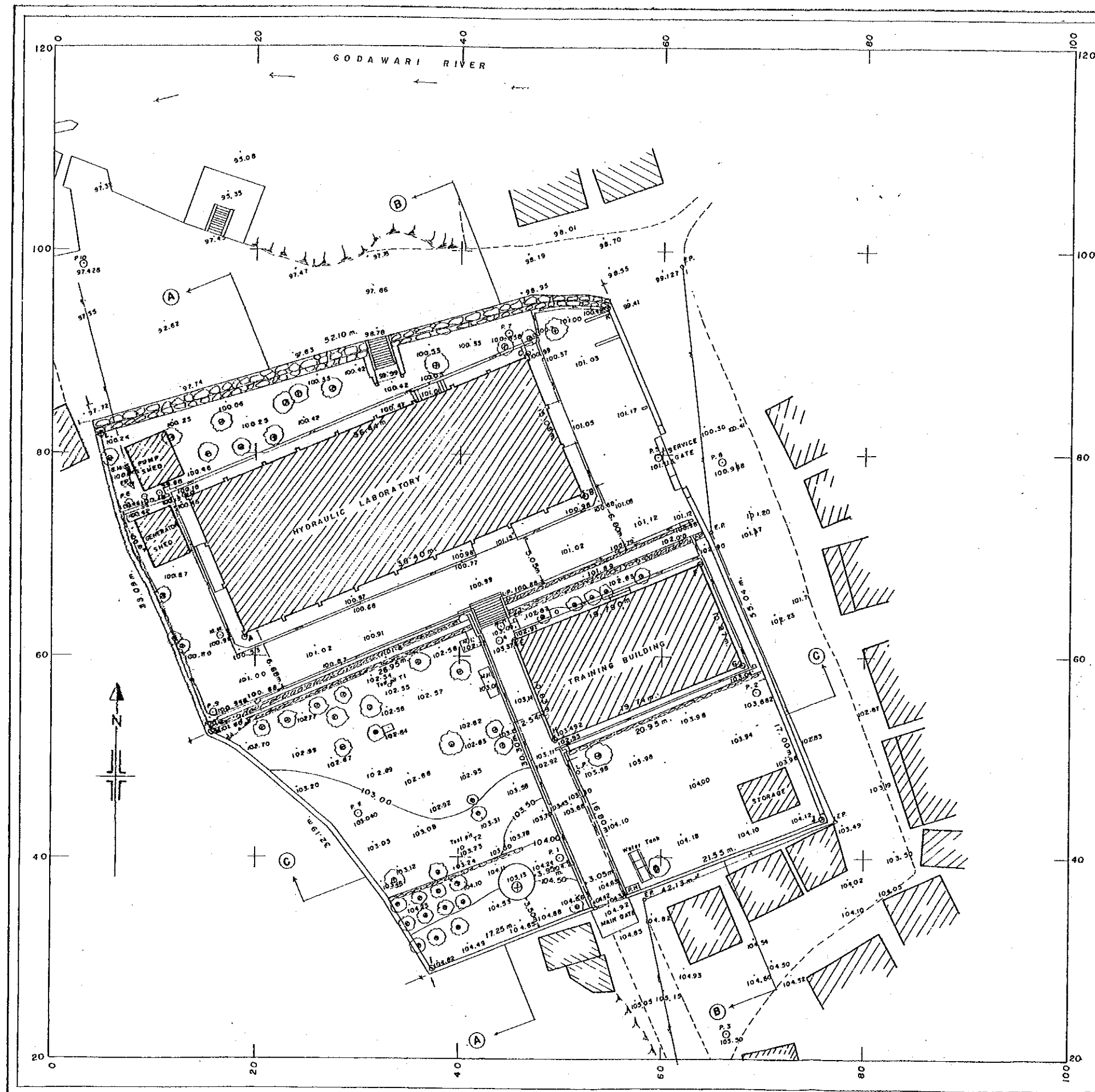
- 0.548 Spot Height
- T-1 0.860 Traverse Point, Elevation
- BM-1 0.000 Benchmark, Elevation
- EP Electric Pole
- EP Transformer
- SL Street Light
- SL Street Lamp (not in use)
- TP Telephone Pole
- 0.945 Boring, Elevation
- Power Line
- S/T Septic Tank
- W/T Water Tank
- M/H Sewer Man Hole
- Boundary for Proposed Site
- New Point

NEPAL WATER INDUCED DISASTER
PREVENTION TECHNICAL CENTRE
AT
PULCHOWK, LALITPUR

PROPOSED SITE FOR
MAIN BUILDING
AT
PULCHOWK, LALITPUR

DEC CO. (PVT) LTD.
G.P.O. BOX 3820, KATHMANDU, NEPAL

DESIGNED:	SURVEYED: R.L. THAPA
DRAWN: R.L. THAPA	CHECKED:
APPROVED:	SCALE: 1:300
DATE:	DWG. NO.:



LEGEND

BENCH MARK ...	+	B.M. 100.843
ROAD ...	---	
DRAIN ...	---	
TREES ...	(Circles with dots)	
BUILDING ...	---	
FOOT TRACK ...	---	
COMPOUND WALL ...	---	
ELECTRIC LINE ...	---	
PEG POINT ...	P.1, P.2, P.3, P.4	
FLOWER BED ...	---	
CONTOUR INTERVAL ...	0.50 m.	103.00

COORDINATE DIAGRAM

S.N.	Easting - X	Northing - Y	Reduced Level
1	50.000	40.000	104.230
2	69.302	58.512	103.882
3	66.478	22.443	103.500
4	43.894	81.530	103.370
5	59.514	79.715	101.113
6	63.797	79.262	100.858
7	44.734	91.803	100.659
8	7.477	74.992	100.461
9	15.768	54.208	100.946
10	3.011	98.653	97.428
11	30.121	44.294	103.040
SCA	19.003	81.740	
SCB	32.429	75.871	
SCC	48.833	89.783	
SCD	72.988	75.742	
SCE	49.820	51.819	
SCF	63.705	69.210	
SCG	67.857	59.172	
SCH	45.477	81.631	
CWCJ	37.401	28.929	
CWCI	75.789	44.013	
CWCK	54.339	94.441	
CWCL	4.717	81.807	
CWCM	19.889	52.251	

NEPAL WATER INDUCED DISASTER
PREVENTIVE TECHNICAL CENTRE
AT
GODAWARI LALITPUR

PROPOSED SITE FOR
TECHNOLOGY DEVELOPMENT BUILDING
AT
GODAWARI LALITPUR

TOPOGRAPHICAL SURVEY

FIELD SURVEYED: H.V. THAPA G.P. SHRESTHA	DEALT: H.V. THAPA
AREA: 3053.00 Sq.m. 6 Ropani 0 ana 0 pauso 0 dam	CHECKED: R.R. BAJRACHARYA
SCALE: 1:200	APPROVED:
DATE OF SURVEY: JUN 14-15/1993	JOB CODE:
JYATHA KATHMANDU	CHHUSYA BAHAL NEPAL
CONSULTANT:	PREPARED FOR BASIC DESIGN TEAM



CONSULTANT:
PREPARED FOR BASIC DESIGN TEAM

APPENDIX 10 PROJECT SITES PHOTOS

■ Pulchouk site - Main Building and Trainees' Dormitory



South-West View



South-East View

■ Godawari site - Technology Development Building



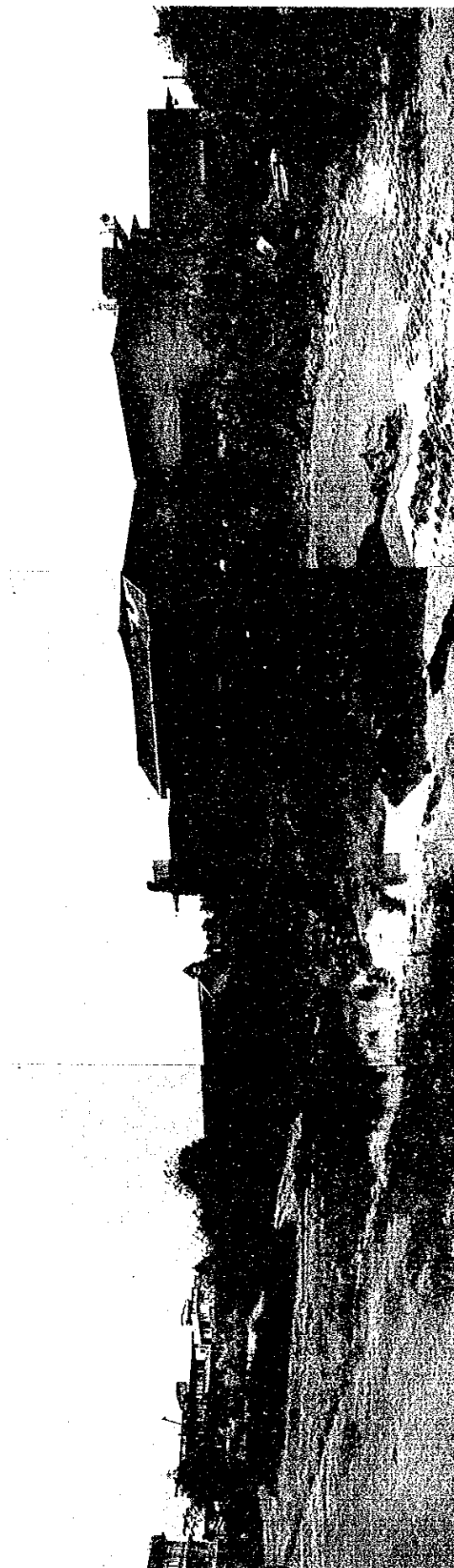
South View



West View

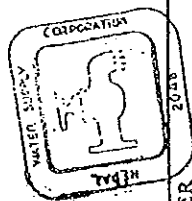


West View



South-East View

APPENDIX 11 WELL WATER AND CITY WATER QUALITY ANALYSIS TABLE



NEPAL WATER SUPPLY CORPORATION

Research and Quality Control Section
SCIENTIFIC SERVICES
CENTRAL LABORATORY, KIRTIPUR

Phone: 2-16148

NAME & ADDRESS OF SENDER Patan Nagary Palika	SOURCE OF SAMPLE N.W.S.C. Tap Water -	DATE OF ANALYSIS 05.02.27	LAB. NO C-47
		DATE OF RECEIPT 19/2/27	B.

LABORATORY REPORT

Results Expressed As mg/l.

Sl. No.	Parameter	Unit	Result	Sl. No.	Parameter	Unit	Result	Sl. No.	Parameter	Unit	Result
1	Appearance		Clear	24	Iron	mg/l	0.1	48	Free Chlorine	mg/l	0.2
2	Temperature	°C	23	25	Manganese	mg/l	0.05	49	Total Chlorine	mg/l	0.2
3	pH		8.1	26	Aluminium	mg/l	0.05	50			
4	Colour	° Hazen	15	27	Sodium	mg/l	0.05				
5	Turbidity	NTU	15	28	Potassium	mg/l	0.05				
6	Electrical Conductivity	ms/cm	0.209	29	Silica	mg/l	0.05				
7	Taste		0.209	30	Copper	mg/l	0.05				
8	Odour		0.209	31	Lead	mg/l	0.05				
9	Suspended Solids	115° C.	0.209	32	Zinc	mg/l	0.05				
10	Dissolved Solids	180° C.	0.209	33	Chloride	mg/l	0.209				
11	Total Solids	180° C.	0.209	34	Fluoride	mg/l	0.209				
12	Total Fixed Solids	700° C.	0.209	35	Sulphide	mg/l	0.209				
13	Settleable Solids	115° C.	0.209	36	Sulphate	mg/l	0.209				
14				37	Phosphate, Ortho	mg/l	0.209				
15	Free CO ₂	Ca CO ₃	0.209	38	Phosphate, Total	mg/l	0.209				
16	Total Alkalinity	Ca CO ₃	105.04	39	Ammonia Total	mg/l	0.209				
17	P. P. H. Alkalinity	Ca CO ₃	105.04	40	Ammonia Albuminoid	mg/l	0.209				
18	pH 4.5 Alkalinity	Ca CO ₃	105.04	41	Ammonia Free & Saline	mg/l	0.209				
19	Total Hardness	Ca CO ₃	130.56	42	Nitrite Nitrogen	mg/l	0.209				
20	Calcium Hardness	Ca CO ₃	130.56	43	Nitrate Nitrogen	mg/l	0.209				
21	Magnesium Hardness	Ca CO ₃	30.6	44	Dissolved Oxygen	mg/l	0.209				
22	Calcium	Ca	30.6	45	B. O. D.	mg/l	0.209				
23	Magnesium	Mg.	46.02	46	C. O. D.	mg/l	0.209				
			47	P. V. N/80 hrs	mg/l	0.209					

COMMENTS

Signature *N. P. P. H.*

Date 05.03.73

WATER SUPPLY AND SEWERAGE CORPORATION

Surveillance and Water Quality Control Section

SCIENTIFIC SERVICES

CENTRAL LABORATORY, KIRTI PUR

Phone : 2-16145

15 JAN. 1990

NAME & ADDRESS OF SENDER NISSAKU COMPANY (P) Ltd	SOURCE OF SAMPLE Borewell Water	DATE OF ANALYSIS 24.9.87	DATE OF RECEIPT 24.9.87	LAB. NO C. 069
--	---	------------------------------------	-----------------------------------	--------------------------

LABORATORY REPORT

Results Expressed in mg/l.

1	Appearance	24	Iron	48	Free Chlorine	Cl
2	Temperature °C	25	Manganese	49	Total Chlorine	Cl
3	pH	26	Aluminium	50		
4	Colour Hazen	27	Sodium			
5	Turbidity NTU	28	Potassium			
6	Electrical Conductivity mscm	29	Silica			
7	Taste	30	Copper			
8	Odour	31	Lead			
9	Suspended Solids 115° C.	32	Zinc			
10	Dissolved Solids 180° C.	33	Chloride			
11	Total Solids 180° C.	34	Fluoride			
12	Total Fixed Solids 700° C.	35	Sulphide			
13	Settleable Solids 115° C.	36	Sulphate			
14		37	Phosphate, Ortho			
15	Free CO ₂	38	Phosphate, Total			
16	Total Alkalinity	39	Ammonia Total			
17	P. P. H. Alkalinity	40	Ammonia Albuminoid			
18	pH 4.5 Alkalinity	41	Ammonia Free & Saline			
19	Total Hardness	42	Nitrite Nitrogen			
20	Calcium Hardness	43	Nitrate Nitrogen			
21	Magnesium Hardness	44	Dissolved Oxygen			
22	Calcium	45	B. O. D.			
23	Magnesium	46	C. O. D.			
		47	P. V. N/80 4hrs.			

51	Coliforms	56	Faecal Streptococci	MPN/100 ml.	MPN/100 ml.
52	E. Coli	57	Cl. Perfringens	MPN/100 ml.	MPN/100 ml.
53	Plate Count 24hr @37° C	58	Salmonella Sp.	MPN/litre	
54	Plate Count 72hr @22° C				

COMMENTS

Signature *R. S. Singh*
 Date 04.10.87
 Senior Chemist

**APPENDIX 12 WRITTEN CONSENT FROM
DEPARTMENT OF ROADS
— CONSTRUCTION OF THE GARAGE FOR HEAVY EQUIPMENT —**

TRANSLATION

HMG/N

MINISTRY OF WORKS & TRANSPORT

DEPARTMENT OF ROADS

MECHANICAL SECTION

Lett. No. : Mech/Misc/Ref No 33

Subject : Provision of space for storage of heavy equipments.

Water Induced Disaster Prevention Technical Centre
Khumaltar, Lalitpur.

Regarding the above mentioned subject a letter is received from that centre of dated 2050/3/3 (17th June, 1993) and lett. No. 049/50 Ref No. 531. By the order it is kindly informed that space will be provided at Heavy Equipment Division, Baneswor for the storage of heavy equipment which will be acquired by that centre. Further, terms of reference will be sent to that centre in near future regarding the operation and maintenance of the equipment including the construction of garage at the same place.

(Pramod Raj Pokharel)
Assistant Engineer

cc: Department of Roads
H. E. D., Baneswor.

