

DETAILED PROJECT REPORT
of
PHUD PHRA-PHUD TANGSHOT WATERSHED

UNDER
INTEGRATED WATERSHED MANAGEMENT PROGRAMME (IWMP)
PROJECT – IV (2013 – 2018)

RANIKOR C&RD BLOCK, SOUTH WEST KHASI HILLS DISTRICT, MEGHALAYA



PROJECT IMPLEMENTATION AGENCY (IWMP)
WEST KHASI HILLS DISTRICT
SOIL & WATER CONSERVATION DIVISION: NONGSTOIN

SUMMARY

Name of the State	:	Meghalaya
Name of the District	:	South West Khasi Hills District
Name of the C&RD Block	:	Ranikor
Name of the Villages	:	(i) Wahkaji (ii) Domiasiat (iii) Nongmalang (iv) Nongbah Jynrin (v) Mawthabah (vi) New Phanwer (vii) Langpa (viii) Phudumiap
Name of the Project	:	South West Khasi Hills – IWMP – IV
Total Geographical Area	:	7562 Ha
Total Treatment Area	:	5567 Ha
Total Project Cost	:	Rs. 835 Lakhs
Project Duration	:	5 Years
Project Implementing Agency	:	Soil & Water Conservation Division, Nongstoin.

A GLIMPSE OF PHUD PHRA – PHUD TANGSHOT WATERSHED (IWMP)



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CHAPTER I

INTRODUCTION AND BACKGROUND

1.1 Project Background:

The Phud Phra –Phud Tangshot Watershed (IWMP-IV) project is located in Ranikor C&RD Block ,South West Khasi Hills District of Meghalaya. Consisting of a single micro-watershed, the project area is drained by the Kynshi and Umrilang River where in the middle reaches –the area centrally located in the Watershed- this river is also locally known as the Phud Phra- Phud Tangshot River. Its tributaries flow in from North to South West direction. The total area is 7562 Ha. with 5567 Ha. to be treated under the Integrated Watershed Management Programme (IWMP-IV).

The Project area is located at a distance of about 65 km from Nongstoin, the District Headquarter of West Khasi Hills District. The geographical location is between 91° 9' 36.99" to 91° 16' 5.72" E Longitude and 25° 14' 33.67" to 25° 22' 22.76" N Latitude. The Project Area is not well connected. It is accessible by an all weather black-topped road only upto the Jyrhap village which is about 20 km from Nongstoin. From there-on, it is kuccha road, highly winding, rocky, making accessibility and transportation very difficult for the next 45 km upto the Phudumiap village, the last village accessible by kuccha road. Enroute from Jyrhap to Phudumiap (the village strategically located in the watershed), transportation is possible only by a jeep or a four-wheel drive where there is a need to cross the River Umjyrhap where there is bridge . Public transport is available only upto Phangdlion village. From here, villagers move by foot which easily takes time about two hours or more upto Phudumiap.

A total of eight (8) villages are covered under the project. These are:-

- | | |
|-------------------|---------------|
| 1. Wahkaji | 5. Mawthabah |
| 2. Domiasiat | 6 .Newphanwer |
| 3. Nongbah Jynrin | 7. Langpa |
| 4. Nongmalang | 8. Phudumiap |

1.2 Micro-watershed Information:

The micro-watershed code is 3C1B2r2a , 3C1B2r2b , 3C1B2r2d ,3C1B2r4a, 3C1B2r24b , 3C1B2r4c , 3C1B2r5d , 3C1B2q1a as codified by the North East Space Application Centre (NESAC) which are partially treated. The total area of the micro-watershed is 7562 Ha. with 5567 hectares to be treated under the Integrated Watershed Management Programme (IWMP-IV).

1.3 Need and Scope for Watershed Development:

The micro-watersheds 3C1B2r2a , 3C1B2r2b , 3C1B2r2d ,3C1B2r4a, 3C1B2r24b , 3C1B2r4c , 3C1B2r5d , 3C1B2q1a falls under the Medium to High Priority category as per the prioritization of watersheds by the North East Space Application Centre (NESAC). Topography of the project consist mostly of undulating rolling hills with moderate to steep slopes. The elevation ranges from 16 meters to 1400 meters above mean sea level. The Eastern side of the project area consists of hillocks from 542 meters to 584 meters or so thereby draining the watershed towards the eastern and western side, an area of lower elevation range of 22 meters to 37 meters. The centrally located area in the watershed has an elevation range of about 961 meters to 1001 meters above mean sea level.

A wide majority of the population of the project area is fully dependent on agriculture. The farmers are mostly marginal and practice mono-cropping where agro-horti forms the main crop. Adverse and unpredictable climatic condition, poor mobilization of resources and inadequate infrastructural facilities made agriculture an unprofitable and subsistence enterprise. Even though the area receives ample rainfall during the monsoons, there is acute shortage of water during the dry seasons.

Inspite of these problems, there are vast potentialities for the development of agriculture in the areas. Therefore, the project would undoubtedly boost living standards of the people of the area through agriculture and allied activities. Jhum cultivation is practiced by most of the inhabitants of these villages on the hill slopes.

1.4 Aim of the Project and Production Strategy/ Approach:

The aim of the Project is to scientifically managed the natural resources for achieving sustainable and enhanced production of the land so as to bring about overall upliftment of the socio-economic standard of the people in the watershed/project area.

Objectives:

- Enhance the productivity level of land and water resources in the context of agriculture and its allied activities.
- Improve the socio – economic setup of the people living in the project area.
- To achieve sustainable development through conservation and management of soil and water.
- Generate local employment – seasonal/perennial.
- And to reduce the disasters.

Keeping in view of the above objectives, the major thrust area being considered here is the approach to the programme in the form of its capability which will be acceptable to the local communities and which can sustain their livelihood for the present and the future generation through the cost effective measures. The strategy being conducted here is not for the context of sudden change of land use but instead land use changes should be gradual. Locally available materials and indigenous potential crops have been strongly advocated here.

Immediate necessity of the farmer communities in terms of their cereal requirement has been prioritized. The individual farm holding within the homes-stead has been given due important for improved production activities of integrated approach. Water resources management and conservation in the form of controlling measures and trapping of such resources for multi uses has been given due preference.

The people's participation and identification of the needs of the area is considered foremost. As far as possible, assets (such as check dam, water harvesting structures, channels) are build whereby a vast number of beneficiaries are benefitted and that can be cater to.

1.5 Other developmental projects/schemes running in the Project Area:

The other developmental projects/schemes undertaken in the Project Area are:-

- i. MGNREGS

CHAPTER II

BASIC INFORMATION OF THE PROJECT AREA

2.1 Location:

The Project area is located within Ranikor C&RD Block, South West Khasi Hills District. The Project area is located at a distance of about 65 km from Nongstoin, the District Headquarter of West Khasi Hills District. The geographical location is between 91° 9' 36.99" to 91° 16' 5.72" E Longitude and 25° 14' 33.67" to 25° 22' 22.76" N Latitude.

There are eight (8) villages within the Watershed which are as follows: –

1. Wahkaji
2. Domiasiat
3. Nongbah Jynrin
4. Nongmalang
5. Mawthabah
6. Newphanwer
7. Langpa
8. Phudumiap

2.1.2 Physiography:

The physiography of the micro-watersheds is moderate to highly undulating. The altitude ranges from a minimum of 22m to a high of 1310m above mean sea level. In the lower reaches (valley lands) and the eastern peripheral boundary of the watershed the slope ranges from 33% to 66% whereas in the mid reaches and the central part of the watershed, the slope ranges from 23% to 463% and 3° to 77°.

Table 2.1: Physiographic details

Elevation (metres)	Slope Range (%)	Slope Range (Degree)	Order of watershed Sub/Micro-watershed	Major streams	Topography
19 m to 1400 m	<23% to 463 %	3° to 77°	Micro Watershed	Phud Phra – PhudTangshot	Gentle to steep sloping

2.1.3 Drainage: The major stream draining the micro-watershed is the Phud Phra – Phud Tangshot which are the 4th order stream flowing in a South-West direction. The slopes of the micro-watershed are dissected by numerous small tributaries flowing to the Phud Phra – Phud Tangshot. The Drainage System may be classified as dendritic. The important rivers of the area are Phud Sawphew, Phud Sohphie, Phud Khyntro, Phud Tangshot, along with a number of tributaries and streamlets. It has been observed that few of these tributaries and streamlets are perennial in nature.

Drainage density calculated 5.48 Km/Km² & the average **bifurcation ratio** worked out is 4.18. The total length of all the streams/rivers is 305.314 Km (Ist Order to IVth Order). There are 365 First Order streams, 86 Second Order streams, 20 Third Order streams and 5 Fourth Order streams.

$$\text{Drainage Density} = \frac{\text{Total length of stream/rivers in the Watershed (Km)}}{\text{Area of Watershed (Km}^2\text{)}}$$

$$\text{Bifurcation Ratio} = \frac{\text{Previous streams order (Nos. of segments)}}{\text{Next Order (Nos. of Segments)}}$$

2.1.4 Soil: Soil are generally shallow with loam to sandy loam in surface texture which is attributed to deep weathering, leaching and eluviations. Soils are generally fairly well drained with moderate permeability. The soil reaction is acidic ranging from 4.02 to 4.70 as per soil Fertility Testing. Exposure to erosion hazard is moderately severe in the area.

Table 2.2: Details of soil erosion in the project areas:

1	2	3	4	5	6	7	8	9		
Sl. No.	Names of State	Names of District	Names of Projects	Cause	Types of erosion	Area affected (ha)	Run-off (mm/ year)	Average soil loss (Tonnes/ ha/ year)		
1	Meghalaya	South West Khasi Hills	South West Khasi Hills – IWMP IV	Water erosion:				7562	3200-3700	10.50 – 32.50
				a	Sheet					
				b	Rill					
				c	Gully					
				Sub total		7562	3200-3700			
Wind erosion				NA	NA	NA				

2.1.5 Climate: The climate in this area is humid subtropical (Sub-Montane), a typical characteristic representative of the Shillong Plateau Agro-Climatic Zone which is directly influenced by the South West Monsoon originally from Bay of Bengal and Arabian Sea. The whole year can be divided into four seasons – Summer, Monsoon (rainy), Autumn and Winter. The summer season extends from the last part of March to Mid May, is characterized by relatively high temperature, occasional thunder storms and high wind velocity. The rainy season commences with the onset of the south west monsoon in April/May and lasts until October/November, though it rains intermittently for the whole year but this is the wettest period of the year. The rainy season is followed by short Autumn from Mid October to November which is a sharp decline of temperature then the winter season starts which extends to the start of March. This is the coldest season of the year where winter is severe. The average rainfall in this area is 3050 mm.

Table 2.3: Agro-climatic zones of the project areas, soil types, average rainfall and major crops.

1	2	3	4	5	6	7		8	9	
Sl. No.	Name of State	Name of the Agro-climatic zone	Area (in ha)	Names of the districts	Names of the Projects	Major soil types		Average annual rainfall in mm (preceding 5 years' average)	Major crops	
						Type	Area (ha)		Name	Area (ha)
1.	Meghalaya	Cold Moisture, Hot Moisture, Mild moisture.	7562	South West Khasi Hills	South West Khasi Hills, IWMP – IV	Sandy Clay , Sandy Loam, Sandy Clay Loam	7562	3050	Paddy	56
									Betel Nut	110
									Betel Leaf	125
									Citrus	150
									Broom	450
									Black Pepper	175
									Maize	40
Total	1106									

2.1.6 Agriculture: The economy of the area is predominantly agrarian. Majority of the people of the region depends on Agriculture and allied activities. The people mostly practice jhum. In spite of the problems such as the geographical isolation, infrastructural deficiencies, socio – economic structures, etc there are potentialities for the development of agriculture in the areas. The main agriculture crops are paddy, maize varieties of chilies, pumpkin, Cauliflower, radish, squash, and variety of vegetables, etc

Horticulture: Orchard in a pure form does not exist in the watershed area but in a scattered manner fruit trees like betel nut, betel leaf, citrus, broom, black pepper, lemon, guava etc. are grown around their houses and in the same terraces in farm area. The condition of the fruit trees are not good and mostly are local varieties and stocking is poor. Due to inadequate management, yield and income from the fruit trees is not satisfactory.

Table 2.4: Crop yield and production

Crops	Area (ha)	Average Yield (Quintal per Ha.)	Total Production (Qtl.)
Paddy	56	18	1008
Betel Nut	110	10	1100
Betel Leaf	125	12	1500
Citrus	150	44	6600
Broom	450	10	4500
Black Pepper	175	6	1050
Maize	40	10	400
Total	1106	110	16158

2.1.7 Natural Vegetation: Natural Vegetation of the project area is fairly poor due to tremendous biotic factors such as recurring fire hazards, overgrazing and browsing. Over exploitation of timber and fuel wood particularly the jhum cultivation practices and charcoal burning etc. have destroyed the economical species and left scrub vegetation in most of the area. The following species area available in the Watershed area:

- *Pinus kesiya* (Diengkseh)
- *Schima wallichii* (Diengngan)
- *Michelia champaca* (Diengrai)
- *Quercus spp.* (*dieng sning, dieng sai*)
- *Toona ciliata*
- *Alnus spp.*
- *Betula alnoides* (*dieng lieng lieh*)
- Bamboo
- *Castanopsis spp* (*Diengstap, dieng sohot*)
- *Emblica spp* (gooseberry)

2.1.8 Socio-Economic Profile: The Socio – Economic set up of the people in the area is very poor. Although Agriculture is the main stay of the people, this sector could barely meet their livelihood requirements as it is largely mono – agriculture and low productivity of the land. The average Annual Income is about Rs.36500/- per family.

Demographic Status: The total population of the Watershed is 1877 attributed to 261 families of which 929 are males and 948 are females. The average size of the family is 5. The entire population is tribal, predominantly belonging to the Khasi Tribe.

The detail of the household in each of the villages in the watershed project is as follows:

Sl. No.	Villages	No. of Households	Population		Total
			Male	Female	
1	Wahkaji	104	381	392	773
2	Domiasiat	7	25	31	56
3	Nongbah Jynrin	10	36	39	75
4	Nongmalang	30	97	112	209
5	Mawthabah	23	83	89	171
6	Newphanwer	24	49	34	83
7	Langpa	25	70	67	137
8	Phudumiap	45	188	184	372
	TOTAL	268	929	948	1877

Infrastructure facilities :

- **Roads:** The Project Area is not well connected. It is accessible by an all weather black-topped road only upto the Jyrhap village which is about 20km from Nongstoin. From there-on, it is kuccha road, highly winding, rocky, making accessibility and transportation very difficult for the next 45 km upto the Phud Umiap village, the last village accessible by road. Along the way, there is a need to cross the River Umjyrhap where there is bridge yet making transportation possible only by a jeep or a four-wheel drive. Public transport is available only upto Phlangdiloin village. From here, villagers move by foot which easily takes time about two hours or more upto Phudumiap.
- **School:** There are several schools in the Project area which includes Lower Primary, Upper Primary and a Secondary School at Wahkaji. They are both Government schools and privately managed.
- **Electricity :** Nongmalang have no electric power connection yet.
- **Health :** Health care facility is poor. The only health care facilities available is from the Govt. Public Health Centre which is situated at Wahkaji village where there is doctor and nurses.
- **Water Supply :** PHE's drinking Water Supply facility is there at Wahkaji while in all other villages they have to rely on natural water resources by fetching water from some distances. However, during lean seasons water supply is erratic and entire population have to depend on springs and other natural sources.
- **Market Facility:** Market is available for disposal of their farm produce and forest produce in once a week at Umdohlun or the people come to Nongstoin and Mawkyrwat for the weekly marketing on market days.

Table 2.5: Infrastructure Status.

1	2	3		4			
Name of District	Name of Project	Parameters:		Status			
South West Khasi Hills	South West Khasi Hills – IWMP IV	(i)	No. of villages connected to the main road by an all-weather road.	All the villages are connected by an all-weathered road but only by a kutchra road, except Nongmalang			
		(ii)	No. of village provided with electricity	7 nos. except Nongmalang			
		(iii)	No. of households without access to drinking water	181 No.			
		(iv)	No. of educational institutions: Primary (P)/ Secondary (S)/ Higher Secondary (HS)/ Vocational institution (VI)	(P)	(S)	(HS)	(VI)
				12	1	Nil	Nil
		(v)	No. of village with access to Primary Health Centre	1			
		(vi)	No. of village with access Veterinary Dispensary	Nil			
		(vii)	No. of village with access Post Office	Nil			

1	2	3		4			
		(viii)	No. of village with access Banks	Nil			
		(ix)	No. of village with access Markets/ mandis	Nil			
		(x)	No. of village with access Agro-Industries	Nil			
		(xi)	Total quantity of surplus milk	Nil			
		(xii)	No. of milk collection centres (e.g. Union (U)/ Society (S)/ Private agency (PA)/ Others (O))	(U)	(S)	(PA)	(O)
				Nil	Nil	Nil	Nil
		(xiii)	No. of villages with access to Aganwadi Centres	5 No.			
		(xiv)	Any other facilities with no. of villages (please specify)	-			

2.1.9 Livestock: The important livestock of the Watershed includes Cattle rearing, Piggery, Poultry, Goatery, Horse rearing, Pisciculture, etc.,. Most of the livestock are farmed at a small scale and reared for meat purpose and domestic consumption only. Bee-Keeping or Apiculture are also taken by few of the villagers in the project area.

Table 2.6: Existing livestock population

Type of Animal	Population
Cattle (Cows)	489
Goats	285
Piggery	198
Poultry	1747
Horse	33

2.1.10 Land ownership: There are primarily two types of land holding system, namely private lands (Ri Kynti i.e. individually owned land) and community lands (Ri Kur i.e. clan land and Ri Raid i.e. village community land).

Table 2.7: Land Holding:

1 Name of District	2 Name of the Project	3 Types of Farmer	4 No. of households	5 No. of BPL households	6 Land holding (ha)		
					Irrigated	Rainfed	Total
South West Khasi Hills	South West Khasi Hills – IWMP IV	(i) Large	48	156		630	630
		(ii) Small	99			530	530
		(iii) Marginal	78			490	490
		(iv) Landless	43			0	0
		Sub – Total	268	156		1650	1650

Table 2.8 : Common Property Resources in the Project Area:

1 Name of District	2 Name of the Projects	3 CPR Particulars	4 Total Area (ha) Area owned / In possession of				5 Area available for treatment (ha)			
			Pvt. Person	Govt. (specify deptt.)	PRI	Any other (Community)	Pvt. Person	Govt. (specify deptt.)	PRI	Any other (Community)
South West Khasi Hills	South West Khasi Hills – IWMP VIII	(i) Wasteland/ degraded land	720			3510	720			3185
		(ii) Pastures	10				10			
		(iii) Private Agriculture land	600			1050				
		(iv) Village woodlot	20				20			
		(v) Forest	700			932	700			932
		(vi) Village Ponds/ Tanks								
		(vii) Community Buildings		5(PHE,PWD, PHC,Govt Schools)						
		(viii) Weekly Markets								
		(ix) Permanent Markets								
		(x) Temples/ Places of worship				12 Nos / 6 Ha				
		(xi) Others (Built-up, Streams)(specify)				9				
			Total		2050	5		5507	1450	

2.1.11 Land use and land cover : As per the land use land cover map generated by NESAC, Meghalaya from Satellite Image taken during 2005 – 2006 (LISS – III, Image) the Watershed area has been broadly classified into the following land uses.

a) Agricultural	=	10 Ha
b) Barren	=	727 Ha
c) Broom	=	1509 Ha
d) Builtup	=	33 Ha
e) Mixed Plantation	=	1553 Ha
f) Open forest	=	2688 Ha
g) Scrub	=	925 Ha
h) Water bodies	=	117 Ha
Total	=	7562 Ha

2.2 Problems of the Area: The problem of the area of the Watershed as in the general common problems in the state is the un-repairable exploitation of natural resources like soil, water and vegetation. The entire watershed suffers from problems of mismanagement of lands; unscientific land use, frequent forest fires, indiscriminate tree felling, uncontrolled grazing, charcoal burning etc. have already given rise to much soil erosion and increase runoff in the area. Jhumming, the unscientific method of cultivation has not only reduced the Jhum cycle, low crop yield but had adversely affected the ecological balance within the area. Lack of Awareness and Knowledge on improved agricultural practices, low marketing potential and unutilized Wastelands adds to the already existing problems.

In addition to the above mentioned problems, farmers' unawareness of the seriousness of the problem of mismanagement of land hence their lack of motivation and willingness to change their tradition method of farming and adopt another alternative and sustainable method of farming in arable land is another hurdle. Lack of extension, demonstration and infrastructure facilities also contributed to low yield in agriculture production.

The aforesaid problems identified through Participatory Rural Appraisal (PRA) Exercises need to be integrated in the process of farming of land use which will be acceptable to the village communities as a whole.

CHAPTER III

PROJECT PLANNING & INSTITUTION BUILDING

3.1.1 Scientific Planning

- i) Base Line Survey: To establish a benchmark for assessing the impact of any intervention (pre-project & post project) a baseline survey is essential. The baseline survey included household census & socio-economic survey by using structured and semi –structured questionnaires, bio-physical survey to identify and assess the status of natural resources in the project area. Base line data and information obtain from various authentic sources of Government and Semi Government Institutions were incorporated in the course of preparation of Detailed Project Report.
- ii) Participatory Rural Appraisal: To further obtain information on the project area, the people, resources, various PRA techniques like resource mapping, social mapping, seasonal calendars, matrix ranking, Venn diagrams were used.
- iii) GIS & Remote Sensing: To facilitate the process of prioritization and planning Geographic Information System was use. The land use and land cover (LULC) maps were prepared by the North Eastern Space Application Centre (NESAC) using the LISS III images (2006). The activities were located on the field by using GPS and accordingly transferred to the maps on GIS platform.

Table 3.1: Details of Scientific Planning and Inputs in IWMP projects:

1	2	3
Sl.No.	Scientific criteria/ inputs used	No. of projects in which scientific criteria were used
A.	Planning	
	Cluster approach	Yes
	Whether technical back-stopping for the project has been arranged? If yes, mention the name of the Institute.	NESAC, Nongsder., NIRD, Guwahati
	Baseline survey	Yes
	Hydro-geological survey	No
	Contour mapping	Yes
	Participatory Net Planning (PNP)	Yes
	Remote sensing data-especially soil/ crop/ run-off cover	Yes
	Ridge to Valley treatment	Yes
1	2	3
	Online IT connectivity between	
	(1) Project and DRDA cell/ZP	No
	(2) DRDA and SLNA	No
	(3) SLNA and DoLR	Yes
	Availability of GIS layers	
	1. Cadastral map	NA
	2. Village boundaries	NA
	3. Drainage	Yes
	4. Soil (Soil nutrient status)	Yes
	5. Land use	Yes
	6. Ground water status	No
	7. Watershed boundaries	Yes
	8. Activity	Yes
	Crop simulation models [#]	NA

	Integrated coupled analyzer/ near infrared visible spectroscopy/ medium spectroscopy for high speed soil nutrient analysis	NA
	Normalized difference vegetation index (NDVI)#	Yes (NA)
	Weather Stations	Nongstoin AW Station
B.	Inputs	
	1. Bio-pesticides	No
	2. Organic manures	Yes
	3. Vermi-compost	Yes
	4. Bio-fertilizer	Yes
	5. Water saving devices	Yes
	6. Mechanized tools/ implements	No
	7. Bio-fencing	Yes
	8. Nutrient budgeting	No
	9. Automatic water level recorders & sediment samplers	NA
	Any other (please specify)	-

31.2 Project Implementing Agency (PIAs):

The PIA is the Soil & Water Conservation Territorial Division, Nongstoin, West Khasi Hills District of Meghalaya. The Project Manager is be the Divisional Soil and Water Conservation Officer and will be assisted by an Asst. Soil & Water Conservation Officer along with WDT members in which expertise is drawn from the relevant fields for achieving smooth and successful implementation of the project.

1	2	3	
Names of Districts	Names of projects	Details of PIA	
South West Khasi Hills	South West Khasi Hills – IWMP IV	(i) Type of organization	Government Agency
		(ii) Name of organization	Soil & Water Conservation Division, Nongstoin
		(iii) Designation & Address	Divisional Soil & Water Conservation Officer, Nongstoin, West Khasi Hills, Meghalaya.
		(iv) Telephone	0364 – 280236
		(v) Fax	0364 - 280236
		(vi) E-mail	soilnwatercon.ngn@gmail.com

3.2 Institution Building

i) Watershed Committee (WC):

The Watershed Committee of the Phud Phra –Phud Tangshot Watershed IWMP - IV was constituted with the active involvement of the villagers with strong support of the Traditional Institutions (Village Durbar/Council). The Phud Phra –Phud Tangshot Watershed Committee has been registered under the Society Registration Act 1983.

Table 3.2: Details of Watershed Committees (WC) :

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19			
Names of the Districts	Names of projects	Names of WCs	Date of Registration as a Society (dd/mm/yyyy)	Name	Village	Designation	M/F	SC	ST	SF	MF	LF	Landless	UG	SHG	GP	Any other	Educational qualification	Function/s assigned#		
West Khasi Hills District	West Khasi Hills District IWMP – VIII	Kynthroin WC		Shri. Hesdingland Lyngdoh	Mawthabah	Chairman	M	-	ST			√			√		Business	X	A,B,C,D,E,G,H,I		
				Shri. M.C.Lyndem		Secretary	M		ST									Range Officer	XII	A,B,C,D,E,F,G,H,I	
				Shri.Prophet Shyrman	Phudumiap	Member	M	-	ST			√					√		Farmer	IX	A,B,E
				Shri.Mombaten Jakit	Phudumiap	Member	M	-	ST			√					√		Farmer	VIII	A,B,E
				Shri. Orestarwell L Sohlang	Langpa	Member	M	-	ST			√					√		Teacher	X	A,B,E
				Shri. Pailestar Myrthong	Newphanwer	Member	M	-	ST			√					√		Business	IX	A,B,E
				Shri. Weslandly Sangriang	Mawthabah	Member	M	-	ST			√					√		Teacher	XII	A,B,E
				Shri. Jespar Nongphlang	Nongmalang	Member	M	-	ST			√					√		Farmer	III	A,B,E
				Smti. Lastone Lyngdoh Sangriang	Nongbah Jynrin	Member	F	-	ST			√							Farmer	III	A,B,E
				Shri. Stikshon Syrman	Domiasiat	Member	M	-	ST		√								Farmer	VI	A,B,E
				Shri. Edira Lyngdoh	Wahkaji	Member	M	-	ST		√								Farmer	VI	A,B,E
				Smti.Lesbidan Lyngdoh Sangriang	Wahkaji	Member	M	-	ST								√		Farmer	IX	A,B,E
				Smti. Rebica Lyngdoh Sangriang	Mawthabah	Member	F	-	ST										Farmer	III	A,B,E

- | | | | |
|----|---|----|---------------------------------------|
| A. | <i>PNP and PRA</i> | F. | <i>Cost Estimation</i> |
| B. | <i>Planning</i> | G. | <i>Verification & Measurement</i> |
| C. | <i>Maintenance of Accounts</i> | H. | <i>Record of labour employed</i> |
| D. | <i>Signing of cheques and making payments</i> | I. | <i>Social Audit</i> |
| E. | <i>Supervision of construction activities</i> | J. | <i>Any other (please specify).</i> |

ii) Self Help Group

Awareness Programmes were organized in the villages to inform and sensitize the people on the essence of organizing themselves in to homogenous groups for uplifting their livelihood especially the under privilege - for the women and the landless. Discussions were held at length with the WDT for organizing training and capacity building on the scope and procedure of group formation, availing credit, grading of the groups and so on.

Table 3.3: Details of Self Help Groups (SHGs) in the project areas:

1 Names of the Districts	2 Names of projects	3 Total no. of registered SHGs				4 No. of members				5 No. of SC/ST in each category			6 No. of BPL in each category		
		With only Men	With only Women	With both	Total	Categories	M	F	Total	M	F	Total	M	F	Total
South West Khasi Hills	SWKH. IWMP-IV		-			(i) Landless									
						(ii) SF									
						(iii) MF									
						(iv) LF									

* (M – Male., F – Female)

** From Column no. 2,3 and 4, total no. of states, District and projects, respectively, from column 5 to 8, category-wise grand totals, may be given for the entire country at the end of the table.

iii) User Group

To manage the assets created and ensure their sustainability User Groups will be formed. The people have been sensitized on the importance of ensuring that the assets created are sustainably used and the essentiality of having User Groups for maintenance and operation of their assets.

Table 3.4: User Group Details

1 Names of Districts	2 Names of Projects	3 Total no. of UGs				4 No. of members				5 No. of SC/ST in each category			6 No. of BPL in each category		
		Men	Women	Both	Total	Categories	M	F	Total	M	F	Total	M	F	Total
South West Khasi Hills	SWKH IWMP-IV					(i) Landless									
						(ii) SF									
						(iii) MF									
						(iv) LF									
Total															

* (M – Male., F – Female)

** From Column no. 2,3 and 4, total no. of states, District and projects, respectively, from column 5 to 8, category-wise grand totals, may be given for the entire country at the end of the table.

CHAPTER IV PROJECT ACTIVITIES

4.1 Preparatory Phase:

i) Entry Point Activities (EPA):

(Financial – Rs. in lakh)

1	2	3					
Name of the Project	Amount earmarked for EPA	Entry Point Activities planned					
		Sl No	Name of Village	Location	Name of work	Amount	Geographical Location
Phud Phra- Phud Tangshot Watersh IWMP-IV, South West Khasi Hills	33.40	1	Wahkaji	Phot Risa	R.C.C Checkdam	5,11,290	N 25°21'9.55" E 91°15' 4.11" Elevation:- 1292 m
		2	Wahkaji	Phot Risa	Drinking Well Mission	1,26,000	N 25° 21' 9.5" E 91° 15' 4.25" Elevation:-1292 m
		3	Domiasiat	Phot Urthlong	Water Harvesting	6,12,820	N 25° 20' 36.7" E 91° 13' 34.0" Elevation:-1001 m
		4	Nongmalang	Phot Rit	Drinking Well	1,26,000	N 25° 19' 7.33" E 91° 9' 8.57" Elevation:- 635 m
		5	Nongbah Jynrin	Nongbah Jynrin	Water Tank	4,16,130	N 25° 19' 16.3" E 91° 12' 14." Elevation:- 769 m
		6	Mawthabah	Phot Umlaru	R.C.C Checkdam	4,81,140	N 25° 17' 8.53" E 91° 10' 3.02" Elevation:- 487 m
		7	Phud Umiap	Phud Sah	Public Check Dam	4,29,530	N 25° 16' 32.8" E 91° 13' 22.7" Elevation:- 567 m
		8	Langpa	Phud Tangshot	Public Check Dam	5,11,290	N 25° 16' 20.7" E 91° 13' 39.3" Elevation:- 500 m
		9	Langpa	Phud Rangkhlieh	Drinking Well	1,26,000	N 25° 16' 22.7" E 91° 13' 35.4" Elevation:- 532 m

ii) Other activities of Preparatory Phase:

1	2	3	4	5	6	7
Initiation of village level institution	Capacity building	IEC activities	Baseline survey	Hydro-geological survey	Identifying technical support agencies	Resource agreements

4.2 Watershed Works Phase:

4.2.1 Activities related to surface water resources in the project areas:

1	2	3			4												
		Pre-Project			Proposed Project									Total target			
		No.	Area irrigated (Ha.)	Storage capacity (m ³)	Augmentation/repair of existing structures				Construction of new structures								
No.	Area to be treated (ha.)				Storage capacity (m ³)	Estimated cost (in Lakhs)	No.	Area to be treated (ha.)	Storage capacity (m ³)	Estimated cost (in Lakhs)	No.	Area to be treated (ha.)	Storage capacity (m ³)	Estimated cost (in Lakhs)			
Phud Phra-Phud Tangshot Watershed, IWMP-IV South West Khasi Hills.	(i) Tank									6	12.5	1080	12.9382	.	12.5	1080	12.9382
	(ii) Pond (Dug-Out)									4	16.0	2800	6.4072	4	16.0	2800	6.4072
	(iii) Rain Water Harvesting									14	7	2520	30.60148	14	7	2520	30.60148
	(iv) Check Dam									19	66.5	1140	83.72714	19	66.5	1140	83.72714
	(v) Percolation Tank									4	2	800	9.31393	4	2	800	9.31393
	(vi) Drinking Well									2	6	60	5.53861	2	6	60	5.53861
	(vii) Any other (specify)																
	- Protection Wall									20			88.26341	20			88.26341
	- Water Harvesting Structures									5	26	8400	23.23569	5	26	8400	23.23569
TOTAL									74 Nos			260.02566	74 Nos			260.02566	

4.2.2. Activities related to recharging ground water resources in the project areas:

1	2	3		4							
		Pre-Project		Proposed Project							
		N o.	Area irrigated (Ha.)	Augmentation/repair of existing recharging structures			Construction of new recharging atructures			Total target	
No.	Area to be irrigated (Ha.)			Estimated cost	No.	Area to be irrigated (Ha.)	Estimated cost	Area to be irrigated (Ha.)	Estimated cost		
Phud Phra-Phud Tangshot Watershed, IWMP-IV South West Khasi Hills.	(i) Drinking wells						2	6	5.53861	6	5.53861
	(ii) Bore wells										
	(iii) Any others (Pls. specify)										
	1. Dug-out Pond						4	16	6.4072	16	6.4072
	2. Water Harvesting						5	26	23.23569	26	23.23569
	3. Check Dam						19	66.5	83.72714	66.5	83.72714
	TOTAL FOR THE PROJECT						30	114.5	118.90864	114.5	118.90864

4.2.3 User Groups in the Project Areas.

The Watershed Committee (WC) shall also constitute User Groups in the watershed area with the help of WDT. These shall be homogenous groups of persons most affected by each work/ activity and shall include those having land holdings within the watershed areas. Each User Group shall consist of those who are likely to derive direct benefits from a particular watershed work or activity.

The Watershed Committee (WC) with the help of the WDT shall facilitate resource-use agreements among the User Groups based on the principles of equity and sustainability. These agreements must be worked out before the concerned work is undertaken. It must be regarded as a pre-condition for that activity. The User Groups will be responsible for the operation and maintenance of all the assets created under the project in close collaboration with the Village Dorbar.

4.2.4 Self Help Groups (SHGs) in the project areas:

The Watershed Committee shall constitute SHGs in the watershed area with the help of WDT from amongst poor, small and marginal farmer households, landless/assetless poor agricultural labourers, women, farmers and ST persons. The Phud Phra – Phud Tangshot Watershed has so far constituted 6 SHG. It plans to initiate forming of 5 more. The Phud Phra – Phud Tangshot Watershed in this respect has already organised SHG Training to help people be aware of the concept and scope of SHG formation. These Groups shall be homogenous groups having common identity and interest who are dependent on the watershed area for their livelihood.

Awareness Programmes were organized in the villages to inform and sensitize the people on the essence of organizing themselves in to homogenous groups for uplifting their livelihood especially the under privilege – for the women and the landless. Discussions were held at length with the WDT for organizing training and capacity building on the scope and procedure of group formation, availing credit, grading of the groups and so on.

Table 4.2.3 Other activities of watershed works phase:

1 Names of project	2 Ridge area treatment		3 Drainage line treatment		4 Nursery raising		5 Land development		6 Crop demonstrations		7 Pasture development		8 Veterinary services		9 Fishery development		10 Non-conventional energy		11 Any other (please specify)		12 Total Estimated Cost
	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)			
	Phud Phra-Phud Tangshot Watershed, IWMP-IV South West Khasi Hills.	2439.49 Ha	178.59828	73 Nos	260.02566			117 Ha/ 3962 Rm	18.7542/2.09986	163 Units	8.15										

Table 4.2.4 Details of engineering structures in watershed works:

1	2	3			4			5		
Project	Name of Structures	Type of Treatment			Type of land			Target		
		(i) Ridge area (R)	(ii) Drainage line (D)	(iii) Land Dev. (L)	(i) Private	(ii) Community	(iii) Others (pl. specify)	No. of units (No. / cum / rmt.)	Estimated cost (Rs. in lakh)	Expected month & year of completion (mm/yyyy)
Phud Phra-Phud Tangshot Watershed, IWMP-IV South West Khasi Hills.	Contour bund			L	P			61 Ha	9.699	03/2017
	Peripheral bunding			L	P			3962 Rm	2.09986	03/2017
	Protection wall		D		P	C		20 Nos	88.26341	03/2017
	Rain Water harvesting		D		P			14 Nos	30.60148	03/2017
	Water tank		D			C		6 Nos	12.9382	03/2017
	Drinking Wells		D			C		2 Nos	5.53861	03/2017
	Underground dykes									
	Any others (Pls. specify)									
	Percolation Tank		D		P			4 Nos	9.31393	03/2017
	Check Dam		D			C		19 Nos	83.72714	03/2017
	Water Harvesting Structures		D			C		5 Nos	23.23569	03/2017
Dug-out Pond		D		P			4 Nos	6.4072	03/2017	

4.2.5 Details of activities connected with vegetative cover in watershed works:

1	2	3			4			5			
Project	Name of structure / work	Type of Treatment			Type of Land			Target			
		(i) Ridge area (R)	(ii) Drainage Line (D)	(iii) Land Dev. (L)	(i) Private	(ii) Community	(iii) Others (pl. specify)	Area (Ha.)	No. of plants	Estimated cost (in lakh)	Expected month & year of completion (mm/yyyy)
Phud Phra-Phud Tangshot Watershed, IWMP-IV South West Khasi Hills	Afforestation	R			Pvt	C		948 Ha		95.9376	03/2017
	Improvement of paddy field	R			Pvt			56 Ha		9.0552	03/2017
	Agro –Horticulture	R			Pvt			559.49 Ha		48.11614	03/2017
	Improvement of Degeraded Forest	R			Pvt	C		833 Ha		30.3212	03/2017
	Strip Plantation	R			Pvt	C		99 Ha		4.22334	03/2017

in case two or more activities are executed over same area, the figures in area treated should be accounted only once and should reflect only the actual watershed area treated.

4.2.6 Details of allied / other activities: (Livelihood Activities)

1 Project	2 Name of activity Units		3			4	
			Type of land			Target	
			(i) Private	(ii) Community	(iii) Others (Landless)	Estimated cost (in lakhs)	Expected month & year of completion (mm/yyyy)
Phud Phra-Phud Tangshot Watershed, IWMP-IV South West Khasi Hills.	Tailoring/Knitting	132	P			11.8	03/2017
	Carpentry	97	P			5.82	03/2017
	KitchenGarden	154	P			3.8495	03/2017
	Vermi composting	147	P			18.375	03/2017
	Apiculture	66	P			5.28	03/2017
	Hollow Block Making	2	P			0.08	03/2017
	Piggery	80	P			10.80	03/2017
	Poultry	44	P			3.52	03/2017
	Pisciculture	3	P			0.30	03/2017
Goatery	122	P			15.25	03/2017	

4.2.7 Details of allied / other activities: (Production System of Micro Enterprise)

1 Project	2 Name of activity Units		3			4	
			Type of land			Target	
			(i) Private	(ii) Community	(iii) Others (Landless)	Estimated cost (in lakhs)	Expected month & year of completion (mm/yyyy)
Phud Phra-Phud Tangshot Watershed, IWMP-IV South West Khasi Hills	Poultry farming	17	P			5.10	03/2017
	Piggery farming	6	P			1.80	03/2017
	Grocery Shop	22	P			6.60	03/2017
	Mushroom Cultivation	2	P			0.70	03/2017
	Cattle Rearing	109	P			59.50	03/2017
	Fruit /Food Processing	3	P			1.485	03/2017
	Fabrication	1	P			0.52	03/2017
	Goat rearing	26	P			7.80	03/2017

* from column no. 2, no. of States; from column no. 3, no. of Districts; from column no. 4, total no. of Projects; from column no. 5, activity-wise totals, from column no. 6, type-wise totals, from column no. 7, agency-wise totals, from column no. 8, total estimated cost, from column no. 9, total expenditure incurred, structure-wise no. of completed works, from column no. 10, item-wise totals, for the entire country may be indicated at the end of the table

@ The activities given in this column are merely indicative and States are free to choose any other activity suited to the project area.

4.3 Consolidation and withdrawal phase

Details of activities in the CPRs in the project areas:

1	2	3	4	5			
Names of project	Name(s) of villages	CPR particulars	Activity proposed	Target			
				Target area under the activity (Ha.)	Estimated expenditure (in lakh)	Expected no. of beneficiaries	Estimated contribution to WDF (in lakh)
Phud Phra-Phud Tangshot Watershed, IWMP-IV South West Khasi Hills.	Wahkaji Domiasiat Nongbah Jynrin Mawthabah Nongmalang Phudumiap Langpa Newphanwer	Degraded Forest/Wasteland	Afforestation	948	95.9376	1050	4.79688
		Degraded Forest/Wasteland	Improvement of Existing Degraded Forest	833	30.3212	940	1.51606
		Community Land	Avenue/Strip Plantation	99	4.2234	500	0.21117
		Community Land	Water Tank	7	17.0995	200	0.85497
		Springs	Drinking Wells	5	9.31861	155	0.46593
		Streams	Check Dam	23	103.05964	1250	5.15298
		Streams	Water Harvesting Structure	1	6.1282	45	0.30641
	Total				266.08815		13.3044

WATERSHED TREATMENT PLAN OF PHUD PHRA – PHUD TANGSHOT MICRO WATERSHED UNDER IWMP – SOUTH WEST KHASI HILLS, PROJECT –IV

CHAPTER V

PROJECT PHASING & BUDGETING

PLAN FOR RELEASE OF PROJECT FUND BY SLNA TO PROJECT IMPLEMENTATION AGENCY (PIA) & WATERSHED COMMITTEE

OF PHUD PHRA – PHUD TANGSHOT WATERSHED (SOUTH WEST KHASI HILLS, IWMP – PROJECT IV)

(Physical in %) (Financial: Rs. in Lakhs)

Particulars in Budget Component	Prescribed Percentage (%)		PIA (%)		Watershed Committee (%)		Year wise Phasing & Breakup of Prescribed Percentage under Column 2										TOTAL		
	Phy	Fin	Phy	Fin	Phy	Fin	1st Year		2nd Year		3rd Year		4th Year		5th Year		Phy	Fin	
							Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin			
1. Administration																			
i. Administrative Cost	10 %	83.505	10 %	83.505	-	-	-	-	2 %	16.701	5 %	41.7525	3 %	25.0515	-	-	10 %	83.505	
ii. Monitoring	1 %	8.3505	1 %	8.3505	-	-	-	-	0.2 %	1.6701	0.5 %	4.17525	0.3 %	2.50515	-	-	1 %	8.3505	
iii. Evaluation	1 %	8.3505	1 %	8.3505	-	-	-	-	0.3 %	2.50515	0.5 %	4.17525	0.2 %	1.6701	-	-	1 %	8.3505	
Total of 1	12 %	100.206	12 %	100.206	-	-	-	-	2.5 %	20.87625	6 %	50.103	3.5 %	29.22675	-	-	12 %	100.206	
2. Preparatory Phase																			
i. Entry Point Activities	4 %	33.402	4 %	33.402	-	-	4 %	33.402	-	-	-	-	-	-	-	-	4 %	33.402	
ii. Institutional, Capacity Building & Training, IEC Activities	5 %	41.7525	5 %	41.7525	-	-	1 %	8.3505	2 %	16.701	1 %	8.3505	1 %	8.3505	-	-	5 %	41.7525	
iii. Preparation of DPR	1 %	8.3505	1 %	8.3505	-	-	1 %	8.3505	-	-	-	-	-	-	-	-	1 %	8.3505	
Total of 2	10 %	83.505	10 %	83.505	-	-	6 %	50.103	2 %	16.701	1 %	8.3505	1 %	8.3505	-	-	10 %	83.505	
3. Watershed Works Phase																			
i. Watershed Treatment / Development Works	56 %	467.628	-	-	56 %	467.628	-	-	7.5 %	62.62875	37 %	308.9685	11.50 %	96.03075	-	-	56 %	467.628	
ii. Livelihood Activities	9 %	75.1545	-	-	9 %	75.1545	-	-	1 %	8.3505	3 %	25.0515	5 %	41.7525	-	-	9 %	75.1545	
iii. Production System & Micro Enterprises	10 %	83.505	-	-	10 %	83.505	-	-	1 %	8.3505	3 %	25.0515	6 %	50.103	-	-	10 %	83.505	
Total of 3	75 %	626.2875	-	-	75 %	626.2875	-	-	9.5 %	79.32975	43 %	359.0715	22.50 %	187.88625	-	-	75 %	626.2875	
4. Consolidation & Withdrawal Phase																			
Total of 4	3 %	25.0515	3 %	25.0515	-	-	-	-	-	-	-	-	-	-	3 %	25.0515	3 %	25.0515	
TOTAL OF 1 TO 4	100 %	835.05	25%	208.7625	75 %	626.2875	6 %	50.103	14 %	116.907	50 %	417.525	27 %	225.4635	3 %	25.0515	100 %	835.05	
Central Share (C.S) : 90 %									45.0927			105.2163						751.545	
State Share (S.S.) : 10 %									5.0103			11.6907						83.505	

Divisional Officer,
Cum
Project Leader
Project Implementation Agency (IWMP)
Soil & Water Conservation Division, Nongstoin

Deputy Commissioner,
West Khasi Hills District,
Nongstoin

**WATERSHED TREATMENT PLAN OF PHUD PHRA- PHUD TANGSHOT MICRO WATERSHED UNDER IWMP – WEST KHASI HILLS
PROJECT - IV**

Project	IWMP-IV
District	South West Khasi Hills
C&RD Block	Ranikor

Total Geographical Area	7562 Ha
Treatable Area	5567 Ha
Nos. of Villages	8

Total Project Cost	835.05
Central Share	751.545
State Share	83.505

Total Population	1877 Nos
Total Household	268 No
No. of Micro-Watersheds	2 Nos

(Rupees in Lakhs)

S. N.	Activities	Total				1st Year				2nd Year				3rd Year				4th Year				5th Year			
		Ha	Nos	Rm	Fin	Ha	Nos	Rm	Fin	Ha	Nos	Rm	Fin	Ha	Nos	Rm	Fin	Ha	Nos	Rm	Fin	Ha	Nos	Rm	Fin
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
I	Administrative Cost		10 %		83.505						2 %		16.701		5 %		41.7525		3%		25.0515				
II	Monitoring & Evaluation		2%		16.701						0.5%		4.17525		1%		8.3505		0.5%		4.17525				
	Sub Total (I+II)		12%		100.206						2.5%		20.87625		6%		50.103		3.5%		29.22675				
III	Preparatory Phase																								
A	EPA																								
	i) Drinking Well		3 Nos		3.78		3 Nos		3.78																
	ii) Water Tank		1 No		4.1613		1 No		4.1613																
	iii) Water Harvesting		1 No		6.1282		1 No		6.1282																
	iv) Drinking Water Supply System																								
	v) Community assets																								
	vi) Check Dam cum Washing Place		4 Nos		19.3325		4 Nos		19.3325																
	vii) Foot bridge																								
	Sub Total of EPA		4%		33.402		4%		33.402																
B	DPR		1%		8.3505		1%		8.3505																
C	Institutional & Capacity Building		5%		41.7525		1%		8.3505		2%		16.701		1%		8.3505		1%		8.3505				
	Sub Total of III (Preparatory Phase)		10%		83.505		6%		50.103		2%		16.701		1%		8.3505		1%		8.3505				
IV	Works Phase																								

A	Arable Land Treatment																						
	Contour bund	103.19			9.699							89.65			8.427	13.54					1.272		
	Peripheral Bunding			1749.89	2.09986					1722.5	2.067							27.39	0.03286				
	Crop Demonstration		163		8.15				36.188		1.8094		75.306		3.7653		51.506				2.5753		
	Improvement of Paddy Field	210.59			9.0552							210.59			9.0552								
	Agro Horticulture	476.397			48.11614							443.20			44.763	33.197					3.35314		
	Sub Total of A (Arable)				77.1202				36.188	3900	3.8764	695.5			66.0105	46.99	51.5	62			7.233		
B	Non-Arable Land																						
	Improvement of Degraded Forest/ existing Natural Forest	842.26			30.3212			242.67				8.736	480.28		17.29	119.32					4.2952		
	Afforestation	948			95.9376							792			80.1504	156					15.7872		
	Avenue /Strip Plantation	99			4.22334							80			3.4128	19					0.81054		
	Sub Total of B (Non Arable)				130.48214			240			8.736	1347			100.8532	293					20.89294		
C	Drainage Line Treatment																						
	Dug-out Ponds		4		6.4072								1		2.4562		3				3.951		
	Water Harvesting Structures		5		23.23569				2		6.38866		3		16.84703								
	Check Dam		23		83.72714				7		21.93331		12		49.48948		4				12.30435		
	Protection Wall		21		88.26341				4		13.62688		12		60.14631		5				14.49022		
	Water tank		6		12.9382				3		6.38074						3				6.55746		
	Rain Water Harvesting		14		30.60148												14				30.60148		
	Percolation Tank		4		9.31393								4		9.31393								
	Drinking Wells		2		5.53861				1		1.68676		1		3.85185								
	Sub Total of C (DLT)		79		260.02566						50.01635				142.1048						67.90451		
	Total of Watershed Works (A+B+C)		56%		467.628				7.5%		62.62875		37%		308.9685		11.5%				96.03075		
D	Livelihood Activities																						
	Tailoring		1487.5		11.88				23.625		1.89		68.625		5.49		56.25				4.50		
	Carpentry / Black smithy		116.4		5.82				2.40		0.12		10.80		0.54		103.20				5.16		
	Kitchen Gardening		153.98		3.8495				16.42		0.4105		50.86		1.2715		86.7				2.1675		
	Vermi composting		147		18.375				27		3.375		81		10.125		39				4.875		
	Apiculture		66		5.28				7		0.56		21		1.68		38				3.04		
	Masonry / Hollow Block Making		1		0.08				1		0.08												
	Piggery		90		10.80				10.125		1.215		30.375		3.645		49.50				5.94		
	Poultry		29.34		3.52				3.34		0.4		10.0		1.2		16.0				1.92		
	Pisciculture		3		0.30								2		0.2		1				0.1		
	Goatery		122		15.25				2.4		0.3		7.2		0.9		112.4				14.05		
	Sub Total of D		9%		75.1545				1%		8.3505		3%		25.0515		5%				41.7525		

S. N.	Activities	Total				1st Year				2nd Year				3rd Year				4th Year				5th Year			
		Ha	Nos	Rm	Fin	Ha	Nos	Rm	Fin	Ha	Nos	Rm	Fin	Ha	Nos	Rm	Fin	Ha	Nos	Rm	Fin	Ha	Nos	Rm	Fin
E	Production Systems																								
	Poultry Farming		17		5.10						2		0.6		6		1.8		9		2.7				
	Piggery Farming		6		1.80						1		0.3		3		0.9		2		0.6				
	Food Processing		2.97		1.485						0.99		0.495		0.99		0.495		0.99		0.495				
	Grocery shop		22		6.60						2		0.6		6		1.8		14		4.2				
	Vermi-composting																								
	Mushroom cultivation		2		0.70						1		0.35		1		0.35								
	Cattle Rearing		119		59.50						10.211		5.1055		32.937		16.4865		75.826		37.908				
	Goat Rearing		26		7.80						3		0.9		9		2.7		14		4.2				
	Fabrication		1		0.52										1		0.52								
	Sub Total of E (Production)		10%		83.505						1%		8.3505		3%		25.0515		6%		50.103				
	Total of IV (A+B+C+D+E) Works Phase		75%		626.2875						9.5%		79.32975		43%		359.0715		22.5%		187.88625				
V	Consolidation Phase		3%		25.0515																		3%		25.0515
	Sub Total of V (Consolidation Phase)		3%		25.0515																		3%		25.0515
	Grand Total (I+II+III+IV+V)		100%		835.05		6%		50.103		14%		116.907		50%		417.525		27%		225.4635		3%		25.0515

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 Nongstoin*

*Deputy Commissioner,
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 Nongstoin*

VILLAGE WISE ACTION PLAN OF PHUD PHRA- PHUD TANGSHOT WATERSHED UNDER IWMP – IV

Name of District : South West Khasi Hills
Name of C&RD Block : Ranikor C&RD Block

Nos. of Villages : 8 Nos
Project Area : 5567 Ha.

Physical in Ha/Nos/RM/Units
Financial : Rs. in Lakhs

1	2	Wahkaji		Domiasiat		Nongbah Jynrin		Mawthabah		Nongmalang		Phudumiap		Langpa		Newphanwer		Total	
		Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		
A	Watershed Treatment / Development Works																		
<i>i.</i>	Arable Land Treatment																		
1.	Contour bund @ Rs 9400/Ha.	18 Ha	1.692	12 Ha	1.128	8.19Ha	0.76986	14 Ha	1.316	13 Ha	1.222	13 Ha	1.222	12 Ha	1.128	13 Ha	1.222	103.19 Ha	9.699
2.	Peripheral Bunding @ Rs 120/Rm	118.51Rm	0.14221	202.95Rm	0.24354	192.95Rm	0.23154	210.04 Rm	0.25204	200.04 Rm	0.24005	417.45 Rm	0.50094	199.30 Rm	0.23916	208.65 Rm	0.25038	1749.89 Rm	2.09986
3.	Crop Demonstration @ Rs 5000/Unit.	38 Units	1.90	5 Units	0.25	6 Units	0.30	10 Units	0.50	16 Units	0.80	43 Units	2.15	23 Units	1.15	22 Units	1.10	163 Units	8.15
4.	Improvement of Existing Paddy Fields @ Rs 4300/Ha.	80.53 Ha	3.46279					62.53 Ha	2.68879	67.53 Ha	2.90362							210.59 Ha	9.0552
5.	Agro-Horticulture @ Rs 10100/Ha.	30.614 Ha	3.09201	77.604 Ha	7.838	12 Ha	1.212	119.614 Ha	12.08101	59.614 Ha	6.02101	70.728 Ha	7.14352	86.228 Ha	8.70902	20 Ha	2.020	476.397 Ha	48.11614
	Total of Arable Land Treatment (i)		12.397		9.06264		2.0952		14.8897		10.3532		12.563		11.82646		3.933		77.1202
<i>ii.</i>	Non Arable Land Treatment																		
1.	Improvement of Degraded Forest @ Rs 3600/Ha.	95 Ha	3.420	70 Ha	2.520	76 Ha	2.736	120 Ha	4.320	70 Ha	2.520	215.26 Ha	7.749	82 Ha	2.952	114 Ha	4.104	842.26 Ha	30.3212
2.	Afforestation @ Rs 10100/Ha.	90 Ha	9.090	65 Ha	6.565	36 Ha	3.636	116.88 Ha	11.80488	85 Ha	8.585	260 Ha	26.260	107 Ha	10.807	190 Ha	19.190	949.88 Ha	95.9376
3.	Avenue / Strip Plantation @ Rs 4266/Ha.	18 Ha	0.76788	8 Ha	0.34128	8 Ha	0.34128	9 Ha	0.38394	9 Ha	0.38394	14 Ha	0.59724	15 Ha	0.6399	18 Ha	0.76788	99 Ha	4.22334
	Total of Non Arable Land Treatment (ii)		13.33388		9.46728		6.75088		16.38994		11.44394		34.40764		14.4531		24.14548	1880 Ha	130.48214
<i>iii.</i>	Drainage Line Treatment																		
1.	Small Dug-Out Ponds	2 Nos	3.8979					2	2.5093									4	6.4072
2.	Water Harvesting	3 Nos	16.84703													2	6.38866	5	23.23569
3.	Check Dam	2 Nos	8.5906	2 Nos	10.32503	3 Nos	9.6075	2 Nos	9.09905	2 Nos	5.52128	2 Nos	3.901	3 Nos	8.3182	7 Nos	28.36448	23 Nos	83.72714
4.	Protection Wall & Retaining Wall	7 Nos	30.82012	4 Nos	13.30714	3 Nos	13.40193	1 No	6.27695	1No	5.48823	1No	2.84681	2 Nos	6.83234	2 Nos	9.28989	21 Nos	88.26341
5.	Water Tanks							1 No	2.00910	1 No	2.18582	1 No	2.18582	1No	4.37164	1No	2.18582	6 Nos	12.9382
6.	Rain Water Harvesting	6 Nos	13.11492	2 Nos	4.37164	2 Nos	4.37164	2 Nos	4.37164	2 Nos	4.37164							14 Nos	30.60148
7.	Percolatoin tank							4 Nos	9.31393									4 Nos	9.31393
8.	Drinking Wells	1 No	3.85185													1 No	1.68676	2 Nos	5.53861

	Total of Drainage Line Treatment (iii)		77.12242		28.00381		27.38107		33.57997		17.56697		8.93363		19.52218		47.91561		260.02566
	Total WS Treatment/Development Works (A)																		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
B	Livelihood Activities																		
1.	Tailoring / Knitting @ Rs 8000/No	49 Nos	3.92	7 Nos	0.56	10 Nos	0.80	20 Nos	1.60	41.5 Nos	3.32	10 Nos	0.80	7 Nos	0.56	4 Nos	0.32	148.5 Nos	11.88
2.	Carpentry/Basketry/Agri-implements @Rs 5000/No	35 Nos	1.75	4 Nos	0.20	5 Nos	0.25	9 Nos	0.45	29.4 Nos	1.47	16 Nos	0.80	7 Nos	0.35	11 Nos	0.55	116.4 Nos	5.82
3.	Kitchen Garden with Compost Pit @ Rs 2500/No	16.98Nos	0.4245	7 Nos	0.175	12 Nos	0.30	21 No	0.525	3 Nos	0.075	45 Nos	1.125	25 Nos	0.625	24 Nos	0.60	153.98 Nos	3.8495
4.	Vermicomposting @ Rs 12500/No	55 Nos	6.875	7 Nos	0.875	10 Nos	1.25	11 Nos	1.375	15 Nos	1.875	20 Nos	2.5	15 Nos	1.875	14 Nos	1.75	147 Nos	18.375
5.	Apiculture @ Rs 8000/No	1 No	0.08	1 No	0.08					1 No	0.08	20 Nos	1.60	20 Nos	1.60	23 Nos	1.84	66 Nos	5.28
6.	Hollow Block Making @ Rs 8000/No	1 No	0.08															1 No	0.08
7.	Piggery @ Rs 12000/no	41 No	4.92	2 Nos	0.24	5 Nos	0.60	4 Nos	0.48	2 Nos	0.24	17 Nos	2.04	4 Nos	0.48	15 Nos	1.80	90 Nos	10.80
8.	Poultry @ Rs 8000/no	7 Nos	0.84	2 Nos	0.24	7 Nos	0.60	2 Nos	0.24	4 Nos	0.48	5 Nos	0.60	1.34 Nos	0.1608	3 Nos	0.36	29.34 Nos	3.52
9.	Goatery @ Rs 12500/No	45 Nos	5.625	2 Nos	0.25	3 Nos	0.375	12 Nos	1.5	15 Nos	1.875	25 Nos	3.125	10 Nos	1.25	10 Nos	1.25	122 Nos	15.25
10	Pisciculture @ Rs 10000/No	3 Nos	0.30															3 Nos	0.30
	Total of Livelihood Activities (B)	146.98Nos	19.2895	34 Nos	2.84	52 Nos	4.36	81 Nos	6.6	77 Nos	7.505	160 Nos	13.065	90 Nos	7.1	106 Nos	8.885	846.98 Nos	75.1545
C	Production System & Micro Enterprises																		
11	Poultry Farming @ Rs 30000/No	1 No	0.30	1 No	0.30	1 No	0.30	1 No	0.30	1 No	0.30	4 Nos	1.20	4 Nos	1.20	4 Nos	1.20	17 Nos	5.10
12	Piggery Farming @ Rs 30000/No	1 No	0.30	1 No	0.30	1 No	0.30	1 No	0.30	1 No	0.30	1 No	0.30					6 Nos	1.80
13	Grocery Shop/Small Cottage Industry@ Rs 30000/No	4 Nos	1.20	1 No	0.30	1 No	0.30	1 No	0.30	2 Nos	0.60	4 Nos	1.20	4 Nos	1.20	5 Nos	1.50	22 Nos	6.60
14	Mushroom Cultivation @ Rs 35000/Unit	2 Nos	0.70															2 Nos	0.70
15	Cattle Rearing @ Rs 50000/Unit	54 Nos	27.00	3 Nos	1.50	3 Nos	1.50	9 Nos	4.50	15 Nos	7.50	18 Nos	9.00	12 Nos	6.00	5 Nos	2.50	109 Nos	59.50
16	Goat Rearing @ Rs 30000/Unit	25 Nos	7.50	1 No	0.30													26 Nos	7.80
17	Fruit Processing/Food Processing @ Rs 49500							1 No	0.50	0.97 Nos	0.485			1 No	0.50			2.97 Nos	1.485
18	Fabrication @ Rs 52000/Unit	1 No	0.52															1 No	0.52
	Total of Production System & Micro Enterprises (C)	88 Nos	37.52	7 Nos	2.70	6 Nos	2.40	12 Nos	5.40	19 Nos	8.70	27 Nos	11.70	23 Nos	9.885	14 Nos	5.20	196 Nos	83.505
	TOTAL of WATERSHED WORKS PHASE (A+B+C)																		

WDT Member
(Community Organizer)

WDT Member
(Forestry)

WDT Member
(Civil Engineering)

WDT Member
(Agriculture)

Project Leader
Phud Phra- Phud tangshot Watershed Committee IWMP - IV

ABSTRACT OF PERSPECTIVE PLAN FOR CONVERGENCE OF NREGS WITH PHUD PHRA - PHUD TANGSHOT IWMP 2013-14 UNDER IWMP-IV

Name of Project	IWMP-IV		Total Wage Component @ ` 145/- per day in the 1st Year	` 3,45,825.00
Name of Watershed	Phud Phra –Phud Tangshot		Total Wage Component @ ` 145/- per day in the 2nd Year	` 0.00
Name of C & RD Block	Ranikor		Total Wage Component @ ` 145/- per day in the 3rd Year	` 0.00
Name of the District	South West Khasi Hills		Total Wage Component @ ` 145/- per day in the 4th Year	` 0.00
Total No. of Job Card Holder	283		Total Wage Component	` 3,45,825.00

S. N	Activities	Units	PROJECT PERIOD												Total			Mandays to be Generated
			2014-15			2015-16			2016-17			2017-18			Phy	Financial		
			Phy	Financial		Phy	Financial		Phy	Financial		Phy	Financial					
				Wages	Material		Wages	Material		Wages	Material		Wages	Material	Total			
1.	Peripheral Bund	Rm	6525	345825										6525	345825		345825	2385
	Total			345825										6525	345825		345825	2385

Amount allotted for Convergence for the period 2014-15 to 2017-18

1.	Wage Component	` 345825.00
2.	Material Component	` 0.00
	Grand Total	` 345825.00

Grand Total (Rupees Three Lakhs Forty Five Thousand Eight Hundred and Twenty Five) only

*Divisional Officer,
 Cum
 Project Leader
 Project Implementation Agency (IWMP)
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 Nongstoin*

*Deputy Commissioner,
 West Khasi Hills District,
 Nongstoin*

ABSTRACT OF PERSPECTIVE PLAN FOR CONVERGENCE OF NREGS WITH IWMP 2013-14 UNDER IWMP-IV

Name of Project	IWMP-IV	Total Wage Component @ ` 145/- per day in the 1st Year
Name of Watershed	Phud Phra-Phud Tangshot Watershed	Total Wage Component @ ` 145/- per day in the 2nd Year
Name of C & RD Block	Ranikor	Total Wage Component @ ` 145/- per day in the 3rd Year
Name of the District	Soutj West Khasi Hills	Total Wage Component @ ` 145/- per day in the 4th Year
Total No. of Job Card Holder	125	Total Wage Component
		Rs 13,78,741

S. N.	Activities	Units	PROJECT PERIOD												Total			Mandays to be Generated	
			2014-15			2015-16			2016-17			2017-18			Total				
			Phy	Financial		Phy	Financial		Phy	Financial		Phy	Financial		Phy	Financial			
				Wages	Material		Wages	Material		Wages	Material		Wages	Material		Total			
1.	Checkdam (Nongbah Jynrin)	Rm	1.	2,88,225	1,92,150										2,88,225	1,92,150	4,80,375	1988	
2.	Checkdam(Tangshot-Dibai)					1	2,88,225	1,92,150							2,88,225	1,92,150	4,80,375	1988	
3.	Checkdam(Phot Umbiang -Nongmalang)					1	3,31,277	2,20,851							3,31,277	2,20,851	5,52,128	2285	
4.	Checkdam(Phot Rangkhlieh,Langpa)								1	1,92,318	1,28,212			1	1,92,318	1,28,212	3,20,530	1327	
5.	Protection Wall(Domiasiat)								1	2,78,696	1,85,798			1	2,78,696	1,85,798	4,64,494	1922	
	Total														13,78,741	9,19,161	22,97,902	9510	

Amount allotted for Convergence for the period 2014-15 to 2017-18

- | | | |
|----|--------------------|---------------------|
| 1. | Wage Component | Rs 13,78,741 |
| 2. | Material Component | Rs 9,19,161 |
| | Grand Total | Rs 22,97,902 |

Grand Total (Twenty Two Lakhs Ninety Seven Thousand Nine Hundred And Two) only

*Divisional Officer,
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*Deputy Commissioner,
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 Nongstoin*

Details of the types of areas covered under the IWMP Programme:

1	2	3		4	5	6	7				8				
Name of Projects	Year of Sanction	Project Duration (dd mm yyyy)		Area of the Project to be treated (Treatable Area)	Project Cost (in Lakhs)	Name of Micro watershed & code nos. (as per Dolp's unique codification)	Treatable Area (Ha) (As per LULC)				Area details (Ha) (falling within the project) As per ownership				
		From	To				Cultivated rainfed area	Cultivated irrigated area	Uncultivated wasteland		Pvt. Agri. land	Forest land	Community land	Others (pls specify)	Total area (Ha)
									a) Temporary fallow	b) Permanent					
Phud Phra-Phud Tangshot Watershed, IWMP-IV South West Khasi Hills.	2013 - 2014	2013-14	2017-18	5567 Ha.	835.05	3C1B2r2a 3C1B2r2b 3C1B2r2d 3C1B2r4a 3C1B2r24b 3C1B2r4c 3C1B2r5d 3C1B2q1a	1650	-	189	677	600	700	5497	-	6797

Fund provision for the IWMP projects from all sources:

1	2		3										4
Name of Projects	IWMP Fund		Funds from other sources in addition to IWMP funds										Total
	Central Share	State Share	Convergence funds		PPP		Community		Institutional finance		Others (Pl. specify)		
			Name of Scheme	Amount (Lakhs)	Name of private sector	Financial contribution	Name	Financial contribution	Name	Financial contribution	Name	Financial contribution	
Phud Phra Phud Tangshot Watershed, IWMP-IV, South West Khasi Hills.	751.545	83.505	MGNREGS		-	-	-	-	-	-	-	-	835.05

Details of Project Fund Accounts of Distt. Agency and Watershed Committees:

1	2				3				
Names of Projects	Distt. Agency's Project Account details				Watershed Committee (WC) account details:				
	Name of the Bank and Branch where project account has been opened	Account Number (to be obtained confidentially)	Account type (Savings/ Current/ Others)	Name & Designation of authorized persons who operate the account.	Name of Watershed Committee	Name of the Bank and Branch where project account has been opened	Account number (to be obtained confidentially)	Account type (Savings/ current others)	Name & Designation of authorized persons who operate the account.
Phud Phra –Phud Tangshot Watershed, IWMP-IV, South West Khasi Hills.	State Bank of India	XXXX	Saving	Shri D.K.Khonglah, D.S. & W.C.O.	Phud Phra –Phud Tangshot Watershed Committee	SBI, Nongstoin	XXXX	Saving	Chairman W.C, Secretary W.C, Project Leader / WDT

Details of Convergence of IWMP with other Schemes:

	1	2	3	4	5	6	7
Sl. No.	District	Names of projects	Names of Departments with Schemes converging with IWMP	Fund made available to IWMP due to convergence (Rs. in lakh)	Name of activity/task/structure undertaken with converged funds (a) Structures (b) livelihoods (c) Any other (pl. specify) [#]	Reference no. of activity/ task/ structure in DPR [@]	Level at which decision for convergence was taken ^{\$}
1	West Khasi Hills	West Khasi Hills – IWMP VIII	* Community Rural Development Department NREGS	26,43,727	Peripheral bunding, Check Dam, Protection wall	As per Convergence Treatment Plan	Block Level & District Level

Note: Nongbah jynrin, Tangshot, Nongmalang, Langpa, & Domiasiat Village

Peripheral bunding, Check Dam, Protection wall

Wages-17,24,566 Lakhs,

Materials – 9,19,161 Lakhs

CHAPTER VI CAPACITY BUILDING

Capacity Building is a process to systematically upgrade the skill of individuals or groups for achieving a specific target. Capacity building in the project has been planned for all the stake holders involved i.e. State Level, District Level, Project Level and Village Level. The relevant details pertaining to Capacity Building has been shown below.

Table 6.1: List of approved Training Institutes for Capacity Building:

1	2	3	4	5	6	7
Sl. No	State	Name of the Training Institute	Full Address with contact no., website & e-mail	Name & Designation of the Head of Institute	Type of Institute [#]	Area(s) of specialization ^{\$}
1	Meghalaya	NIRD (NER)	Guwahati	Director	Central Govt.	Remote Sensing, Rural Devt.
2		SIRD	Nongsder	Director	State Govt.	Capacity Building
3		RRTC	Umran	Director	Don-Bosco	Agri-Horti, Animal Husbandry, Entrepreneurship
4		ICAR	Umiam	Director	Central Govt.	Agri-Horti, Animal Husbandry, Entrepreneurship
5		VTC	Kyrdem Kulai	Director	State Govt.	Animal Husbandry
6		Directorate of Agriculture	Shillong	Director	State Govt.	Agri-Horti, Fruit Processing
7		CTI	Byrnihat	Jt. Director	State Govt.	Watershed Management
8.		FMA Outreach	Shillong	Director	Private	SHG, Rural Resource Management

● From Column no. 2, total no. of States implementing the programme, from Column no. 3, no. of training institutes, from column No. 9, total no. of category-wise trainings and trainees may be given at the end of the table for the entire country.

Central govt. Dept./ State govt. Dept./ Autonomous Body/ Research Institutes/ Universities/ Others (pl. specify).

\$ Capacity Building/ Agriculture/ Horticulture/ Animal Husbandry/ Pisciculture/ Remote Sensing/ Water conservation/ Ground water/ Forestry/ livelihoods/ entrepreneurship development/ others (pl. specify).

@ The training institutes must fulfill the conditions mentioned in the operations guidelines.

- (i) Technical experts in fields required by IWMP
- (ii) Past experiences
- (iii) Annual Turnover
- (iv) Receives funds either from the Central or State Government
- (v) Publications
- (vi) Not blacklisted by any Govt. organizations
- (vii) Audited accounts
- (viii) Organizational structure

Table 6.2: Capacity Building activities for the year 2013-14 as on 31/03/2014 (dd/mm/yyyy)*

1	2	3	4					5
Project	Type of Training / Capacity Building	Agency / Institution to provide training	No. of trainings targeted during each financial year					Total
			1st Year	2nd Year	3rd Year	4th Year	5th Year	
PIAs	Community Organisation	SIRD,NIRD (NER)	2	3	1	1		7
WDTs	Exposure Trip, Watershed Management, GPS handling, Accounts work, Community Organisation, MIS	RRTC,VTC, ICAR, Agriculture Directorate	3	2	1			6
UGs	Watershed Management, Plantation and nursery management,	RRTC, VTC, ICAR, Agriculture Directorate		1				1
SHGs	Exposure Trip, Animal husbandry, Tailoring, Rural Resource Management, Cropping System Management, Agroforestry, SHGs concept and formation, Book Keeping and accounts.	RRTC, VTC, ICAR, Agriculture Directorate,SHG Groups,Enterpreneur and Farmers,FMA	2	2	1	2		7
WCs	Community Organisation & Public Relation, Soil & Water conservation awareness and concept. Environmental management	RRTC, VTC, ICAR, Agriculture Directorate,SHG Groups,Enterpreneur and Farmers,FMA	2	3	2	1		8
Community	Agri-Horticulture, Animal Husbandry, Enterpreneurship, Fruit and Food Processing, Package of practices in agriculture (mxed farming) and livestock management.	Horti- Hub Nongstoin		2	1			3
Others (Pl. specify)		Total	9	13	6	4		32

Table 6.3: Information, Education & Communication (IEC) activities for the year 2013-14 as on 31/03/12 (dd/mm/yyyy)*

Sl. No.	1	2	3
	Activity	Executing agency	Estimated expenditure (₹.)
	Awareness	S&WC Division	
	PRA Exercises	S&WC Division	
	Exposure Visits	S&WC Division	
	Capacity Building	S&WC Division	

CHAPTER VII EXPECTED OUTCOME

Table 7.1 Employment related outcomes:

Sl No	Name of Village	1										2				
		Wage employment										Self employment				
		No. of mandays					No. of beneficiaries					No. of beneficiaries				
		SC	ST	Others	Women	Total	SC	ST	Others	Women	Total	SC	ST	Others	Women	Total
1.	Wahkaji		100 %					100 %					100 %			
2.	Domiasiat		100 %					100 %					100 %			
3.	Nongbah Jynrin		100 %					100 %					100 %			
4.	Nongmalang		100 %					100 %					100 %			
5.	Mawthabah		100 %					100 %					100 %			
6.	Newphanwer		100 %					100 %					100 %			
7.	Langpa		100 %					100 %					100 %			
8.	Phudumiap		100 %					100 %					100 %			

Table 7.2 Migration Details:

1	2	3	4	5	6	7	8	9	10	
Names of the Districts	Names of Projects	Name of village	No. of persons migrating	No. of days per year of migration	Major reason(s) for migrating	Distance of destination of migration from the village (km)	Occupation during migration	Income from such occupation (Rs. in lakh)	For reduced migration identify major activities of IWMP responsible	
				N	I	L			(a) Structures	(b) Livelihoods
				N	I	L				

* From column no. 2, total number of States; from column no. 3, total no. of Districts; from column no. 4, total no. of projects; from column no. 5, total no. of villages; from column no. 6, total no. of persons migrating; from column no. 7, average no. of days for annual migration; from column no. 9, average distance of migration from the village and from column no. 11, average income from occupation during migration, for the entire country may be given at the end of the Table.

Table 7.5.2 Status of Drinking water:

1			2			3
Availability of drinking water			Quality of drinking water			
Pre-project	Post-project	Change in availability	Pre-project	Post-project	Change in quality	Comments
9 Months	10-12 Months	10-12 Months	Moderate	Improved	Improved	

* From column no. 2, total number of States implementing the programme, from column no. 3, total no. of Districts; from column no. 4, category-wise no. of projects, from column no. 5, average no. of months may be given at the end of the table for the entire country.

Table 7.5.3 Water Use efficiency:

1	2	3			
Name of the project	Name of major crop	Water savings in cu.m.			
		through water saving devices ^{\$}	through water conserving agronomic practices [#]	Any other (pl specify)	Total
Phud Phra –Phud Tangshot Watershed, IWMP-IV, South West Khasi Hills	Betel Leaf	Alkathene pipes	Vermi , Mulching		
	Betel Nut	Alkathene pipes	Vermi , Mulching		
	Black Pepper	Alkathene pipes	Vermi , Mulching		
	Citrus	Alkathene pipes	Vermi , Mulching		

* From column no. 2, total number of States implementing the programme, from column no. 3, total no. of Districts; from column no. 4, total no. of projects, from column no. 6, practice-wise totals may be mentioned at the end of the table for the entire country.

^{\$} Sprinkler, Drip, PVC pipe, etc.

[#] Vermi-compost, organic manuring, Mulching, Check basin, Alternate furrow, Ridges & furrow & other scientific practices.

Table 7.6: Vegetation/ crop related outcomes:

Table 7.6.1 Details of Karif crop area and yield in the project areas:

1 Name of Projects	2 Name of crops	3 Pre-project						4 Mid-term						5 Post-project					
		Area (ha)		Average Yield (Qtl) per ha.		Total Production (Qtl)		Area (ha)		Average Yield per ha (Qtl)		Total Production (Qtl)		Area (ha)		Average Yield per ha (Qtl)		Total Production (Qtl)	
		Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.
SWKH-IWMP IV	Paddy		56		18		1008												
	Maize		40		10		400												
	Broom		450		10		4500												
	Citrus		150		44		6600												
	Betel nut		110		10		1100												

* From column no. 2, total number of States; from column no. 3, total no. of Districts; from column no. 4, total no. of projects, from column no. 5, total no. of crops; from column no. 6 to 8, the totals for the area, average yield per ha and total production, category-wise, for the entire country may be given at the end of the Table.

Irri. – Irrigated Rf – Rainfed

Table 7.6.2 Details of Rabi crop area and yield in the project areas:

1 Name of Projects	2 Name of crops	3 Pre-project						4 Mid-term						5 Post-project					
		Area (ha)		Average Yield (Qtl) per ha.		Total Production (Qtl)		Area (ha)		Average Yield per ha (Qtl)		Total Production (Qtl)		Area (ha)		Average Yield per ha (Qtl)		Total Production (Qtl)	
		Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.
SWKH-IWMP IV	Betel Leaf		125		12		1500												
	Black Pepper		175		6		1050												
	Total for the District																		

* From column no. 2, total number of States; from column no. 3, total no. of Districts; from column no. 4, total no. of projects, from column no. 5, total no. of crops; from column no. 6 to 8, the totals for the area, average yield per ha and total production, category-wise, for the entire country may be given at the end of the Table.

Irri. – Irrigated Rf – Rainfed

Table 7.6.3 Details of Zaid crop area and yield in the project areas of the Country: State-wise:

1	2	3						4						5					
Name of Projects	Name of crops	Pre-project						Mid-term						Post-project					
		Area (ha)		Average Yield (Qtl) per ha.		Total Production (Qtl)		Area (ha)		Average Yield per ha (Qtl)		Total Production (Qtl)		Area (ha)		Average Yield per ha (Qtl)		Total Production (Qtl)	
		Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.
SWKH-IWMP IV		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total for the District																		

A

*

From column no. 2, total number of States; from column no. 3, total no. of Districts; from column no. 4, total no. of projects, from column no. 5, total no. of crops; from column no. 6 to 8, the totals for the area, average yield per ha and total production, category-wise, for the entire country may be given at the end of the Table.
Irri- Irrigated Rf- Rainfed

Table 7.6.4 Increase/ Decrease in area under fodder:

1	2	3			4		
Name of project	Duration of Project	Existing area under fodder (ha)			Achievement (ha)		
		Source/Name of report	Year of reference	Area already under fodder	Area under fodder proposed to be covered through IWMP	Area under fodder actually covered through IWMP	Change in area under fodder
SWKH-IWMP IV	5 yrs	NA	NA	NA	Nil	Nil	Nil

* From column no. 2, total number of States implementing the programme, from column no. 3, total no. of Districts; from column no. 4, total no. of projects, from column nos. 6 & 7, total area in ha may be given at the end of the table for the entire country.

Table 7.6.5 Increase/ Decrease in Forest/vegetation cover:

1	2	3			4		
Name of project	Duration of Project	Existing area tree cover (ha)			Expected Outcome (ha)		
		Source/Name of report	Year of reference	Area already under forest/vegetative cover	Forest/vegetative cover area proposed to be covered under IWMP	Forest/vegetative cover area actually covered under IWMP	Change in forest/vegetative cover area
SWKH-IWMP IV	5 yrs	LULC Map, NESAC, Umiam	2006	4241 Ha	1880 Ha		

* From column no. 2, total number of States implementing the programme, from column no. 3, total no. of Districts; from column no. 4, total no. of projects, from column nos. 6 & 7, total area in ha may be given at the end of the table for the entire country.

Table 7.6.6 Increase/ Decrease in area under horticulture:

1	2	3			4		
Name of project	Duration of Project	Existing area under horticulture (ha)			Achievement (ha)		
		Source/Name of report	Year of reference	Area already under horticulture	Area under horticulture proposed to be covered through IWMP	Area under horticulture actually covered through IWMP	Change in area under horticulture
SWKH-IWMP IV		LULC Map, NESAC, Umiam	2006	NA	559.49 Ha	559.49 Ha	559.49 Ha

* From column no. 2, total number of States implementing the programme, from column no. 3, total no. of Districts; from column no. 4, total no. of projects, from column nos. 6 & 7, total area in ha may be given at the end of the table for the entire country.

Table 7.6.7 Increase/ Decrease in area under fuel-wood:

1	2	3	4			5		
District	Name of project	Duration of Project	Existing area under fuelwood (ha)			Achievement (ha)		
			Source/Name of report	Year of reference	Area already under fuelwood	Area under fuelwood proposed to be covered through IWMP	Area under fuelwood actually covered through IWMP	Change in area under fuelwood
SouthWest Khasi Hills District	SWKH-IWMP IV	5 yrs	LULC Map, NESAC, Umiam	2006	1553 Ha	1781 Ha	1781 Ha	1781 Ha

* From column no. 2, total number of States implementing the programme, from column no. 3, total no. of Districts; from column no. 4, total no. of projects, from column nos. 6 & 7, total area in ha may be given at the end of the table for the entire country.

Table 7.7 Livelihood related outcomes:

Table 7.7.1 Details of livestock in the project areas (for fluids please mention in litres, for solids please mention in kgs. and income in Rs.):

1	2	3			4			5			6
Name of Projects	Type of Animal	Pre-project			Mid-term			Post-project			Remarks
		No.	Yield	Income	No.	Yield	Income	No.	Yield	Income	
SWKH-IWMP IV	Cow	489									
	Goat	285									
	Piggery	198									
	Poultry	1747									
	Horse	33									
Total		2752									

* From column no. 2, total number of States; from column no. 3, total no. of Districts; from column no. 4, total no. of projects, from column nos. 5 to 8, the total nos. of animals and the average yield and incomes, category-wise, for the entire country may be given at the end of the Table.

Table 7.10 Benefit Cost Analysis

1	2	3	4	5	6	7
District	Name of project	Name of WC	Name of structure/ activity	Estimated cost (Rs.)	Expected quantifiable benefits (Rs.)	Benefit: Cost ratio [#]
South West Khasi Hills District	South West Khasi Hills, IWMP – IV.	Phud Phra- Phud Tangshot	As per Treatment Plan	835.05 lakhs	951.957 lakhs	1.14 : 1.

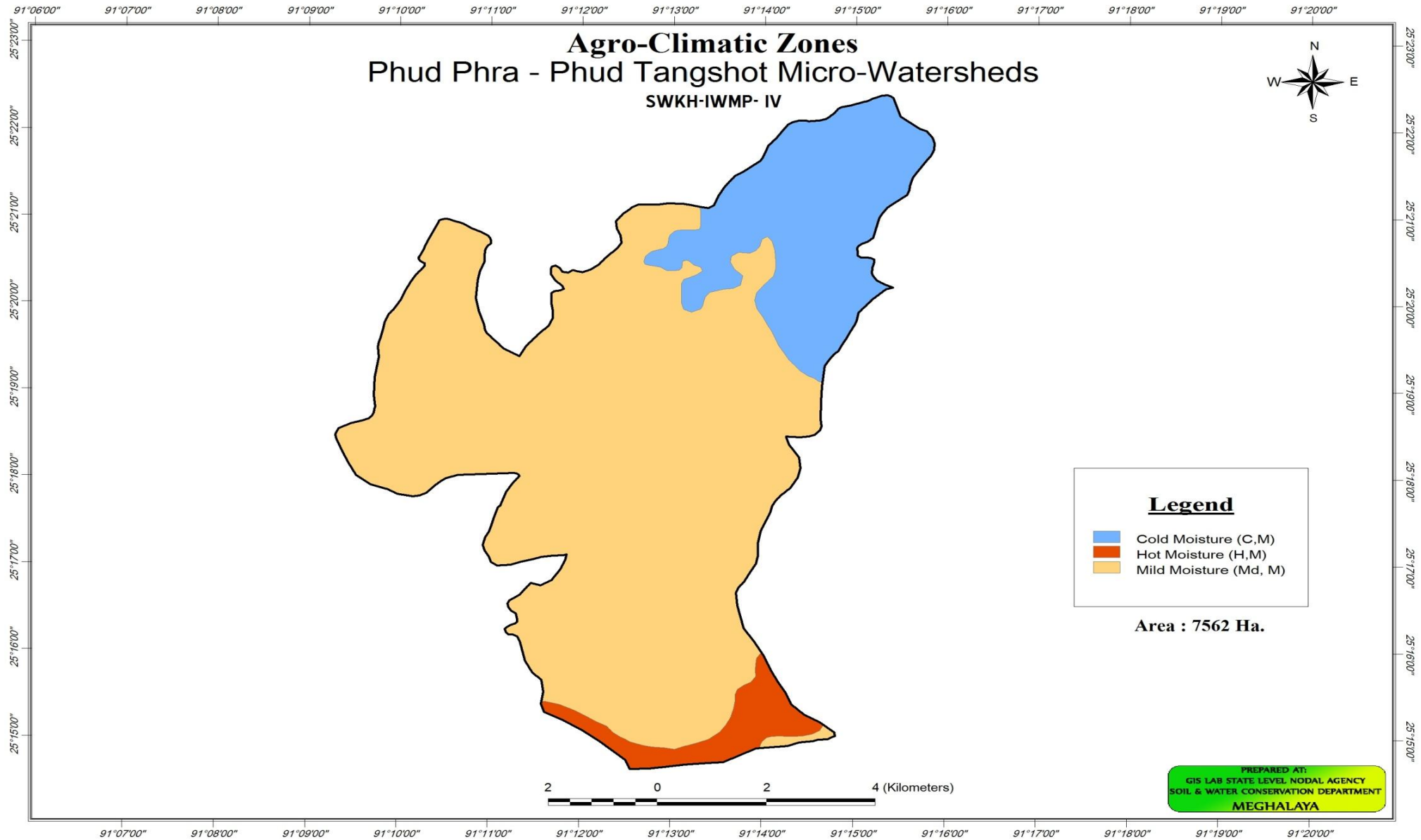
* from column no. 2, total no. of States implementing the programme, from column no. 3, total no. of Districts; from Column no. 4, no. of projects, from column no. 5, no. of WCs, from column no. 6, no. of structures/ activities, from column no. 7 to 10, category-wise# totals, may be mentioned at the end of the table for the entire country.

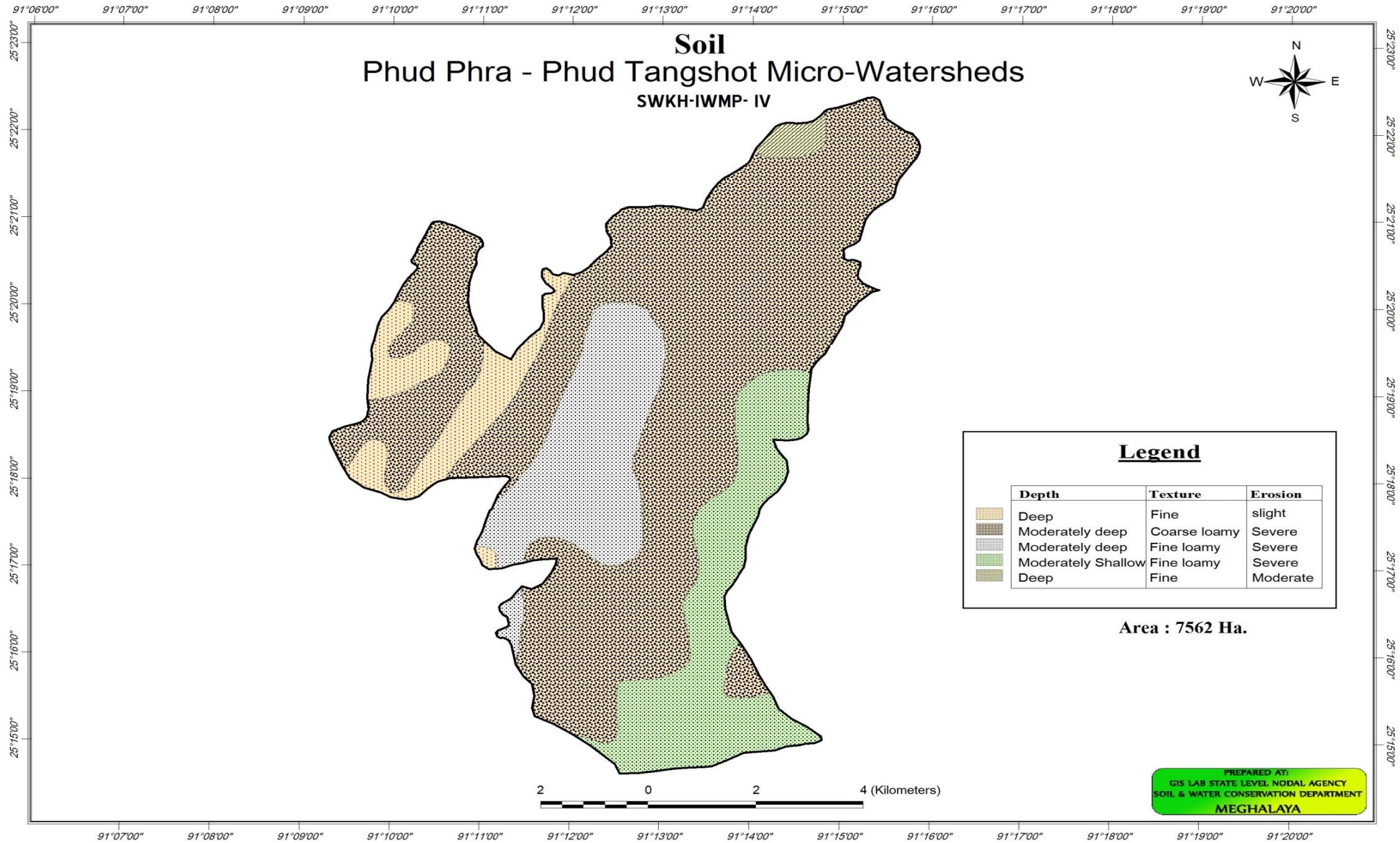
B:C ratio more than 1 – cost effective

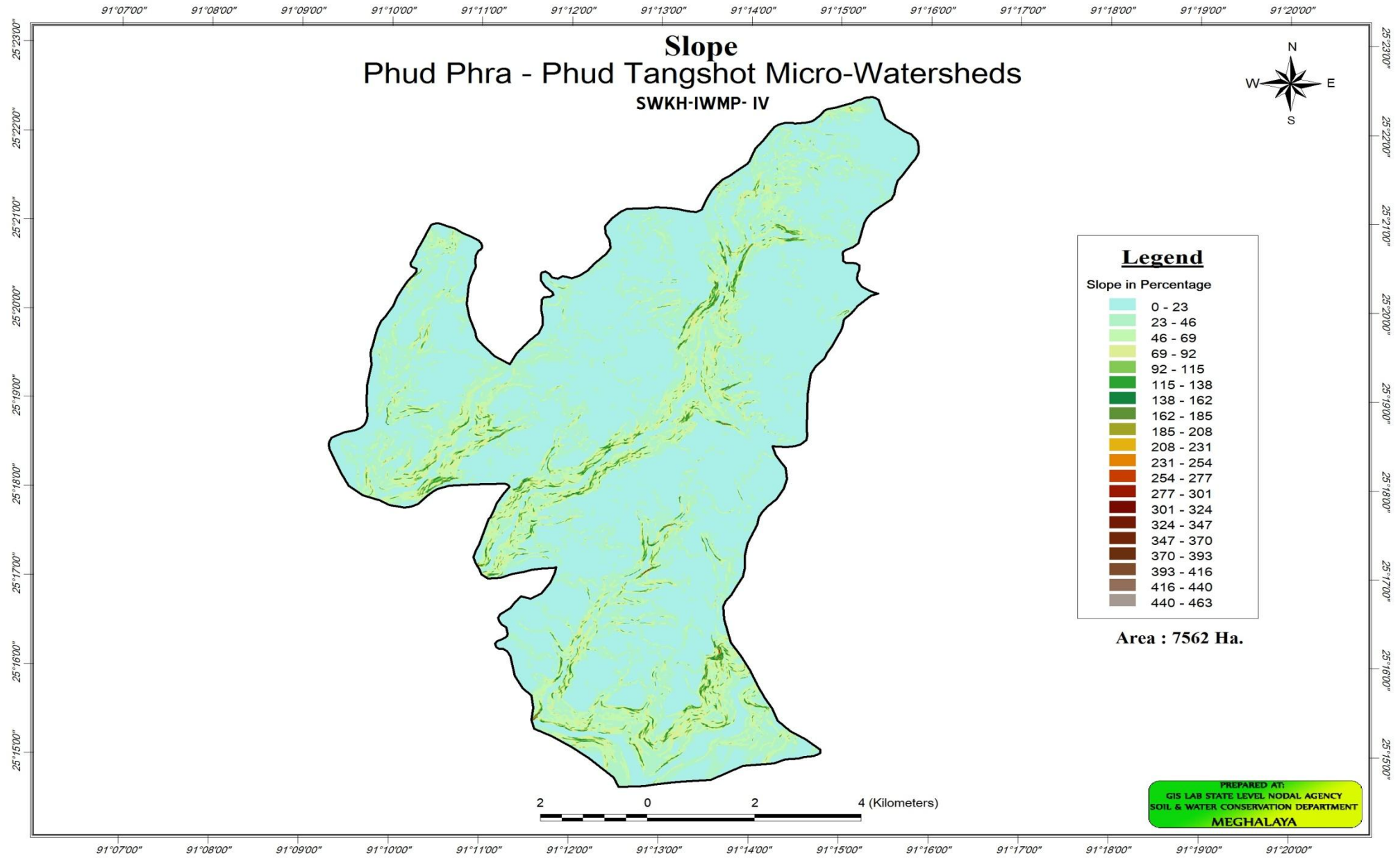
less than 1 – Not cost effective

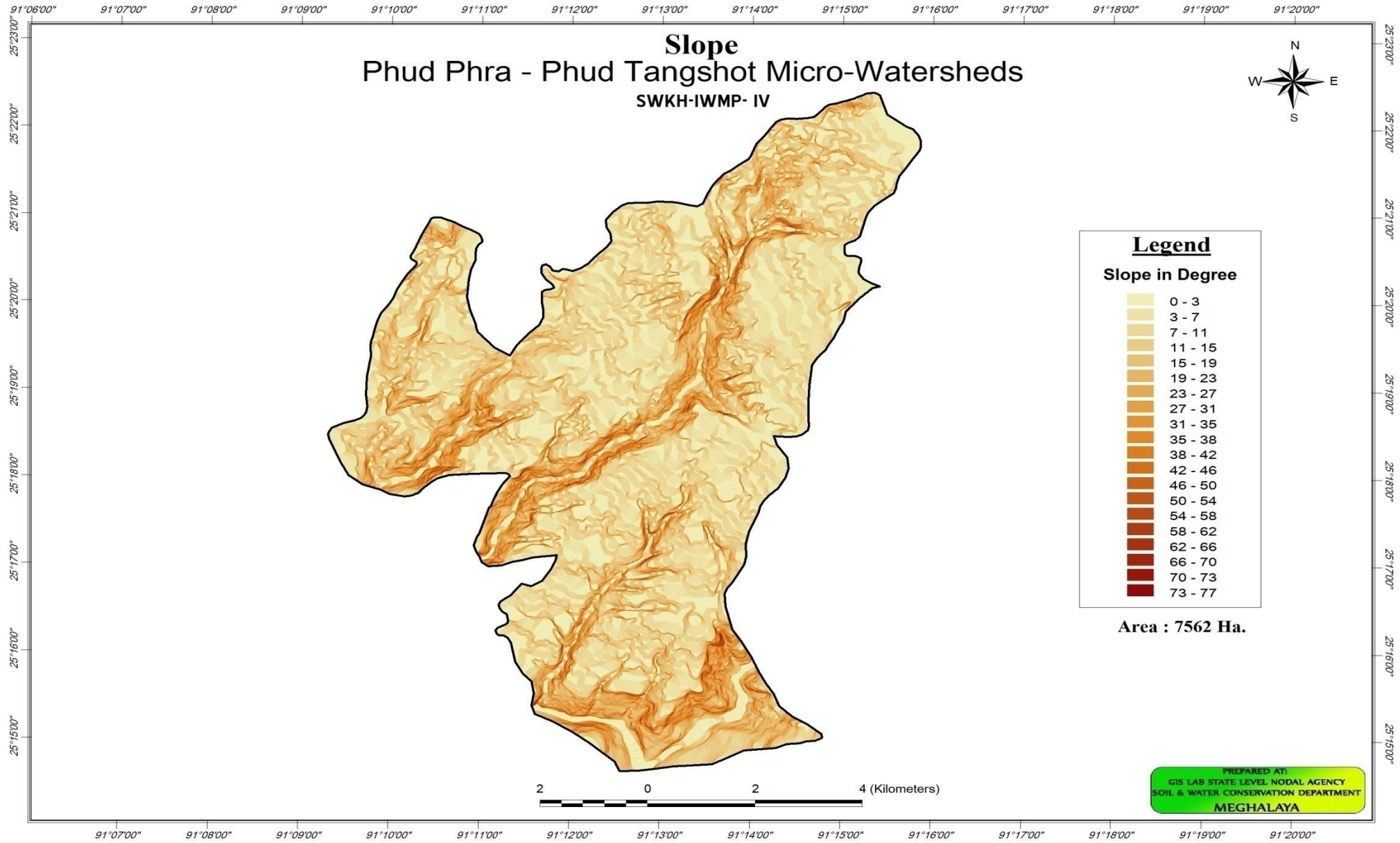
ANNEXURE I

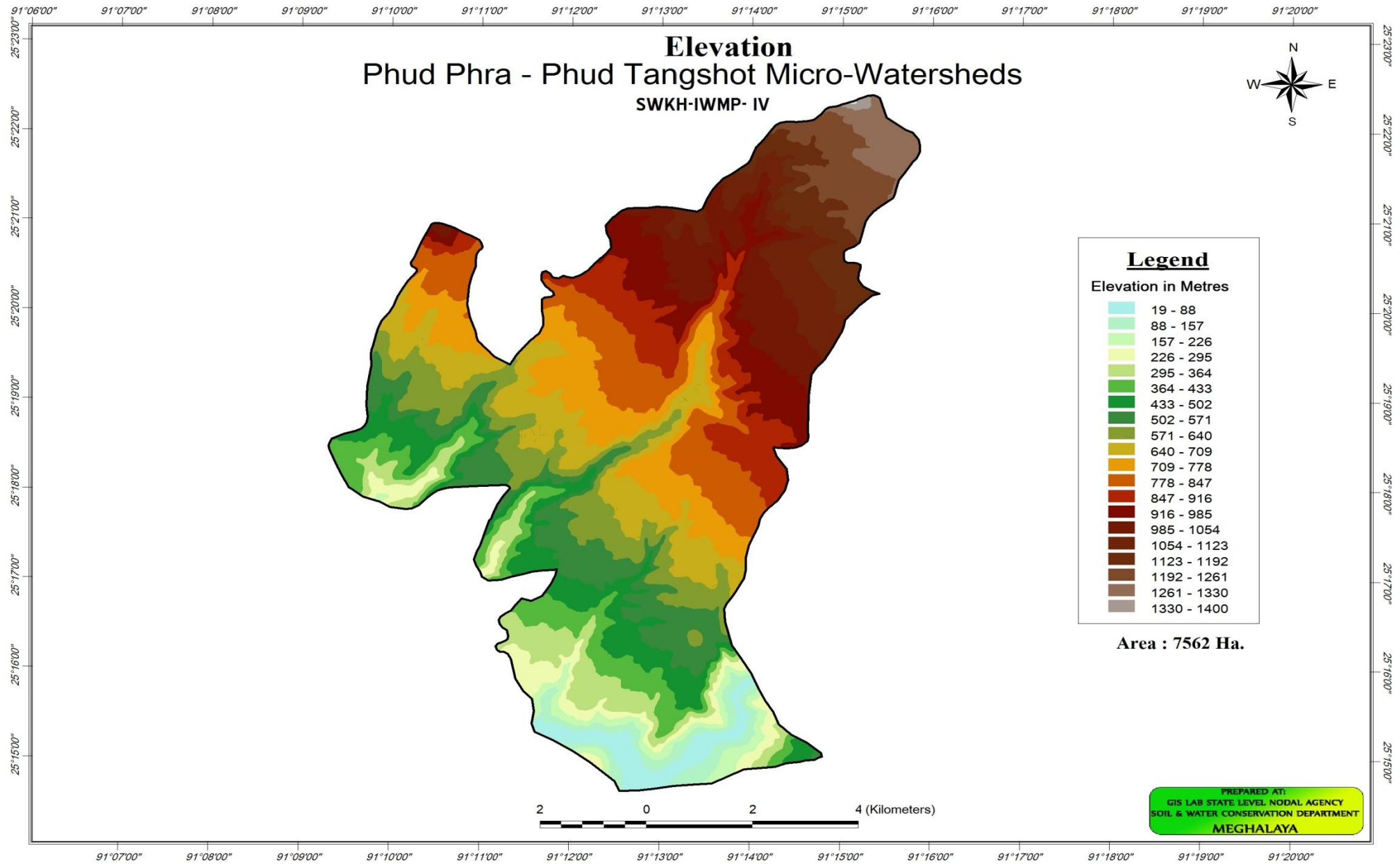
MAPS

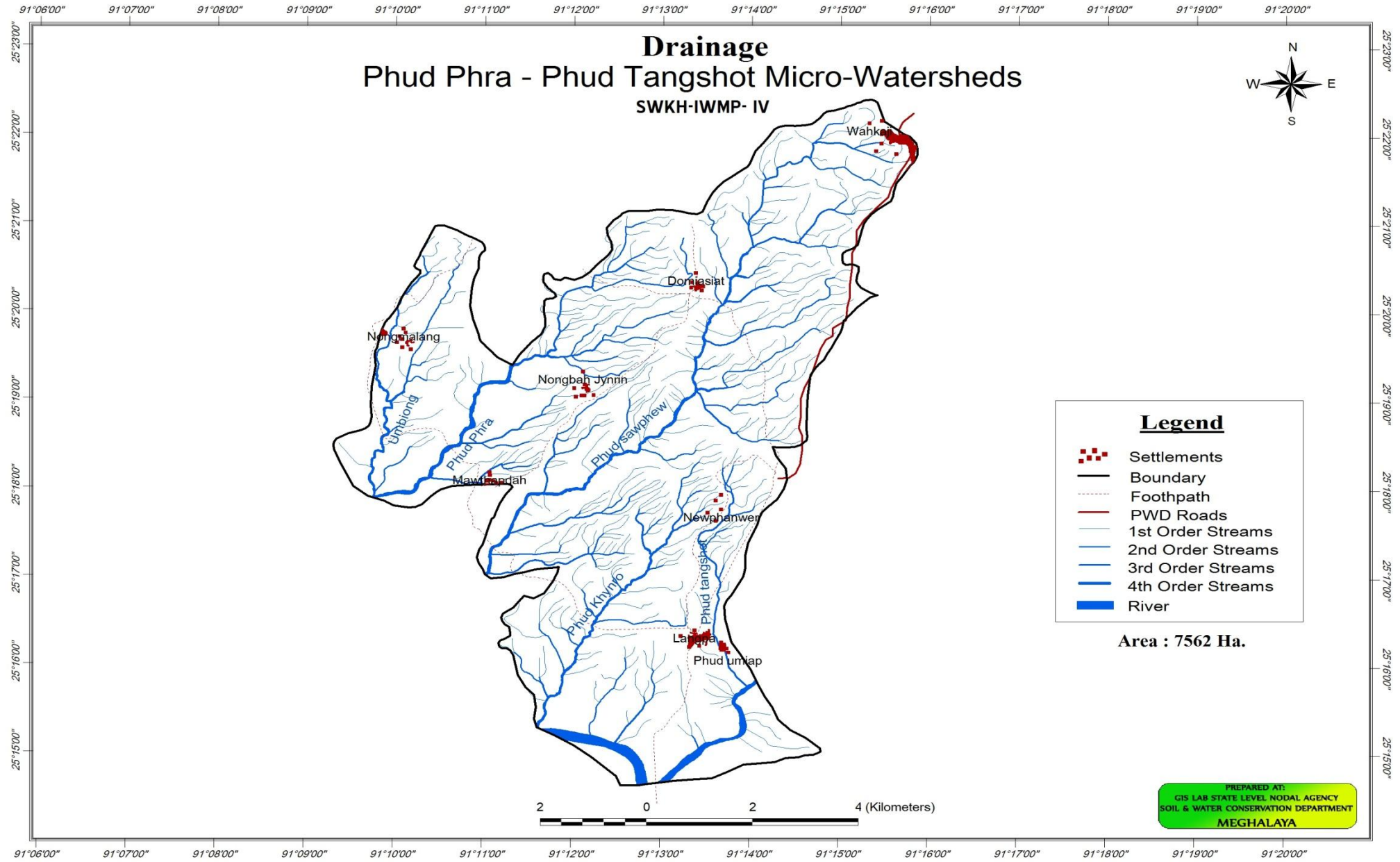


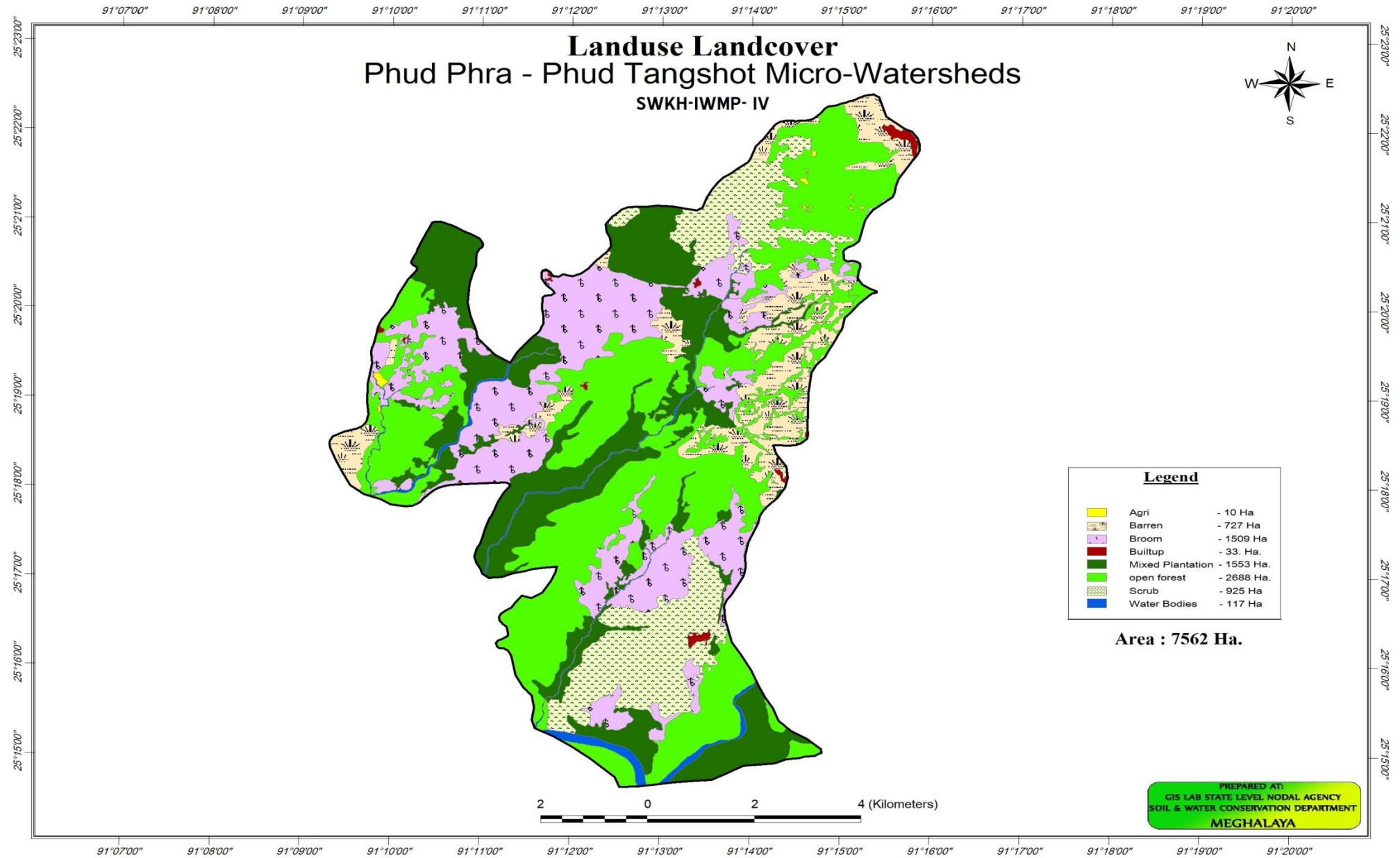


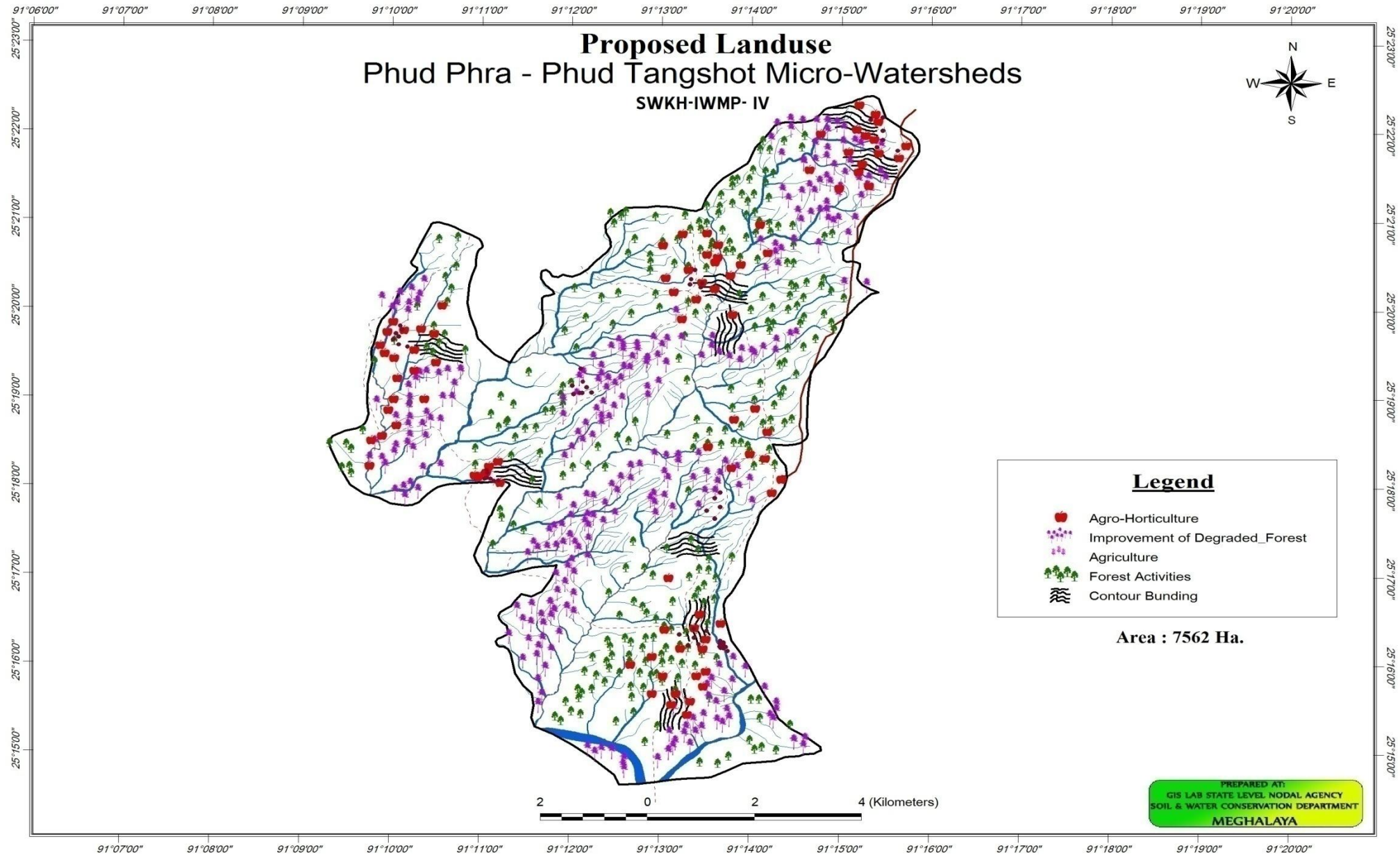


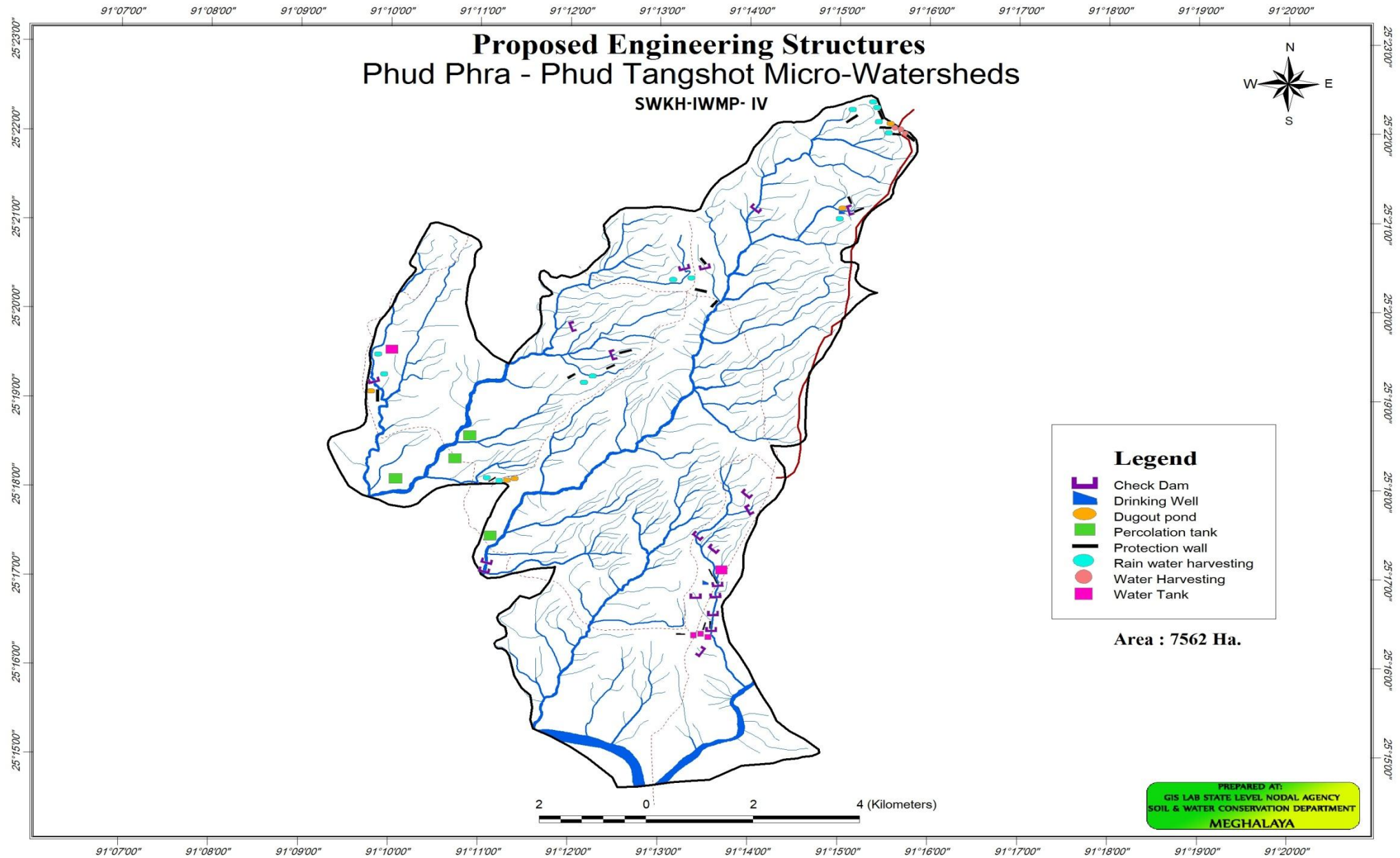












ANNEXURE II
SOCIO-ECONOMIC SURVEY DETAILS
STATEMENT SHOWING SOCIO-ECONOMIC SURVEY

Name of Watershed : **Phud Phra-Phud Tangshot Watershed**

Name of C&RD Block : **Ranikor C&RD Block**

Name of District : **South West Khasi Hills District**

SL No	NAME OF VILLAGE	No. of House Hold	Nos of. Population			Total of Child below 12 Yrs both male & female of col. 6	Occupation	literacy		Land holding in ha/household			Name of Crops grown	Average yield of each crop in kg/ha/No s	Livestock in nos					Total income of each family per annum (Rs.)
			Male	Female	Total			Literate	Illiterate	Arable	Non Arable	Total			Cattle	Goat	Piggery	Poultry	Horse	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1.	5Wahkaji	104	381	392	773		Farmer:, Govt. Service:	515	258				Rice Maize, Vegetables,Broom	-----	215	130	70	950	18	50000
2.	Domiasiat	7	25	31	56		Farmer., Cultivator., Teacher,:	24	32				Rice, Maize, , vegetables,Betel Leaf,Black Pepper,citrus	-----	21	28	11	65	--	50000
3.	Nongbah Jynrin	10	36	39	75		Farmer:, Cultivator:,	25	60				Rice, Maize, , vegetables,Betel Leaf,Black Pepper,citrus,	-----	12	28	17	38	-	45000
4.	Mawthabah	23	83	89	172		Farmer:, Teacher,:	68	104				Rice, Maize, , vegetables,Betel Leaf,Black Pepper,citrus,	-----	24	42	25	85	15	50000
5.	Nongmalang	30	97	112	209		Farmer:, , Others:	87	122				Rice, Maize, , vegetables,Betel Leaf,Black Pepper,citrus,	-----	95	57	32	258	-	50000
6.	Phud Umiap	45	188	184	372	20	Govt Service, Farmer:	200	172				Oraange Bettle Leaf Black Pepper,Broom	-----	80	-	25	205	-	50000
7.	Langpa	25	70	67	137	16	Govt Service,Teacher, Farmer:, Other:	64	73				Oraange Bettle Leaf Black Pepper,Broom	-----	42	-	10	97	-	50000
8.	Newphanwer	24	49	34	83	11	Teacher, Farmer:, Other:	7	76				Oraange Bettle Leaf Black Pepper,Broom	-----	-	-	8	49	-	48000
	TOTAL	268	929	948	1877			990	887						489	285	198	1747	33	

ANNEXURE III

COST ESTIMATES

ESTIMATE FOR CONSTRUCTION OF CHECK DAM.(EPA)

Rate Based as per Schedule of Rates for Road and Bridges (Other than National Highway Works) for the Year 2012-2013.

Name of Beneficiaries :- Community.

Location :- Phud Risa, Wakhaji.

Geographical Coordinates: N 25° 21'9.55"

E 91° 15'4.11"

Sl no	PARTICULARS	NO	DIMENSION			QTY	UNIT	RATE	AMOUNT (RS)
			L	B	H				
1/4.1 B(i).	Earthwork in excavation for structures as per drawings and Technical Clauses 305.1 including setting out construction of shoring and bracing, removal of stumps and other deleterious material and disposal upto a lead of 50m dressing of side and bottom and back filling in trenches with excavated suitable materials. Dam Apron Channel on U/S. W/Walls U/S and D/S	1	15.00	1.40	1.20	25.20	Cu.m		
		1	12.60	2.00	0.25	6.30	Cu.m		
		1	6.00	0.50	0.50	1.50	Cu.m		
		4	3.00	1.20	1.00	14.40	Cu.m		
		TOTAL					47.40	Cu.m	157
2/4.3	Providing concrete for plain/reinforced concrete in open foundations complete as per drawing and technical specifications clauses 802,803,1202,1203. Dam W/WALLS	1	15.00	1.40	0.10	2.10	Cu.m		
		4	3.00	1.20	0.10	1.44	Cu.m		
		TOTAL					3.54	Cu.m	4353
3/4.4	Providing stone masonry work in cement mortar in foundation complete as per drawings and Technical Specification Clauses 702,703,1202,1203. W/WALLS	4	3.00	1.20	0.90	12.96	Cu.m		
		4	3.00	0.85	2.80	28.56	Cu.m		
		TOTAL					41.52	Cu.m	2093
4/7.3	Providing reinforced cement concrete in substructure complete as per drawings and Technical Specification Clauses 802,804,805,806,1202,1204. Dam Apron Channel	1	15.00	1.40	1.20	25.20	Cu.m		
		1	15.00	0.95	2.50	35.63	Cu.m		
		1	12.60	2.00	0.10	2.52	Cu.m		
		1	6.00	0.50	0.10	0.30	Cu.m		
		2	6.00	0.30	0.10	0.36	Cu.m		
TOTAL					64.01	Cu.m	5818	372381.09	
5/5.12	Providing stone pitching with one man size boulders not less than 25cm x 25cm x 30 cm including filling the interstices with spoils and carriages of stone within a distance of 200m completed as directed Apron Channel	1	12.60	2.00	0.25	6.30	Cu.m		
		1	6.00	0.50	0.25	0.75	Cu.m		
		TOTAL					7.05	Cu.m	704

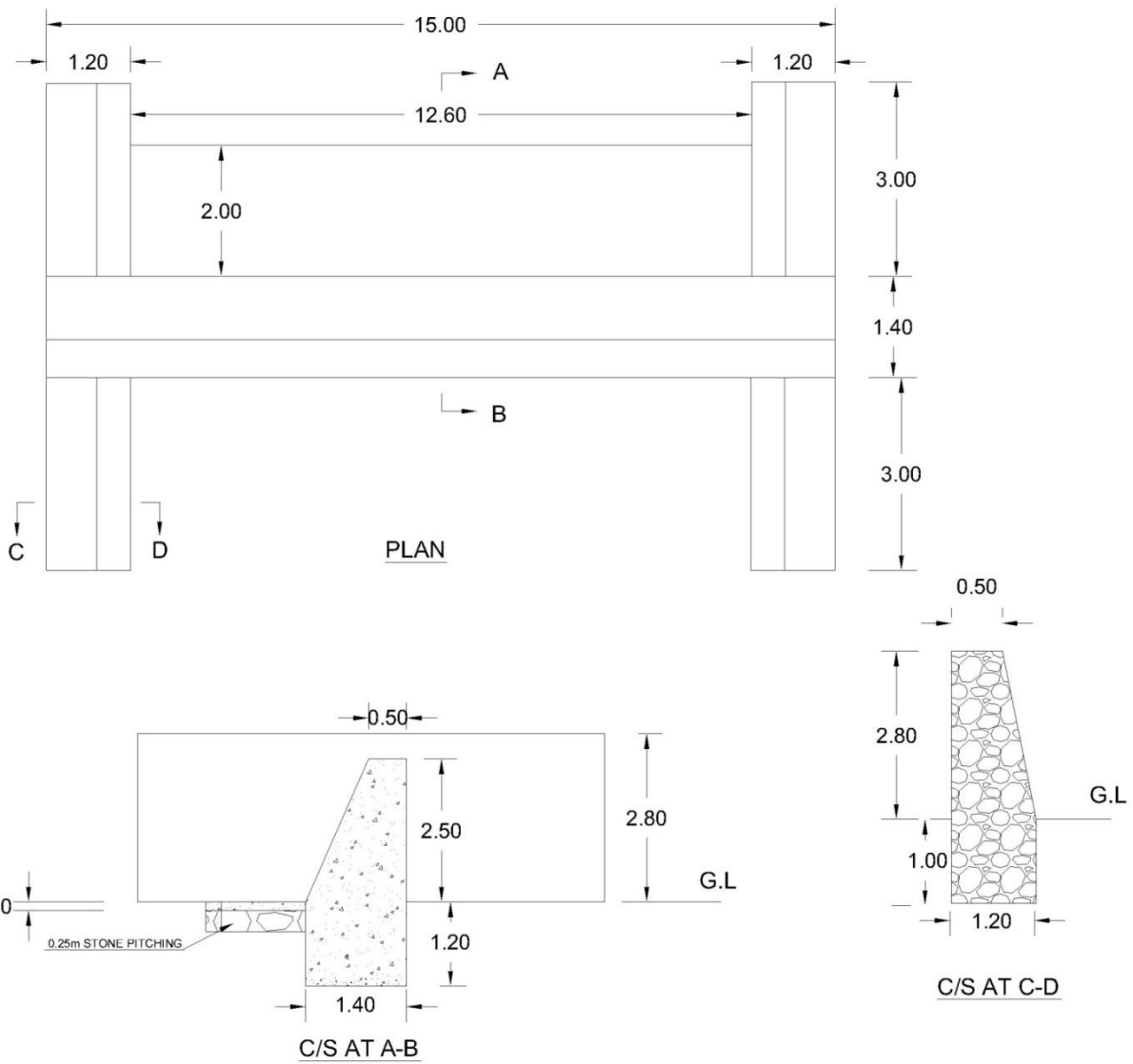
6/9.1 ii	Providing 12mm thick cement plastering including cleaing the surface, curing carriage of sand within 200m complete as per Technical Specification.									
		Dam	1	15.00	2.50		37.50	SQ.M		
		Apron	1	15.00	2.59		38.85	SQ.M		
			1	15.00	0.50		7.50	SQ.M		
			1	12.60	2.00		25.20	SQ.M		
		Channel	1	6.00	0.30		1.80	SQ.M		
			2	6.00	0.30		3.60	SQ.M		
		W/WALLS	4	3.00	2.80		33.60	SQ.M		
			4	3.00	0.50		6.00	SQ.M		
		TOTAL						154.05	SQ.M	157
GRAND TOTAL								511282.92		

Say:

Rs 5,11,290.00

(Rupees Five Lakh Eleven Thousand Two Hundred Ninety) only.

DRAWING FOR PROPOSED CHECK DAM.



NOTES :- ALL DIMENSIONS ARE IN METRES UNLESS SPECIFIED.
SCALE :- 1:50.

COUNTERSIGNED :- PREPARED BY :-

ESTIMATE FOR CONSTRUCTION OF DRINKING WELL.(EPA)

Rate Based as per Schedule of Rates for Road and Bridges (Other than National Highway Works) for the Year 2012-2013.

Name of Beneficiaries :- Community.

Location :- Wahkaji, Phot Risa.

Geographical Coordinates: N 25° 21' 9.5"

E 91° 15' 4.25"

Sl No.	PARTICULARS	NO	DIMENSION			QTY	UNIT	RATE	AMOUNT
			"m"	"m"	"m"				
1/4.1 B(i).	Earthwork in excavation for structures as per drawings and Technical Clauses 305.1 including setting out construction of shoring and bracing, removal of stumps and other deleterious material and disposal upto a lead of 50m dressing of side and bottom and back filling in trenches with excavated suitable materials. DRINKING WELL Washing Platform SIDE DRAIN	1	5.00	4.00	2.00	40.00	cu.m		
		2	5.0	0.30	0.30	0.90	cu.m		
		2	4.0	0.30	0.30	0.72	cu.m		
		1	5.0	2.50	0.25	3.13	cu.m		
		1	10.0	0.40	0.55	2.20	cu.m		
		TOTAL						46.95	cu.m
2/4.3	Providing concrete for plain/reinforced concrete in open foundations complete as per drawing and technical specifications clauses 802,803,1202,1203. DRINKING WELL	2	5.00	0.30	0.10	0.30	cu.m		
		2	4.00	0.30	0.10	0.24	cu.m		
		TOTAL						0.54	cu.m
3/4.4	Providing stone masonry work in cement mortar in foundation complete as per drawings and Technical Specification Clauses 702,703,1202,1203. D/WELL	1	5.00	0.30	3.15	4.73	cu.m		
		1	5.00	0.30	3.65	5.48	cu.m		
		2	4.00	3.40	0.30	8.16	cu.m		
		TOTAL						18.36	cu.m
4/8.6	Supplying, fitting, and placing TMT bar reinforcement (Fe 415) in superstructure complete as per drawing and Technical Specification Clauses 1002,1010 and 1202.fixing including bending, cranking and placing in position as per approved design and drawings	nos	length	Kg/m					
		33	4.00	0.39		0.052	Tonne		
		33	5.00	0.39		0.065	Tonne		
		53	5.00	0.62		0.1653	Tonne		
		TOTAL						0.2823	Tonne
5/5.12	Providing stone pitching with one man size boulders not less than 25cm x 25cm x 30 cm including filling the interstices with spoils and carriages of stone within a distance of 200m completed as directed DRINKING WELL	1	5.00	3.15	0.25	3.94	cu.m		

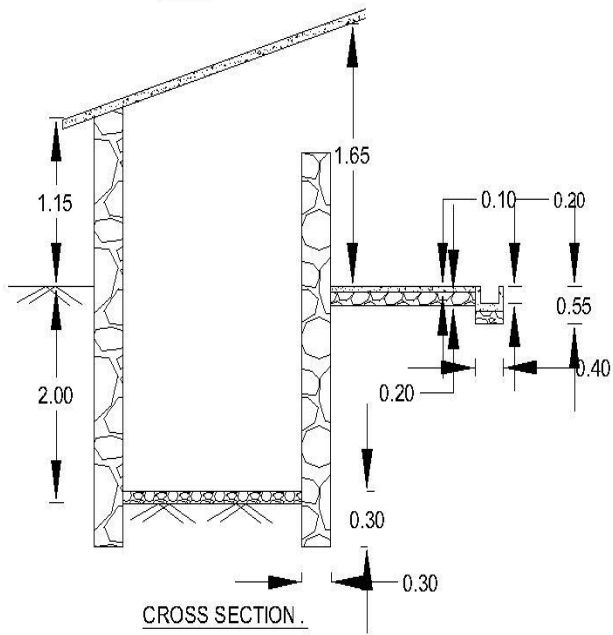
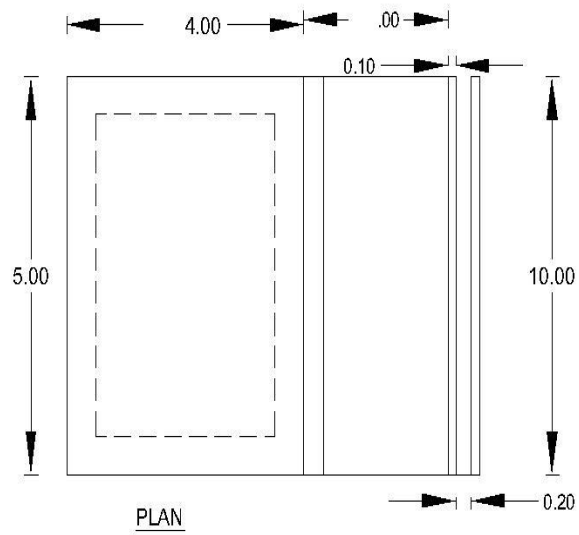
	Washing Platform	1	4.00	3.65	0.25	3.65	cu.m		
	SIDE DRAIN	1	10.00	0.40	0.25	1.00	cu.m		
		TOTAL				8.5875	cu.m	704	6045.60
6/8.1	Providing and laying reinforced cement concrete in superstructure as per drawing and Technical Specification Clauses 800, 1205.4 and 1205.5. A.R.C.C Grade M 20 Nominal Mix 1:2:4 Slab	1	5.30	4.30	0.10	2.279	cu.m		
		TOTAL				2.279	cu.m	6367	14510.39
7/7.2	Plain cement concrete in substructure complete as per drawings and technical specification Clauses 802,804,806,807,1202 and 1204. A.P.C.C Grade M 15 Washing platform SIDE DRAIN	1	5.00	2.50	0.10	1.25	cu.m		
		1	10.00	0.40	0.10	0.40	cu.m		
		2	10.00	0.30	0.10	0.60	cu.m		
		TOTAL				2.25	cu.m	4910	11047.50
8/9.1	Providing 12mm thick cement plastering including cleaning the surface, curing and carriage of all materials within 200m complete as per Technical specification. DRINKING WELL	1	5.00	3.15		15.75	Sqm		
		1	5.00	3.65		18.25	Sqm		
		1	5.00	1.65		8.25	Sqm		
		1	5.00	2.15		10.75	Sqm		
		2	4.00	3.40		27.20	Sqm		
	Washing Platform	1	5.00	2.50		12.50	Sqm		
		1	10.00	0.10		1.00	Sqm		
	SIDE DRAIN	1	10.00	0.20		2.00	Sqm		
		2	10.00	0.20		4.00	Sqm		
	slab	2	5.30	4.30		45.58	Sqm		
		1	19.20	0.10		1.92	Sqm		
		TOTAL				147.2	Sqm	157	23110.40

125998.45

Say : Rs. 1,26,000.00

(Rupees One Lakh Twenty Six Thousand) only.

PROPOSED DRINKING WATER WELL.



NOTES : ALL DIMENSIONS ARE IN METRES UNLESS SPECIFIED.
SCALE :- 1:50.

COUNTERSIGNED.

PREPARED BY.

ESTIMATE FOR CONSTRUCTION OF WATER HARVESTING STRUCTURE CUM WASHING PLACE.(EPA)

Rate Based as per Schedule of Rates for Road and Bridges (Other than National Highway Works) for the Year 2012-2013.

Name of Beneficiaries :- Community.

Geographical Coordinates: N 25° 20' 36.7"

E 91° 13' 34.0"

Location :- Domiasiat.

Sl no	PARTICULARS	NO	DIMENSION			QTY	UNIT	RATE	AMOUNT
			L	B	H				
1/4.1 B(i).	Earthwork in excavation for structures as per drawings and Technical Clauses 305.1 including setting out construction of shoring and bracing, removal of stumps and other deleterious material and disposal upto a lead of 50m dressing of side and bottom and back filling in trenches with excavated suitable materials. Dam W/Walls U/S .	1	20.00	1.40	1.20	33.60	Cu.m		
		2	3.00	1.20	1.00	7.20	Cu.m		
		TOTAL				40.80	Cu.m	157	6405.60
2/4.3	Providing concrete for plain/reinforced concrete in open foundations complete as per drawing and technical specifications clauses 802,803,1202,1203. Dam W/WALLS	1	20.00	1.40	0.10	2.80	Cu.m		
		2	3.00	1.20	0.10	0.72	Cu.m		
		TOTAL				3.52	Cu.m	4353	15322.56
3/4.4	Providing stone masonry work in cement mortar in foundation complete as per drawings and Technical Specification Clauses 702,703,1202,1203. W/WALLS	2	3.00	1.20	0.90	6.48	Cu.m		
		2	3.00	0.85	3.10	15.81	Cu.m		
						22.29	Cu.m	2093	46653.0
4/7.3	Providing reinforced cement concrete in substructure complete as per drawings and Technical Specification Clauses 802,804,805,806,1202,1204. Dam	1	20.00	1.40	1.20	33.60	Cu.m		
		1	20.00	1.00	2.80	56.00	Cu.m		
		TOTAL				89.60	Cu.m	5818	521292.8
5/9.1 ii	Providing 12mm thick cement plastering including cleaing the surface, curing carriage of sand within 200m complete as per Technical Specification. Dam W/WALLS	1	20.00	2.80		56.00	SQ.M		
		1	20.00	2.89		57.80	SQ.M		
		1	20.00	0.60		12.00	SQ.M		
		2	3.00	3.10		18.60	SQ.M		
		2	3.00	0.50		3.00	SQ.M		
		TOTAL				147.40	SQ.M	157	23141.80

GRAND TOTAL

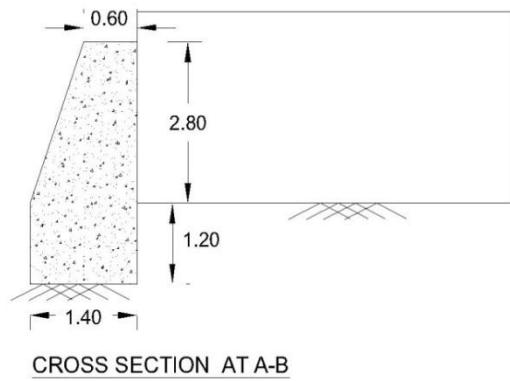
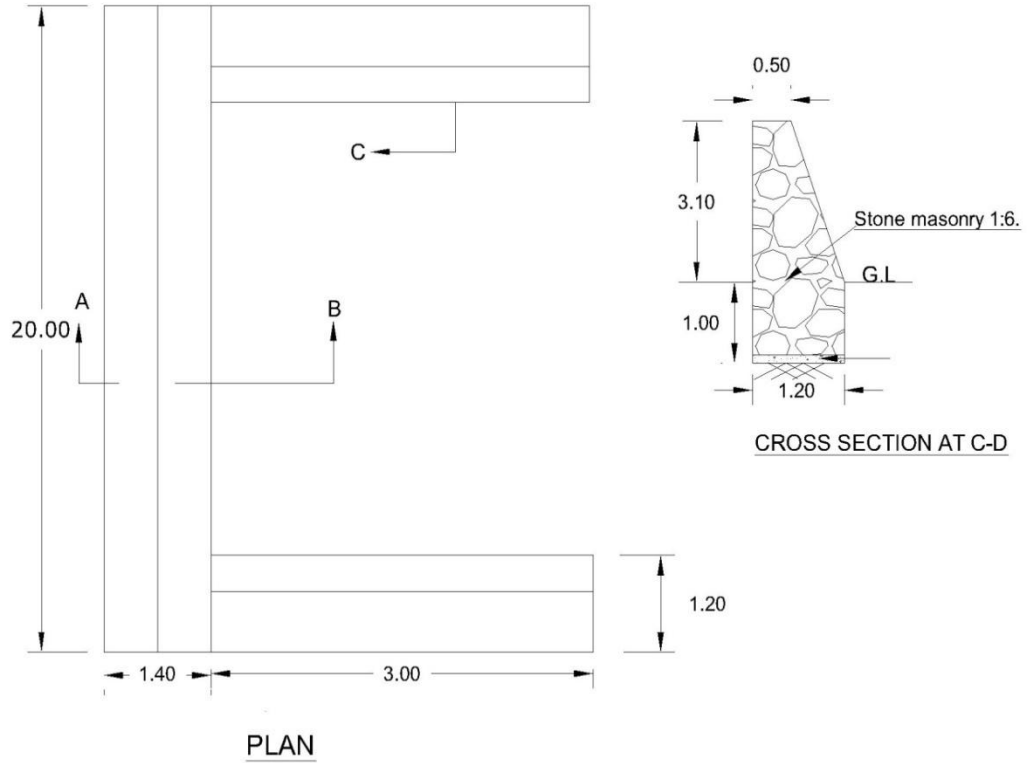
612815.7

Say

Rs 6,12,820.00

(Rupees Six Lakh Twelve Thousand Eight Hundred Twenty) only.

PROPOSED WATER HARVESTING STRUCTURE.



NOTES :-
 ALL DIMENSIONS ARE IN METRES UNLESS SPECIFIED.
 SCALE :- 1:50.

COUNTERSIGNED:-

PREPARED BY :-

ESTIMATE FOR CONSTRUCTION OF DRINKING WELL.(EPA)

Rate Based as per Schedule of Rates for Road and Bridges (Other than National Highway Works) for the Year 2012-2013.

Name of Beneficiaries :- Community.

Location :- Phot Rit ,Nongmalang.

Geographical Coordinates: N 25° 19'7.33 "

E 91° 9'8.57"

Sl No.	PARTICULARS	NO	DIMENSION			QTY	UNIT	RATE	AMOUNT
			"m"	"m"	"m"				
1/4.1 B(i).	Earthwork in excavation for structures as per drawings and Technical Clauses 305.1 including setting out construction of shoring and bracing, removal of stumps and other deleterious material and disposal upto a lead of 50m dressing of side and bottom and back filling in trenches with excavated suitable materials. DRINKING WELL Washing Platform SIDE DRAIN	1	5.00	4.00	2.00	40.00	cu.m		
		2	5.0	0.30	0.30	0.90	cu.m		
		2	4.0	0.30	0.30	0.72	cu.m		
		1	5.0	2.50	0.25	3.13	cu.m		
		1	10.0	0.40	0.55	2.20	cu.m		
		TOTAL						46.95	cu.m
2/4.3	Providing concrete for plain/reinforced concrete in open foundations complete as per drawing and technical specifications clauses 802,803,1202,1203. DRINKING WELL	2	5.00	0.30	0.10	0.30	cu.m		
		2	4.00	0.30	0.10	0.24	cu.m		
		TOTAL						0.54	cu.m
3/4.4	Providing stone masonry work in cement mortar in foundation complete as per drawings and Technical Specification Clauses 702,703,1202,1203. D/WELL	1	5.00	0.30	3.15	4.73	cu.m		
		1	5.00	0.30	3.65	5.48	cu.m		
		2	4.00	3.40	0.30	8.16	cu.m		
		TOTAL						18.36	cu.m
4/8.6	Supplying, fitting, and placing TMT bar reinforcement (Fe 415) in superstructure complete as per drawing and Technical Specification Clauses 1002,1010 and 1202.fixing including bending, cranking and placing in position as per approved design and drawings	nos	length	Kg/m					
		33	4.00	0.39		0.052	Tonne		
		33	5.00	0.39		0.065	Tonne		
		53	5.00	0.62		0.1653	Tonne		
		TOTAL						0.2823	Tonne
5/5.12	Providing stone pitching with one man size boulders not less than 25cm x 25cm x 30 cm including filling the interstices with spoils and carriages of stone within a distance of 200m completed as directed DRINKING WELL Washing Platform SIDE DRAIN	1	5.00	3.15	0.25	3.94	cu.m		
		1	4.00	3.65	0.25	3.65	cu.m		
		1	10.00	0.40	0.25	1.00	cu.m		
TOTAL						8.5875	cu.m	704	6045.60

6/8.1	Providing and laying reinforced cement concrete in superstructure as per drawing and Technical Specification Clauses 800, 1205.4 and 1205.5. A.R.C.C Grade M 20 Nominal Mix 1:2:4 Slab	1	5.30	4.30	0.10	2.279	cu.m		
TOTAL						2.279	cu.m	6367	14510.39
7/7.2	Plain cement concrete in substructure complete as per drawings and technical specification Clauses 802,804,806,807,1202 and 1204. A.P.C.C Grade M 15 Washing platform SIDE DRAIN	1	5.00	2.50	0.10	1.25	cu.m		
		1	10.00	0.40	0.10	0.40	cu.m		
		2	10.00	0.30	0.10	0.60	cu.m		
TOTAL						2.25	cu.m	4910	11047.50
8/9.1	Providing 12mm thick cement plastering including cleaning the surface, curing and carriage of all materials within 200m complete as per Technical specification. DRINKING WELL Washing Platform SIDE DRAIN slab	1	5.00	3.15		15.75	Sqm		
		1	5.00	3.65		18.25	Sqm		
		1	5.00	1.65		8.25	Sqm		
		1	5.00	2.15		10.75	Sqm		
		2	4.00	3.40		27.20	Sqm		
		1	5.00	2.50		12.50	Sqm		
		1	10.00	0.10		1.00	Sqm		
		1	10.00	0.20		2.00	Sqm		
		2	10.00	0.20		4.00	Sqm		
		2	5.30	4.30		45.58	Sqm		
		1	19.20	0.10		1.92	Sqm		
TOTAL						147.2	Sqm	157	23110.40

125998.45

Say : Rs. 1,26,000.00

(Rupees One Lakh Twenty Six Thousand) only

ESTIMATE FOR CONSTRUCTION OF RCC WATER TANK AND WASHING PLACE. (EPA)
Rate Based as per Schedule of Rates for Road and Bridges (Other than National Highway Works) for the
Year 2012 - 2013.

Name of Beneficiaries :- Community.

Location :- Nongbah jynrin.

Geographical Coordinates: N 25° 19'16.3"

E 91° 12'14"

Sl no	PARTICULARS	NO	DIMENSION			QTY	UNIT	RATE	AMOUN T (RS)
			L	B	H				
1/2.1(i)	Excavation in soil in hilly areas including cutting and trimming of sides slopes disposing of excavated earth with all lift upto 1.5m and a lead upto 20m as per drawing and Technical Specification Clause 1603.1. A. By Manual Means i. Ordinary soil. RCC WATER TANK WASHING PLACE.	1	6.00	4.00	0.80	19.20	Cu.m		
		1	6.00	1.00	0.20	1.20	Cu.m		
		1	6.00	0.40	0.50	1.20	Cu.m		
		1	6.60	1.80	0.50	5.94	Cu.m		
		TOTAL					27.54	Cu.m	98
2/5.12	Providing stone pitching with one man size boulders not less than 25cm x 25cm x 30 cm including filling the interstices with spoils and carriages of stone within a distance of 200m completed as directed WASHING PLACE.	1	6.60	4.60	0.20	6.07	Cu.m		
		1	6.00	1.00	0.10	0.60	Cu.m		
		1	6.00	0.40	0.10	0.24	Cu.m		
		1	6.60	1.80	0.30	3.56	Cu.m		
		TOTAL					10.48	Cu.m	704
3/8.6	Supplying, fitting, and placing TMT bar reinforcement (Fe 415) in superstructure complete as per drawing and Technical Specification Clauses 1002,1010 and 1202.fixing including bending, cranking and placing in position as per approved design and drawings	nos	length	Kg/ m					
		70	4.60	0.89		0.287	Tonne		
		44	6.60	0.89		0.258	Tonne		
		70	4.60	0.89		0.287	Tonne		
		44	6.60	0.89		0.258	Tonne		
		21	3.50	0.62		0.046	Tonne		
		21	3.50	0.62		0.046	Tonne		
		35	3.70	0.62		0.080	Tonne		
		22	6.60	0.62		0.090	Tonne		
		4	2.00	0.89		0.007	Tonne		
		TOTAL					1.359	Tonne	81946
4/8.1	Providing and laying reinforced cement concrete in superstructure as per drawing and Technical Specification Clauses 800, 1205.4 and 1205.5. A.R.C.C Grade M 20 Nominal Mix 1:2:4	1	6.00	4.00	0.20	4.80	Cu.m		
		2	6.00	0.22	0.15	0.40	Cu.m		
		2	6.00	2.15	0.15	3.87	Cu.m		
		2	4.00	0.22	0.15	0.26	Cu.m		
		2	4.00	2.15	0.15	2.58	Cu.m		
		1	6.00	4.00	0.10	2.40	Cu.m		
TOTAL					14.31	Cu.m	6367	91111.77	

5/7.2	Plain cement concrete in substructure complete as per drawings and technical specification Clauses 802,804,806,807,1202 and 1204. A.P.C.C Grade M 15 i.1:2.5:5 Nominal mix WASHING PLACE.	1	6.00	1.00	0.10	0.60	Cu.m		
		2	6.00	0.20	0.10	0.24	Cu.m		
		1	6.00	0.40	0.10	0.24	Cu.m		
		1	6.60	1.80	0.10	1.19	Cu.m		
TOTAL						2.27	Cu.m	4910	11135.88
6/9.1	Providing 12mm thick cement plastering including cleaning the surface, curing and carriage of all materials within 200m complete as per Technical specification. (ii) Proportion 1:3 WASHING PLACE.	3	6.00	4.00		72.00	Sq.m		
		4	6.00	4.00		96.00	Sq.m		
		4	4.00	4.00		64.00	Sq.m		
		2	6.60	2.00		26.40	Sq.m		
		2	4.60	2.00		18.40	Sq.m		
		1	18.0	0	0.10	1.80	Sq.m		
		1	19.2	0	0.10	1.92	Sq.m		
		1	6.00	0.20		1.20	Sq.m		
		2	6.00	0.20		2.40	Sq.m		
		1	6.60	1.80		11.88	Sq.m		
TOTAL						296.00	Sq.m	157	46472.00
7/ Market rate	Providing and fixing GI pipe including necessary sockets, bends, jammuts, elbows, tees etc complete (a) 100mm dia (Inlet Pipe) (b) 20mm dia (Outlet Pipe)	1	35.00	0		35.00	Rm		
TOTAL						35.00	Rm	4000	140000.00
		4	1			4.00	Nos		
TOTAL						4.00	Nos	1500	6000.00

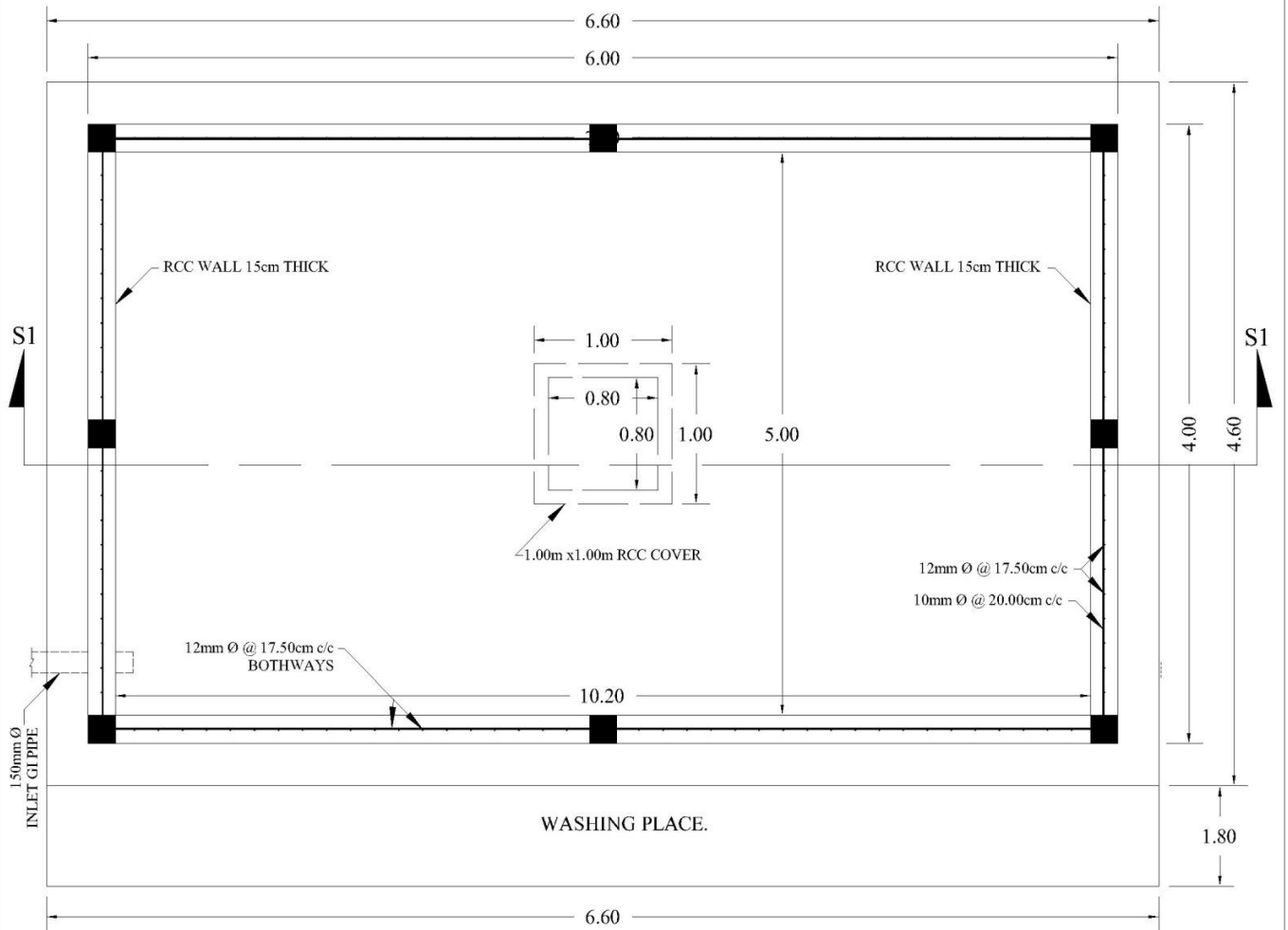
GRAND TOTAL

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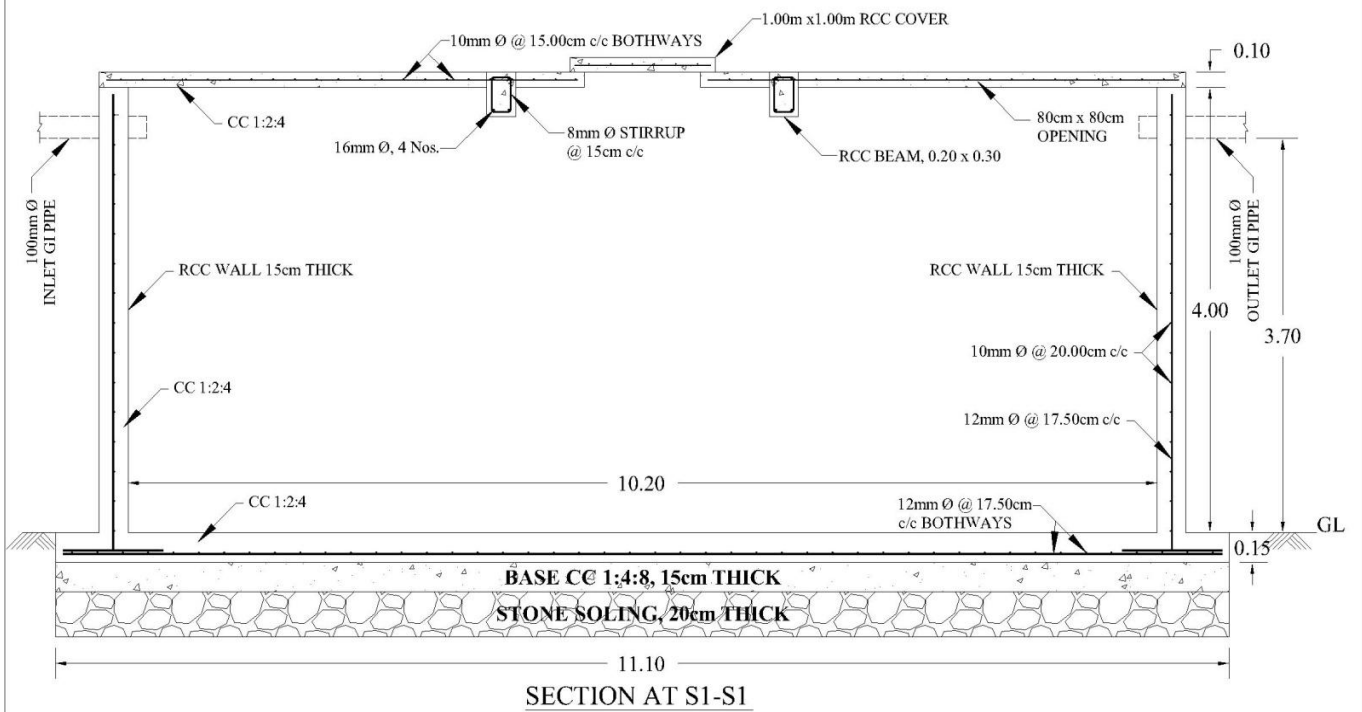
Say **4,16,130.00**

(Rupees Four Lakh Sixteen Thousand One Hundred Thirty) only

PROPOSED RCC WATER TANK AND WASHING PLACE.



PLAN



SECTION AT S1-S1

Notes:

- All dimensions are in metre unless specified.
- Tank capacity = $96.00\text{m}^3 = 96,000\text{litres}$.
- Scale = 1:50

Countersigned

Prepared by

ESTIMATE FOR CONSTRUCTION OF R.C.C CHECK DAM.(EPA)

Rate Based as per Schedule of Rates for Road and Bridges (Other than National Highway Works) for the Year 2012-2013.

Name of Beneficiaries :- Community.

Location :- Phud Umlaru, Mawthabah

Geographical Coordinates: N 25° 17'8.53"

E 91° 10'3.02"

Sl no	PARTICULARS	NO	DIMENSION			QTY	UNIT	RATE	AMOUNT
			L	B	H				
1/4.1 B(i).	Earthwork in excavation for structures as per drawings and Technical Clauses 305.1 including setting out construction of shoring and bracing, removal of stumps and other deleterious material and disposal upto a lead of 50m dressing of side and bottom and back filling in trenches with excavated suitable materials. Dam Apron Channel on U/S. W/Walls U/S and D/S								
		1	12.00	1.40	1.20	20.16	Cu.m		
		1	9.60	1.43	0.25	3.43	Cu.m		
		1	6.00	0.50	0.50	1.50	Cu.m		
		4	3.00	1.20	1.00	14.40	Cu.m		
TOTAL						39.49	Cu.m	157	6200.62
2/4.3	Providing concrete for plain/reinforced concrete in open foundations complete as per drawing and technical specifications clauses 802,803,1202,1203. Dam W/WALLS								
		1	12.00	1.40	0.10	1.68	Cu.m		
		4	3.00	1.20	0.10	1.44	Cu.m		
TOTAL						3.12	Cu.m	4353	13581.36
3/4.4	Providing stone masonry work in cement mortar in foundation complete as per drawings and Technical Specification Clauses 702,703,1202,1203. W/WALLS								
		4	3.00	1.20	0.90	12.96	Cu.m		
		4	3.00	0.85	2.80	28.56	Cu.m		
TOTAL						41.52	Cu.m	2093	86901.36
4/8.6	Supplying, fitting, and placing TMT bar reinforcement (Fe 415) in superstructure complete as per drawing and Technical Specification Clauses 1002,1010 and 1202.fixing including bending, cranking and placing in position as per approved design and drawings.	nos	length	Kg/m					
		80	1.40	0.89	0.100	Tonne			
		9	12.00	0.89	0.100	Tonne			
		17	12.00	1.58	0.316	Tonne			
		80	2.50	0.89	0.178	Tonne			
TOTAL						0.693	Tonne	81946	56818.08
5/7.3	Providing reinforced cement concrete in substructure complete as per drawings and Technical Specification Clauses 802,804,805,806,1202,1204. Dam Apron Channel								
		1	12.00	1.40	1.20	20.16	Cu.m		
		1	12.00	0.95	2.50	28.50	Cu.m		
		1	9.60	1.43	0.10	1.37	Cu.m		
		1	6.00	0.50	0.10	0.30	Cu.m		
		2	6.00	0.30	0.10	0.36	Cu.m		
TOTAL						50.69	Cu.m	5818	294936.30
6/5.12	Providing stone pitching with one man size boulders not less than 25cm x 25cm x 30 cm including filling the interstices with spoils and carriages of stone within a distance of 200m completed as directed.								
	Apron Channel	1	9.60	1.43	0.25	3.43	Cu.m		
		1	6.00	0.50	0.25	0.75	Cu.m		
		TOTAL						4.18	Cu.m

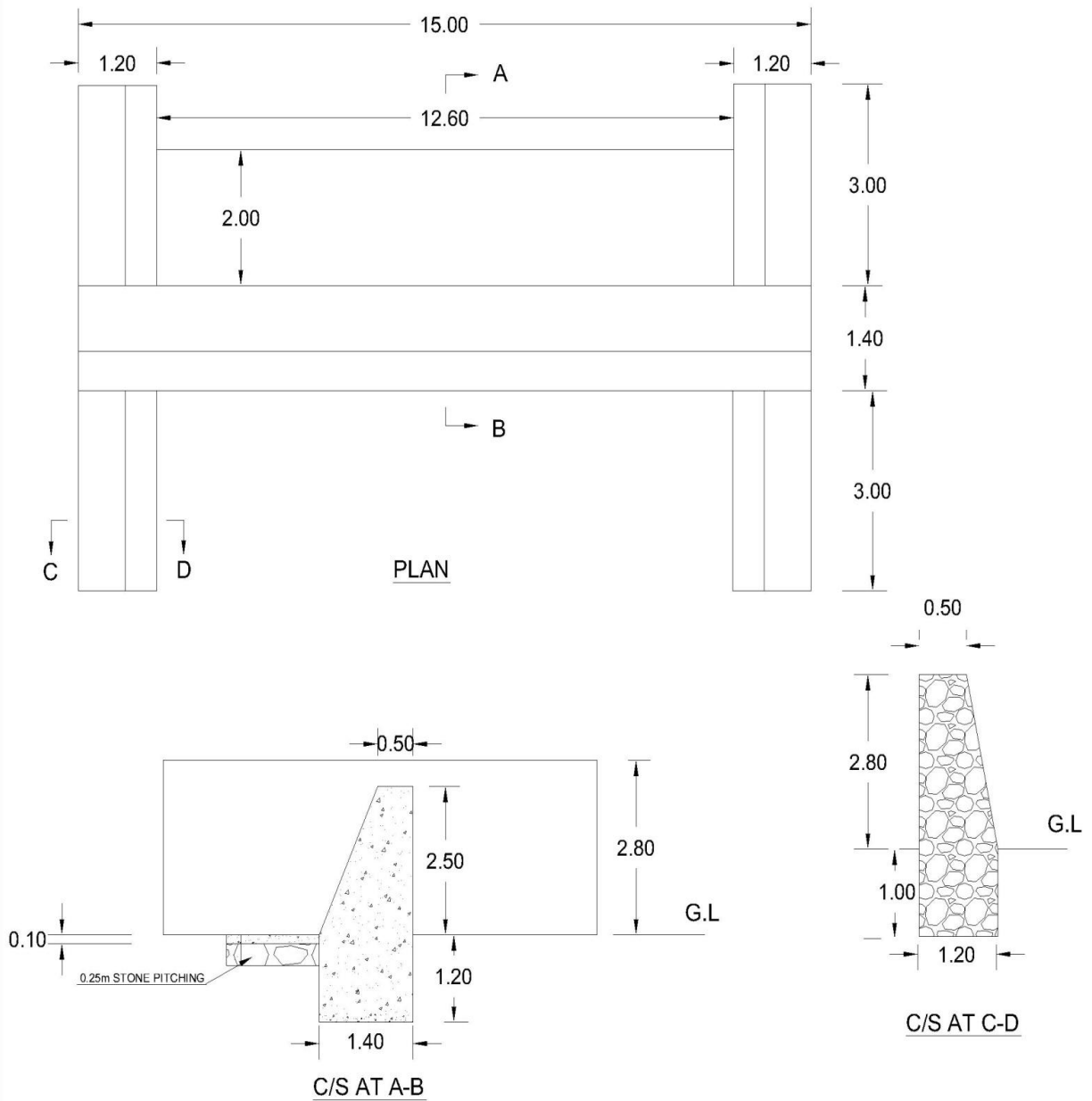
7/9.1 ii	Providing 12mm thick cement plastering including cleaing the surface, curing carriage of sand within 200m complete as per Technical Specification.								
		Dam	1	12.00	2.50		30.00	SQ.M	
			1	12.00	2.59		31.08	SQ.M	
			1	12.00	0.50		6.00	SQ.M	
		Apron	1	9.60	1.43		13.74	SQ.M	
		Channel	1	6.00	0.30		1.80	SQ.M	
			2	6.00	0.30		3.60	SQ.M	
		W/WALLS	4	3.00	2.80		33.60	SQ.M	
			4	3.00	0.50		6.00	SQ.M	
		TOTAL					125.82	SQ.M	157
GRAND TOTAL								481136.90	

Say:

Rs. 4,81,140.00

(Rupees Four Lakh Eighty One Thousand One Hundred Forty) only

DRAWING FOR PROPOSED CHECK DAM.



NOTES :- ALL DIMENSIONS ARE IN METRES UNLESS SPECIFIED.
SCALE :- 1:50.

COUNTERSIGNED :- PREPARED BY :-

ESTIMATE FOR CONSTRUCTION OF DRINKING WELL.(EPA)

Rate Based as per Schedule of Rates for Road and Bridges (Other than National Highway Works) for the Year 2012-2013.

Name of Beneficiaries :- Community.

Location :- Phud Rangkhlieh, Langpa.

Geographical Coordinates: N 25° 16'22.7"

E 91° 13'35.4"

Sl No.	PARTICULARS	NO	DIMENSION			QTY	UNIT	RATE	AMOUNT		
			"m"	"m"	"m"					(Rs.)	(Rs.)
1/4.1 B(i).	Earthwork in excavation for structures as per drawings and Technical Clauses 305.1 including setting out construction of shoring and bracing, removal of stumps and other deleterious material and disposal upto a lead of 50m dressing of side and bottom and back filling in trenches with excavated suitable materials. DRINKING WELL Washing Platform SIDE DRAIN	1	5.00	4.00	2.00	40.00	cu.m				
		2	5.0	0.30	0.30	0.90	cu.m				
		2	4.0	0.30	0.30	0.72	cu.m				
		1	5.0	2.50	0.25	3.13	cu.m				
		1	10.0	0.40	0.55	2.20	cu.m				
		TOTAL						46.95	cu.m	157	7370.37
2/4.3	Providing concrete for plain/reinforced concrete in open foundations complete as per drawing and technical specifications clauses 802,803,1202,1203. DRINKING WELL	2	5.00	0.30	0.10	0.30	cu.m				
		2	4.00	0.30	0.10	0.24	cu.m				
		TOTAL						0.54	cu.m	4353	2350.62
		3/4.4	Providing stone masonry work in cement mortar in foundation complete as per drawings and Technical Specification Clauses 702,703,1202,1203. D/WELL	1	5.00	0.30	3.15	4.73	cu.m		
1	5.00	0.30	3.65	5.48	cu.m						
2	4.00	3.40	0.30	8.16	cu.m						
TOTAL						18.36	cu.m	2093	38427.48		
4/8.6	Supplying, fitting, and placing TMT bar reinforcement (Fe 415) in superstructure complete as per drawing and Technical Specification Clauses 1002,1010 and 1202.fixing including bending, cranking and placing in position as per approved design and drawings	nos	length	Kg/m							
		33	4.00	0.39		0.052	Tonne				
		33	5.00	0.39		0.065	Tonne				
		53	5.00	0.62		0.1653	Tonne				
		TOTAL						0.2823	Tonne	81946	23136.09
5/5.12	Providing stone pitching with one man size boulders not less than 25cm x 25cm x 30 cm including filling the interstices with spoils and carriages of stone within a distance of 200m completed as directed DRINKING WELL	1	5.00	3.15	0.25	3.94	cu.m				
		1	4.00	3.65	0.25	3.65	cu.m				
		1	10.00	0.40	0.25	1.00	cu.m				
TOTAL						8.5875	cu.m	704	6045.60		
6/8.1	Providing and laying reinforced cement concrete in superstructure as per drawing and Technical Specification Clauses 800, 1205.4 and 1205.5. A.R.C.C Grade M 20 Nominal Mix 1:2:4 Slab	1	5.30	4.30	0.10	2.279	cu.m				
		TOTAL						2.279	cu.m	6367	14510.39

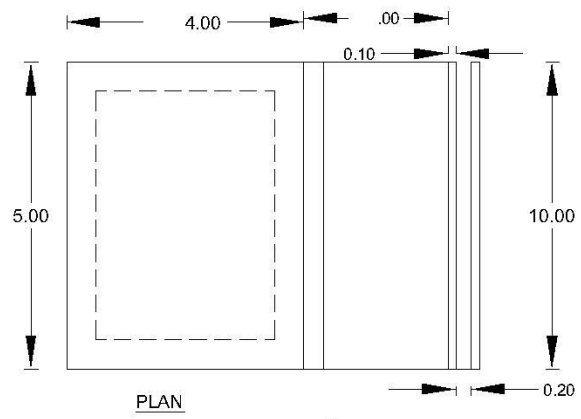
7/7.2	Plain cement concrete in substructure complete as per drawings and technical specification Clauses 802,804,806,807,1202 and 1204. A.P.C.C Grade M 15								
	Washing platform	1	5.00	2.50	0.10	1.25	cu.m		
	SIDE DRAIN	1	10.00	0.40	0.10	0.40	cu.m		
		2	10.00	0.30	0.10	0.60	cu.m		
		TOTAL				2.25	cu.m	4910	11047.50
8/9.1	Providing 12mm thick cement plastering including cleaning the surface, curing and carriage of all materials within 200m complete as per Technical specification.								
	DRINKING WELL	1	5.00	3.15		15.75	Sqm		
		1	5.00	3.65		18.25	Sqm		
		1	5.00	1.65		8.25	Sqm		
		1	5.00	2.15		10.75	Sqm		
		2	4.00	3.40		27.20	Sqm		
	Washing Platform	1	5.00	2.50		12.50	Sqm		
		1	10.00	0.10		1.00	Sqm		
	SIDE DRAIN	1	10.00	0.20		2.00	Sqm		
		2	10.00	0.20		4.00	Sqm		
	slab	2	5.30	4.30		45.58	Sqm		
		1	19.20	0.10		1.92	Sqm		
		TOTAL				147.2	Sqm	157	23110.40

125998.45

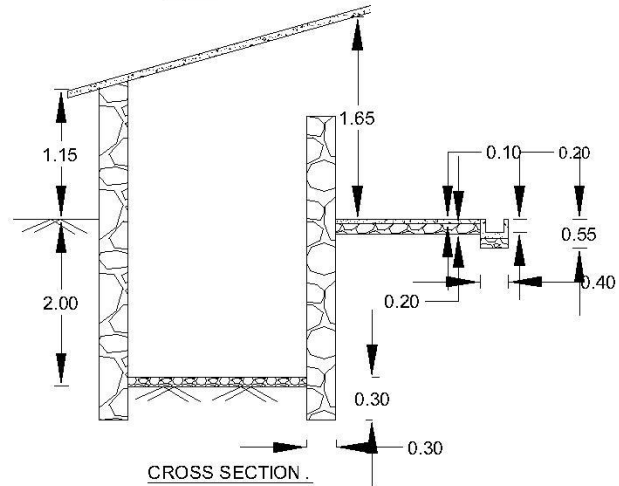
Say : Rs. 1,26,000.00

(Rupees One Lakh Twenty Six Thousand) only.

PROPOSED DRINKING WATER WELL.



PLAN



CROSS SECTION.

NOTES : ALL DIMENSIONS ARE IN METRES UNLESS SPECIFIED.
SCALE :- 1:50.

COUNTERSIGNED.

PREPARED BY.

ESTIMATE FOR CONSTRUCTION OF CHECK DAM.(EPA)

Rate Based as per Schedule of Rates for Road and Bridges (Other than National Highway Works) for the Year 2012-2013.

Name of Beneficiaries :- Community.

Location :- Phud Tangsshot ,Langpa.

Geographical Coordinates: N 25° 16'20.7"

E 91° 13'39.3"

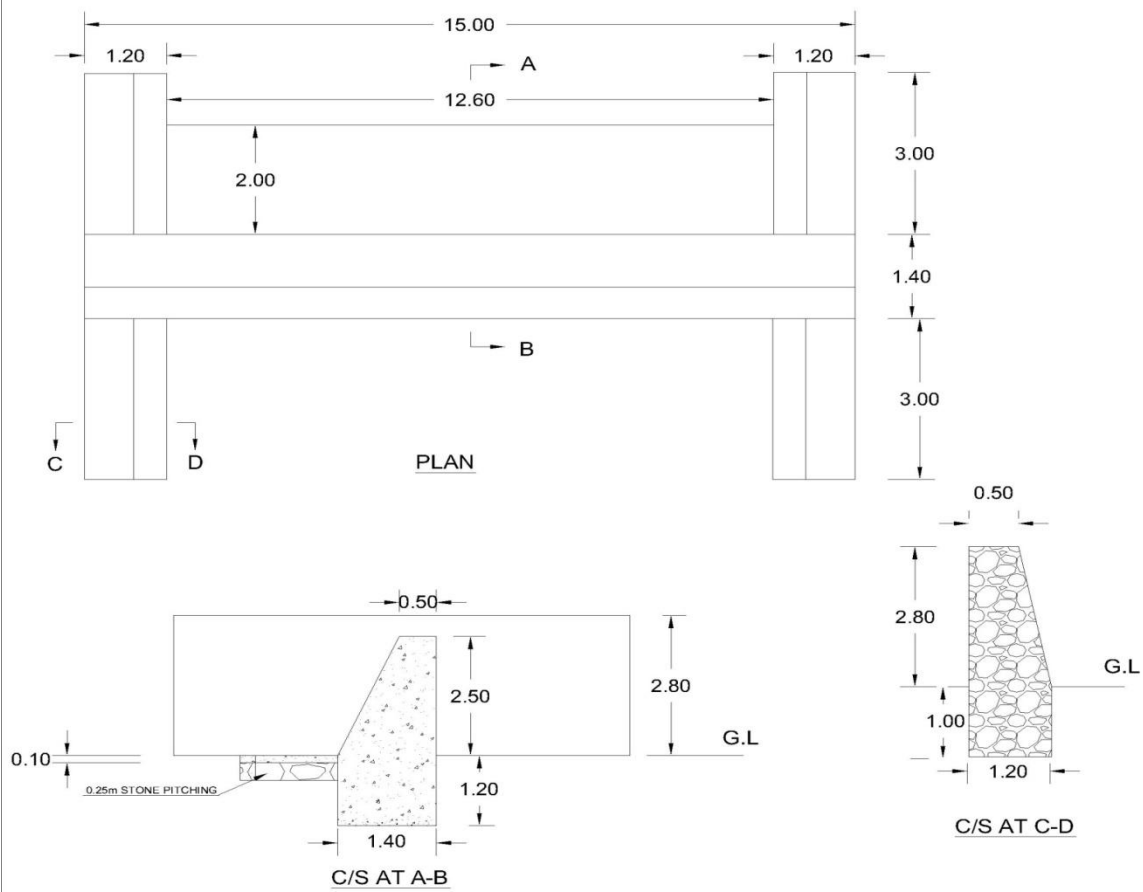
Sl no	PARTICULARS	NO	DIMENSION			QTY	UNIT	RATE	AMOUNT
			L	B	H				
1/4.1 B(i).	Earthwork in excavation for structures as per drawings and Technical Clauses 305.1 including setting out construction of shoring and bracing, removal of stumps and other deleterious material and disposal upto a lead of 50m dressing of side and bottom and back filling in trenches with excavated suitable materials. Dam Apron Channel on U/S. W/Walls U/S and D/S	1	15.00	1.40	1.20	25.20	Cu.m		
		1	12.60	2.00	0.25	6.30	Cu.m		
		1	6.00	0.50	0.50	1.50	Cu.m		
		4	3.00	1.20	1.00	14.40	Cu.m		
		TOTAL						47.40	Cu.m
2/4.3	Providing concrete for plain/reinforced concrete in open foundations complete as per drawing and technical specifications clauses 802,803,1202,1203. Dam W/WALLS	1	15.00	1.40	0.10	2.10	Cu.m		
		4	3.00	1.20	0.10	1.44	Cu.m		
		TOTAL						3.54	Cu.m
3/4.4	Providing stone masonry work in cement mortar in foundation complete as per drawings and Technical Specification Clauses 702,703,1202,1203. W/WALLS	4	3.00	1.20	0.90	12.96	Cu.m		
		4	3.00	0.85	2.80	28.56	Cu.m		
		TOTAL						41.52	Cu.m
4/7.3	Providing reinforced cement concrete in substructure complete as per drawings and Technical Specification Clauses 802,804,805,806,1202,1204. Dam Apron Channel	1	15.00	1.40	1.20	25.20	Cu.m		
		1	15.00	0.95	2.50	35.63	Cu.m		
		1	12.60	2.00	0.10	2.52	Cu.m		
		1	6.00	0.50	0.10	0.30	Cu.m		
		2	6.00	0.30	0.10	0.36	Cu.m		
		TOTAL						64.01	Cu.m
5/5.12	Providing stone pitching with one man size boulders not less than 25cm x 25cm x 30 cm including filling the interstices with spoils and carriages of stone within a distance of 200m completed as directed Apron Channel	1	12.60	2.00	0.25	6.30	Cu.m		
		1	6.00	0.50	0.25	0.75	Cu.m		
		TOTAL						7.05	Cu.m
6/9.1 ii	Providing 12mm thick cement plastering including cleaing the surface, curing carriage of sand within 200m complete as per Technical Specification. Dam	1	15.00	2.50		37.50	SQ.M		
		1	15.00	0.50		7.50	SQ.M		
	Apron Channel W/WALLS	1	12.60	2.00		25.20	SQ.M		
		1	6.00	0.30		1.80	SQ.M		
		2	6.00	0.30		3.60	SQ.M		
		4	3.00	2.80		33.60	SQ.M		
		4	3.00	0.50		6.00	SQ.M		
		TOTAL						154.05	SQ.M
GRAND TOTAL									511282.92

Say:

Rs 5,11,290.00

(Rupees Five Lakh Eleven Thousand Two Hundred Ninety) only.

DRAWING FOR PROPOSED CHECK DAM.



NOTES :- ALL DIMENSIONS ARE IN METRES UNLESS SPECIFIED.
 SCALE :- 1:50.

COUNTERSIGNED :- PREPARED BY :-

ESTIMATE FOR CONSTRUCTION OF CHECK DAM.(EPA)

Rate Based as per Schedule of Rates for Road and Bridges (Other than National Highway Works) for the Year 2012-2013.

Name of Beneficiaries :- Community.

Location :- Phud Sah ,Phud Umiap.

Geographical Coordinates: N 25° 16'32.8"

E 91° 13'22.7"

Sl no	PARTICULARS	NO	DIMENSION			QTY	UNIT	RATE	AMOUNT
			L	B	H				
1/4.1 B(i).	Earthwork in excavation for structures as per drawings and Technical Clauses 305.1 including setting out construction of shoring and bracing, removal of stumps and other deleterious material and disposal upto a lead of 50m dressing of side and bottom and back filling in trenches with excavated suitable materials. Dam Apron Channel on U/S. W/Walls U/S and D/S	1	12.00	1.40	1.20	20.16	Cu.m		
		1	9.60	2.00	0.25	4.80	Cu.m		
		1	6.00	0.50	0.50	1.50	Cu.m		
		4	3.00	1.20	1.00	14.40	Cu.m		
		TOTAL						40.86	Cu.m
2/4.3	Providing concrete for plain/reinforced concrete in open foundations complete as per drawing and technical specifications clauses 802,803,1202,1203. Dam W/WALLS	1	12.00	1.40	0.10	1.68	Cu.m		
		4	3.00	1.20	0.10	1.44	Cu.m		
		TOTAL						3.12	Cu.m
3/4.4	Providing stone masonry work in cement mortar in foundation complete as per drawings and Technical Specification Clauses 702,703,1202,1203. W/WALLS	4	3.00	1.20	0.90	12.96	Cu.m		
		4	3.00	0.85	2.80	28.56	Cu.m		
		TOTAL						41.52	Cu.m
4/7.3	Providing reinforced cement concrete in substructure complete as per drawings and Technical Specification Clauses 802,804,805,806,1202,1204. Dam Apron Channel	1	12.00	1.40	1.20	20.16	Cu.m		
		1	12.00	0.95	2.50	28.50	Cu.m		
		1	9.60	2.00	0.10	1.92	Cu.m		
		1	6.00	0.50	0.10	0.30	Cu.m		
		2	6.00	0.30	0.10	0.36	Cu.m		
		TOTAL						51.24	Cu.m
5/5.12	Providing stone pitching with one man size boulders not less than 25cm x 25cm x 30 cm including filling the interstices with spoils and carriages of stone within a distance of 200m completed as directed Apron Channel	1	9.60	2.00	0.25	4.80	Cu.m		
		1	6.00	0.50	0.25	0.75	Cu.m		
		TOTAL						5.55	Cu.m

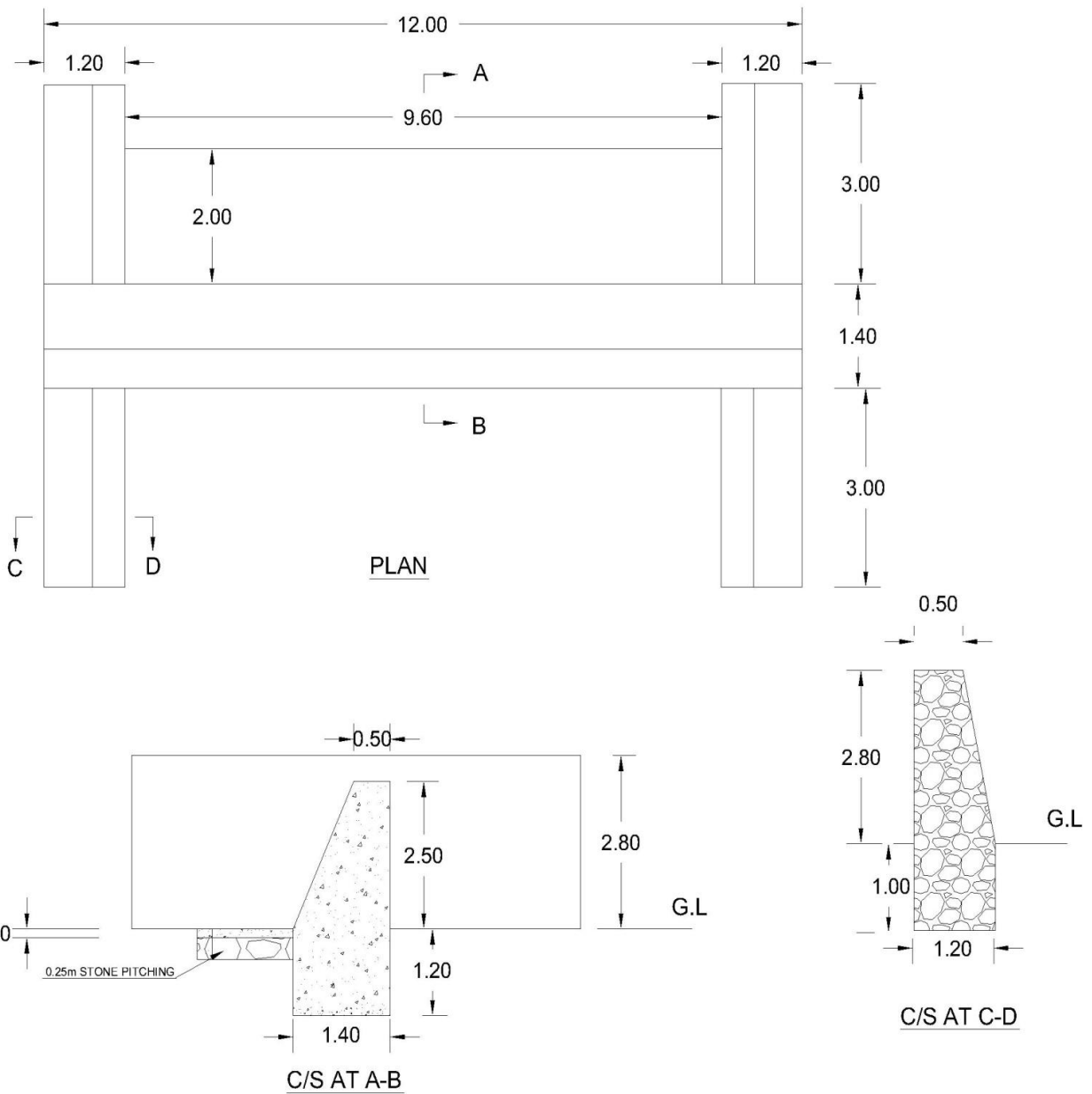
6/9.1 ii	Providing 12mm thick cement plastering including cleaing the surface, curing carriage of sand within 200m complete as per Technical Specification.								
	Dam	1	12.00	2.50		30.00	SQ.M		
		1	12.00	2.59		31.08	SQ.M		
		1	12.00	0.50		6.00	SQ.M		
	Apron	1	9.60	2.00		19.20	SQ.M		
	Channel	1	6.00	0.30		1.80	SQ.M		
		2	6.00	0.30		3.60	SQ.M		
	W/WALLS	4	3.00	2.80		33.60	SQ.M		
		4	3.00	0.50		6.00	SQ.M		
		TOTAL				131.28	SQ.M	157	20610.96
		GRAND TOTAL							429530.22

Say:

Rs 4,29,530.00

(Rupees Four Lakh Twenty Nine Thousand Five Hundred Thirty) only.

DRAWING FOR PROPOSED CHECK DAM.



NOTES :- ALL DIMENSIONS ARE IN METRES UNLESS SPECIFIED.
SCALE :- 1:50.

COUNTERSIGNED :- PREPARED BY :-

ESTIMATE FOR THE CONSTRUCTION OF DRINKING WELL AT NEW PHANWER (PHUD THRI) (2nd Year)
(Rates as per Schedule of rates for Building for the year 2013-2014)

Beneficiaries: Community

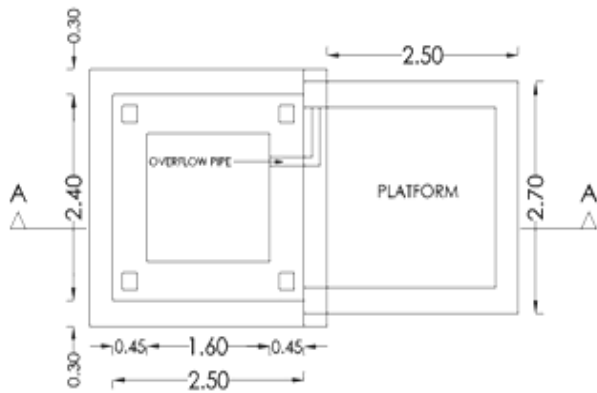
Geographical Coordinates: E 91° 13' 31.4"

N 25° 16' 55.9"

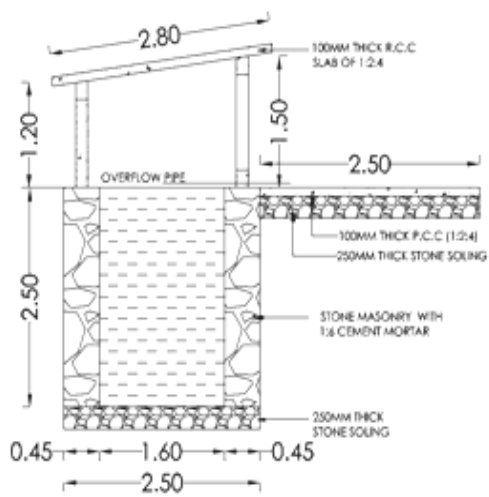
Sl/No	Particulars	Units	Nos	Length	Breadth	Height	Quantity	Rate	Amount
1/1.1	Earthwork in excavation in foundation trenches,including dressing of sides and ramming of the bottom including including stacking of serviceable stones,disposal and removal of excavated earth within a lead of 50m lift of 1.50m complete as directed.								
(d)	Soft laminated rock or medium shale								
	Well			2.50	2.40	2.50	15.00		
	Platform			2.70	2.50	0.20	1.35		
	Footpath			20.00	1.40	0.30	<u>8.40</u>		
		Cum					24.75	286.00	7,078.50
2/3.5	Providing coursed random rubble stone masonry in foundation and plinth with unsized stone(mawthup)bonded with cement mortar of proportion 1:6(1-cement ,6-sand)including curing complete.(Average size is not less than 20 cm x 20 cm x 25 cm)								
	Wall		2	2.50	0.45	2.40	5.400		
	Wall		2	2.40	0.45	2.40	5.184		
	Footpath		2	20.00	0.15	0.30	<u>1.800</u>		
		Cum					12.384	3810.00	47,183.04
3/4.5	Providing 100 mm thick soling with approved quality of stones including carriage,ramming,consolidating and filling the interstices with stone aggregates complete								
	Well			2.50	2.40		6.00		
	Platform			2.70	2.50		6.75		
	Footpath			20.00	1.40		<u>28.00</u>		
		Sqm					40.75	220.00	8,965.00
4/2.3	Providing and laying cement concrete in proportion 1:2:4 corresponding to M15 (1 cement : 2 sand : 4 stone aggregates of 20mm and down graded) including curing etc complete excluding shuttering,in foundation and below plinth and in septic tank,inspection pits etc,complete								
	Platform		1	2.50	2.40	0.10	0.60		
	Slab		1	2.80	2.40	0.10	0.67		
	Column		2	0.20	0.20	1.20	0.10		
	Column		2	0.20	0.20	1.50	0.12		
	Beam		2	2.40	0.15	0.15	0.11		
	Beam		2	2.50	0.15	0.15	0.11		

	Wall		2	2.50	0.15	$1.2+1.5/2 = 1.35$	1.01		
	Wall		1	2.40	0.15	1.50	0.54		
	Wall		1	2.40	0.15	1.20	0.43		
	Footpath			20.00	1.40	0.15	<u>4.20</u>		
		Cum					7.89	7239.00	57,137.43
5/2. 9 (a)	Providing shuttering including centering for flat surface such as slabs,shelves,chajja and for vertical faces such as columns,walls,ends of beams etc with dressed plank not less than 25cm thick firmly fixed etc								
	Slab		1	2.50	2.40		6.00		
	Slab		2	2.50		0.10	0.50		
	Slab		2	2.40		0.10	0.48		
	Column		2	0.80		1.20	1.92		
	Column		2	0.80		1.50	2.40		
	Beam		2	2.40		0.45	2.16		
	Beam		2	2.50		0.45	2.25		
	Wall		2	2.50		$1.2+1.5/2 = 1.35$	6.75		
	Wall		1	2.40		1.50	3.60		
	Wall		1	2.40		1.20	<u>2.88</u>		
		Sqm					28.94	389.00	11,257.66
6/4. 1	Providing 12mm thick cement plaster i/c cleaning the surface and curing complete as directed								
	Slab		1	2.50	2.40		6.00		
	Slab		2	2.50		0.10	0.50		
	Slab		2	2.40		0.10	0.48		
	Column		2	0.80		1.20	1.92		
	Column		2	0.80		1.50	2.40		
	Beam		2	2.40		0.45	2.16		
	Beam		2	2.50		0.45	2.25		
	Wall		2	2.50		$1.2+1.5/2 = 1.35$	6.75		
	Wall		1	2.40		1.50	3.60		
	Wall		1	2.40		1.20	<u>2.88</u>		
		Sqm					28.94	213.00	6,164.22
7/4. 10	Providing cement concrete topping proportion is 1:1:2 corresponding to M25 (1 cement : 1 sand : 2 stone chip of 12mm and down graded) to the proper level and slope including curing and trowel finished with a floating coat of neat cement slurry @ 2.75kg of cement per sqm for floor complete as directed								
(a)	20mm thick topping								
	Footpath			20.00	1.40		28.00		
	Platform			2.70	2.50		<u>6.75</u>		
		Sqm					34.75	252.00	8757.00

8/6.2	Providing tor steel reinforcement in RCC work including cutting,bending,cranking and tying in position with binding wire,20 gauge,as shown in drawings,complete upto floor two level	Nos	Length	Breadth	Height	Nos of reinforcement	Unit weight in kg/m	Quantity	Rate	Amount	
	Column super structure (200x200) 4-12mm dia	2	1.50			4	0.89	10.68			
	Development length	2	0.60			4	0.89	4.27			
	6 mm Stirrup @ 150mm c/c		(0.84*10*2*0.22)+1						4.70		
	Column super structure (200x200) 4-12mm dia	2	1.20			4	0.89	8.54			
	Development length	2	0.60			4	0.89	4.27			
	6 mm Stirrup @ 150mm c/c		(0.84*8*2*0.22)+1						3.96		
	Beam (150x150) 2-12mm dia alt top bottom	2	2.50			4	0.89	17.80			
	Development length	2*2	0.72			4	0.89	10.25			
	6 mm Stirrup @ 150mm c/c		2*(0.86*17*0.22)+1						7.43		
	Beam (150x150) 2-12mm dia alt top bottom	2	2.40			4	0.89	17.09			
	Development length	2*2	0.72			4	0.89	10.25			
	6 mm Stirrup @ 150mm c/c		2*(0.86*16*0.22)+1						7.05		
	Wall (jali) 10mm bothways @ 150mm c/c	2	2.50			9	0.62	27.90			
	Wall (jali) 10mm bothways @ 150mm c/c	2	1.35			17	0.62	28.46			
	Wall (jali) 10mm bothways @ 150mm c/c	1	2.40			10	0.62	14.88			
	Wall (jali) 10mm bothways @ 150mm c/c	1	1.50			16	0.62	14.88			
	Wall (jali) 10mm bothways @ 150mm c/c	1	2.40			8	0.62	11.90			
	Wall (jali) 10mm bothways @ 150mm c/c	1	1.20			16	0.62	11.90			
						Total in Kg		216.23			
						Total in Qntl		2.16			
	Add 3% wastage							0.06			
								2.23	9,938.00	22,133.36	
						Total				1,68,676.21	
									Say	1,68,676.00	
	(Rupees One Lakh Sixty Eight Thousand Six Hundred Seventy Six Only)										



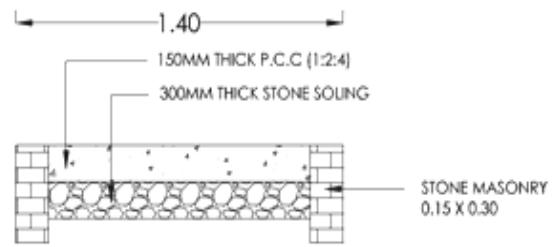
PLAN



SECTION A-A



PLAN OF A FOOTPATH



SECTION A-A OF A FOOTPATH

NOTE: ALL DIMENSIONS ARE IN METERS EXCEPT OTHERWISE MENTIONED.

PROJECT :	CONSTRUCTION OF A DRINKING WELL AT NEW PHANWER PHUD THRI.	
DWG TITLE :	PLAN & CROSS SECTION OF A DRINKING WELL & FOOTPATH.	
DRWN BY :		COUNTERSIGNED BY :

Detail estimate for the construction of Water Tank at Mawthabah as per M.P.W.D Building S.O.R(2013-2014)(2nd Year)

Beneficiaries: Community

Geographical Coordinates: E 91° 11' 09.3"

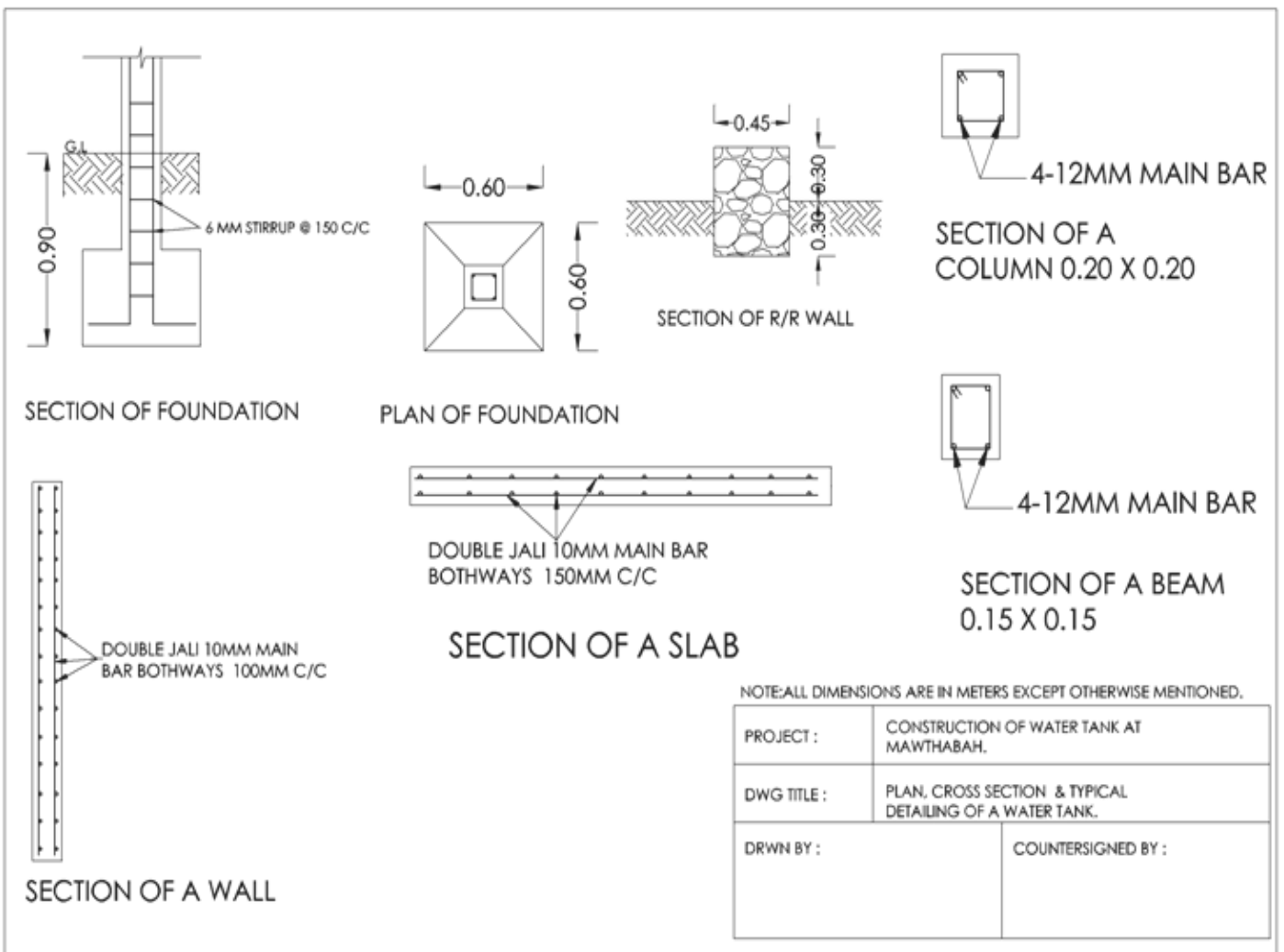
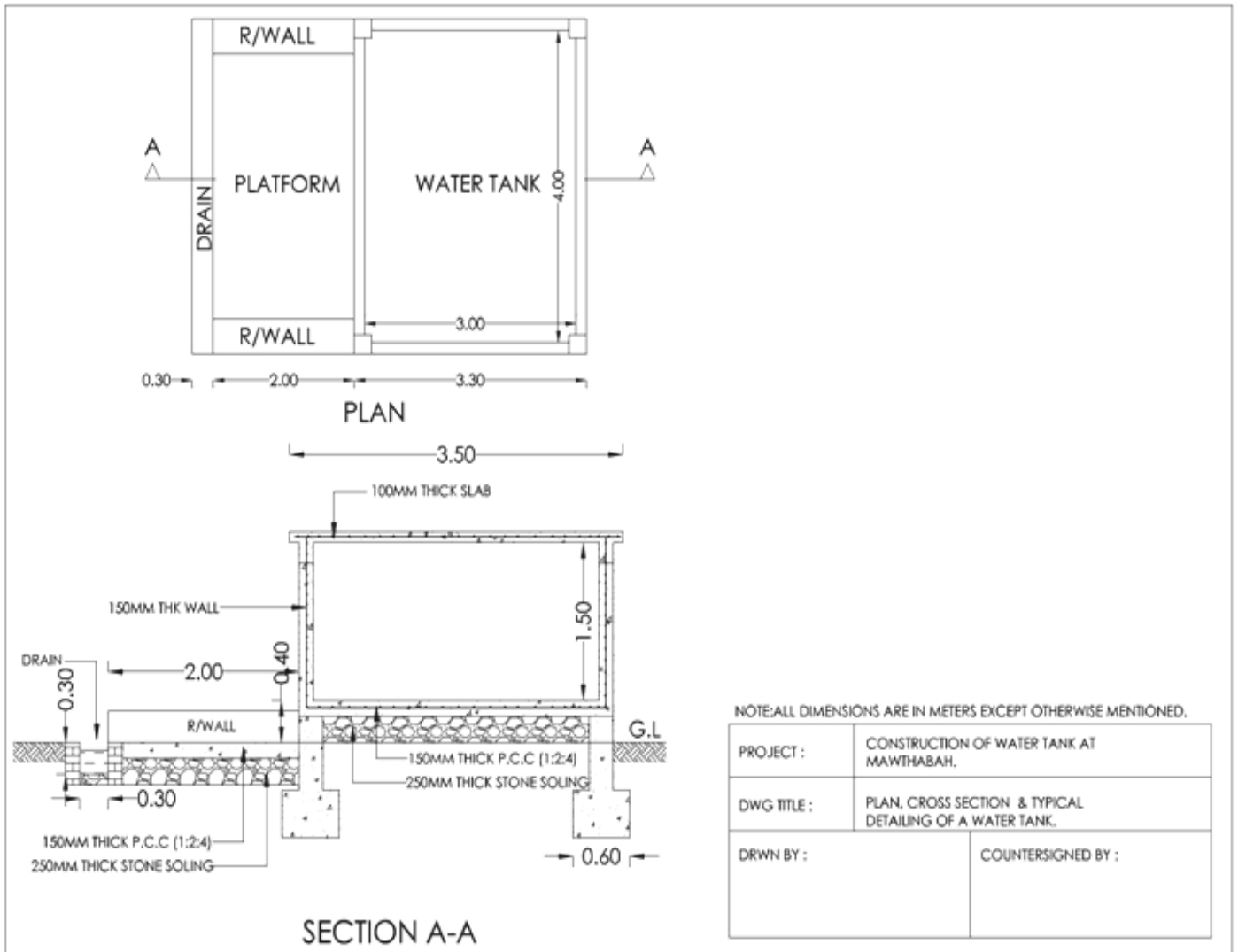
N 25° 18' 0.34"

Sl/No	Particulars	Units	Nos	Length	Breadth	Height	Quantity	Rate	Amount
1/1.1	Earthwork in excavation in foundation trenches,including dressing of sides and ramming of the bottom including including stacking of serviceable stones,disposal and removal of excavated earth within a lead of 50m lift of 1.50m complete as directed.								
(b)	Hard soil or mixed with moorum,gravel,boulder upo one man size(above 0.03 cum each)								
	Footing		4	0.60	0.60	0.90	1.296		
	Wall		2	3.00	0.30	0.20	0.36		
	Wall		2	4.00	0.30	0.20	0.48		
	Wall		2	2.00	0.30	0.20	0.24		
	Water tank			4.00	3.00	0.20	2.40		
	Platform			4.00	2.00	0.30	2.40		
	Drain			4.00	0.60	0.60	<u>1.44</u>		
		Cum					8.62	159.00	1,369.94
2/3.5	Providing coursed random rubble stone masonry in foundation and plinth with unsized stone(mawthup)bonded with cement mortar of proportion 1:6(1-cement ,6-sand)including curing complete.(Average size is not less than 20 cm x 20 cm x 25 cm)								
	Wall		2	3.00	0.30	0.45	0.81		
	Wall		2	4.00	0.30	0.45	1.08		
	Wall		2	2.00	0.30	0.45	<u>0.54</u>		
		Cum					2.43	3810.00	9,258.30
3/4.5	Providing 100 mm thick soling with approved quality of stones including carriage,ramming,consolidating and filling the interstices with stone aggregates complete								
	Footing		4	0.60	0.60		1.44		
	Water tank			4.00	3.00		12.00		
	Platform			4.00	2.00		<u>8.00</u>		
		Sqm					21.44	220.00	4,716.80

4/2.3	Providing and laying cement concrete in proportion 1:2:4 corresponding to M15 (1 cement : 2 sand : 4 stone aggregates of 20mm and down graded) including curing etc complete excluding shuttering,in foundation and below plinth and in septic tank,inspection pits etc,complete								
	Foundation		4	0.60	0.60	0.45	0.65		
	Column		4	0.25	0.25	2.65	0.66		
	Tie beam		2	4.00	0.20	0.25	0.40		
	Tie beam		2	3.00	0.20	0.25	0.30		
	Main wall		2	4.00	0.15	1.50	1.80		
	Main wall		2	3.00	0.15	1.50	1.35		
	Slab			4.50	3.50	0.10	1.58		
	Water tank floor			4.00	3.00	0.15	1.80		
	Platform floor			4.00	2.00	0.15	<u>1.20</u>		
		Cum					9.74	7239.00	70,475.28
5/2.9 (a)	Providing shuttering including centering for flat surface such as slabs,shelves,chajja and for vertical faces such as columns,walls,ends of beams etc with dressed plank not less than 25cm thick firmly fixed etc								
	Foundation		4	2.40		0.45	4.32		
	Column		4	1.00		2.65	10.60		
	Tie beam		2	4.00		0.50	4.00		
	Tie beam		2	3.00		0.50	3.00		
	Main wall		2*2	4.00		1.50	24.00		
	Main wall		2*2	3.00		1.50	18.00		
	Slab			4.50	3.50		15.75		
	Do (sides)		2	8.00		0.10	<u>1.60</u>		
		Sqm					81.27	389.00	31,614.03
6/4.1	Providing 12mm thick cement plaster i/c cleaning the surface and curing complete as directed								
	Column		4	1.00		2.30	9.20		
	Tie beam		2	4.00		0.25	2.00		
	Tie beam		2	3.00		0.25	1.50		
	Wall		2	2.00		1.20	<u>4.80</u>		
		Sqm					17.50	213.00	3,727.50

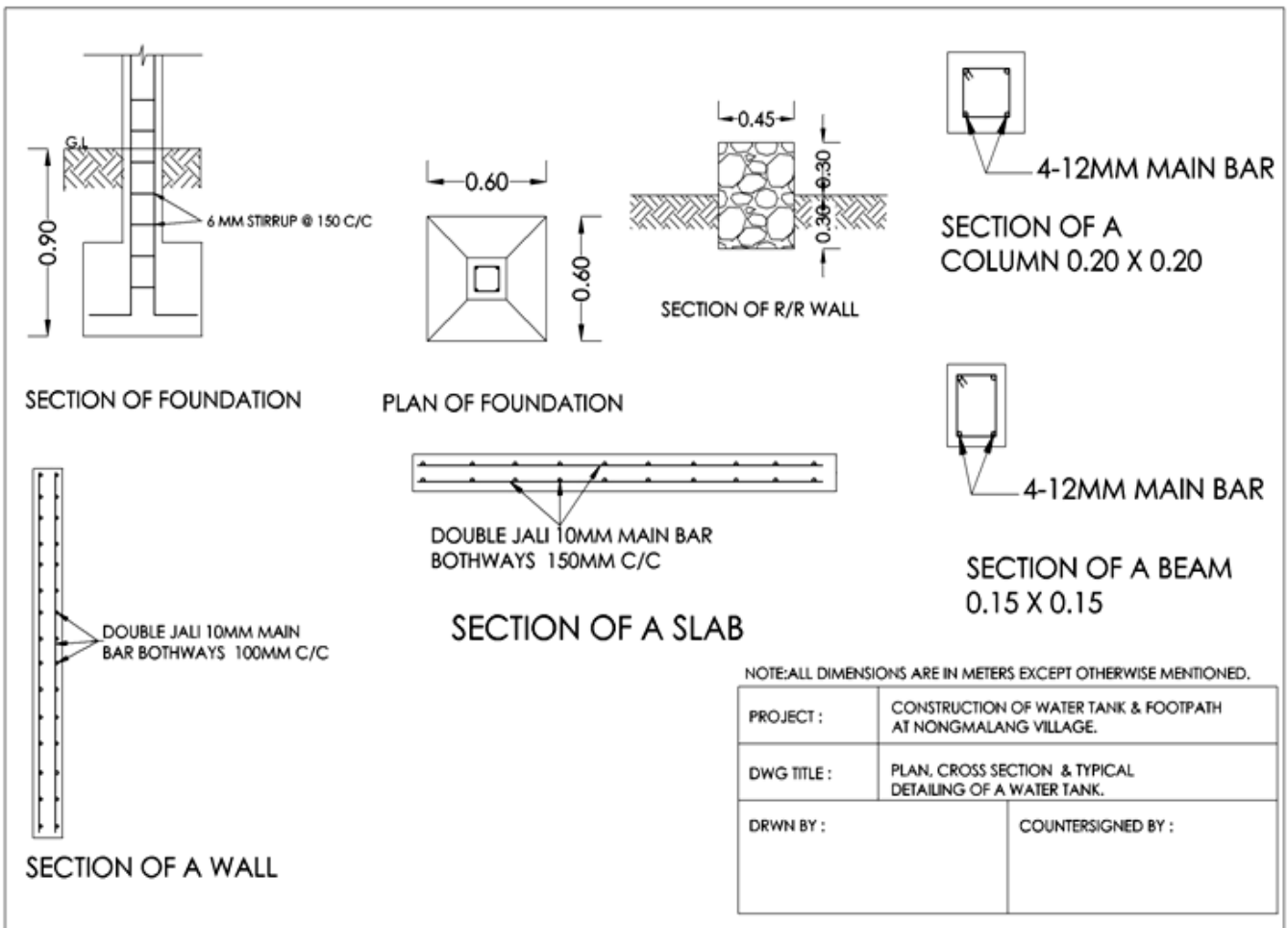
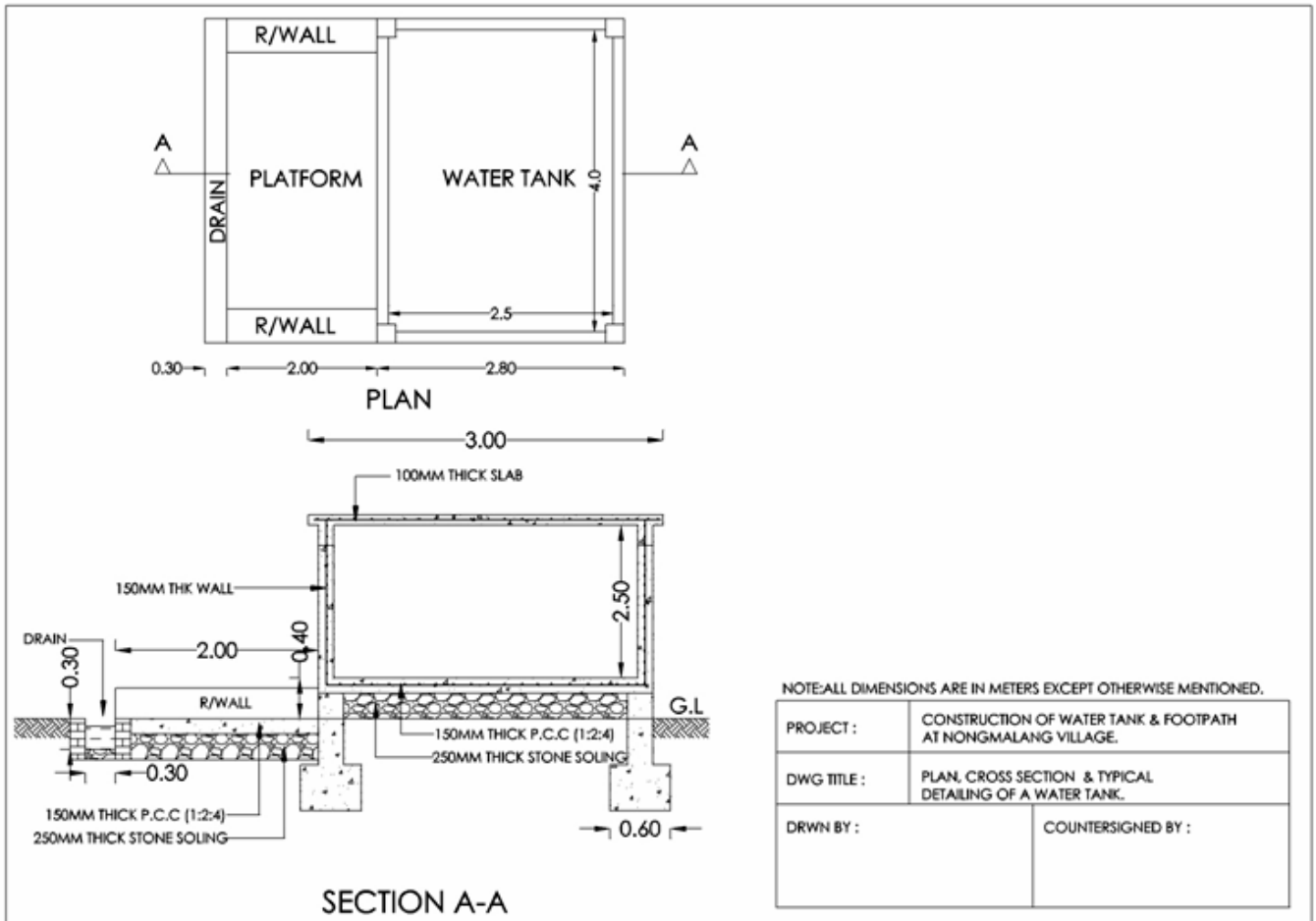
7/4.10	Providing cement concrete topping proportion is 1:1:2 corresponding to M25 (1 cement : 1 sand : 2 stone chip of 12mm and down graded) to the proper level and slope including curing and trowel finished with a floating coat of neat cement slurry @ 2.75kg of cement per sqm for floor complete as directed									
(a)	20mm thick topping									
	Main wall		2*2	4.00		1.50	24.00			
	Main wall		2*2	3.00		1.50	18.00			
	Slab		1	4.50	3.50		15.75			
	Water tank floor			4.00	3.00	0.15	1.80			
	Platform floor			4.00	2.00	0.15	<u>1.20</u>			
		Sqm					60.75	252.00	15309.00	
8/6.2	Providing tor steel reinforcement in RCC work including cutting,bending,cranking and tying in position with binding wire,20 gauge,as shown in drawings,complete upto floor two level	Nos	Length	Breadth	Height	Nos of reinforcement	Unit weight in kg/m	Quantity	Rate	Amount
	Column sub structure (250x250) 4-12mm dia	4	1.60			4	0.89	22.78		
	Development length	4	0.60			4	0.89	8.54		
	6 mm Stirrup @ 150mm c/c		(0.84*11*4*0.22)+1					9.13		
	Column super structure (250x250) 4-12mm dia	4	1.50			4	0.89	21.36		
	Development length	4	0.60			4	0.89	8.54		
	6 mm Stirrup @ 150mm c/c		(0.84*10*4*0.22)+1					8.39		
	Tie beam (200x250) 2-12mm dia alt top bottom	2	3.00			4	0.89	21.36		
	Development length	2*2	0.72			4	0.89	10.25		
	6 mm Stirrup @ 150mm c/c		2*(0.86*20*.22)+1					8.57		
	Tie beam (200x250) 2-12mm dia alt top bottom	2	4.00			4	0.89	28.48		
	Development length	2*2	0.72			4	0.89	10.25		
	6 mm Stirrup @ 150mm c/c		2*(0.86*27*.22)+1					11.22		
	Main wall (jali) 10mm bothways @ 150mm c/c	2*2	4.00			15	0.62	148.80		
	Main wall (jali) 10mm bothways @ 150mm c/c	2*2	1.50			27	0.62	100.44		
	Main wall (jali) 10mm bothways @ 150mm c/c	2*2	3.00			15	0.62	111.60		
	Main wall (jali) 10mm bothways @ 150mm c/c	2*2	1.50			20	0.62	<u>74.40</u>		
						Total in Kg		604.13		
						Total in Qntl		6.04		
	Add 3% wastage							<u>0.18</u>		

								6.22	9,938.00	61,839.14
9/19.15	Providing drain (open surface)with bed and wall thickness of 100 mm finished with cement plaster 1:3(1-cement,3-sand)and a floating coat of neat cement complete as directed									
2	250mmx250mm									
a	C.C 1:3:6	Rm		4.00			4.00		650.00	<u>2,600.00</u>
									Total	2,00,910.00
									Say	2,00,910.00
(Rupees Two Lakh Nine Hundred Ten Only)										



	Column		4	0.25	0.25	3.35	0.84		
	Tie beam		2	4.30	0.20	0.25	0.43		
	Tie beam		2	2.80	0.20	0.25	0.28		
	Main wall		2	4.30	0.15	1.50	1.94		
	Main wall		2	2.80	0.15	1.50	1.26		
	Slab			3.00	4.30	0.10	1.29		
	Water tank floor			4.30	2.80	0.15	1.81		
	Platform floor			4.30	2.00	0.15	<u>1.29</u>		
		Cum					9.78	7239.00	70,772.08
5/2.9 (a)	Providing shuttering including centering for flat surface such as slabs,shelves,chajja and for vertical faces such as columns,walls,ends of beams etc with dressed plank not less than 25cm thick firmly fixed etc								
	Foundation		4	2.40		0.45	4.32		
	Column		4	1.00		3.35	13.40		
	Tie beam		2	4.30		0.50	4.30		
	Tie beam		2	2.80		0.50	2.80		
	Main wall		2*2	4.30		1.50	25.80		
	Main wall		2*2	2.80		1.50	16.80		
	Slab			3.00	4.30		12.90		
	Do (sides)		2	7.30		0.10	<u>1.46</u>		
		Sqm					81.78	389.00	31,812.42
6/4.1	Providing 12mm thick cement plaster i/c cleaning the surface and curing complete as directed								
	Column		4	1.00		2.50	10.00		
	Tie beam		2	4.30		0.25	2.15		
	Tie beam		2	2.80		0.25	1.40		
	Wall		2	2.00		0.60	2.40		
	do(top)		2	2.00		0.45	<u>1.80</u>		
		Sqm					17.75	213.00	3,780.75
7/4.1 0	Providing cement concrete topping proportion is 1:1:2 corresponding to M25 (1 cement : 1 sand : 2 stone chip of 12mm and down graded) to the proper level and slope including curing and trowel finished with a floating coat of neat cement slurry @ 2.75kg of cement per sqm for floor complete as directed								
(a)	20mm thick topping								
	Main wall		2*2	4.30		1.50	25.80		
	Main wall		2*2	2.80		1.50	16.80		
	Slab		1	4.30	3.00		12.90		
	Water tank floor			4.30	2.80	0.15	1.81		
	Platform floor			4.30	2.00	0.15	<u>1.29</u>		
		Sqm					58.60	252.00	14766.19

8/6.2	Providing tor steel reinforcement in RCC work including cutting,bending,cranking and tying in position with binding wire,20 gauge,as shown in drawings,complete upto floor two level	Nos	Length	Breadth	Height	Nos of reinforcement	Unit weight in kg/m	Quantity	Rate	Amount	
	Column sub structure (250x250) 4-12mm dia	4	1.60			4	0.89	22.78			
	Development length	4	0.60			4	0.89	8.54			
	6 mm Stirrup @ 150mm c/c		(0.84*11*4*0.22)+1						9.13		
	Column super structure (250x250) 4-12mm dia	4	1.75			4	0.89	24.92			
	Development length	4	0.60			4	0.89	8.54			
	6 mm Stirrup @ 150mm c/c		(0.84*12*4*0.22)+1						9.87		
	Tie beam (200x250) 2-12mm dia alt top bottom	2	2.80			4	0.89	19.94			
	Development length	2*2	0.72			4	0.89	10.25			
	6 mm Stirrup @ 150mm c/c		2*(0.86*19*.22)+1						8.19		
	Tie beam (200x250) 2-12mm dia alt top bottom	2	4.30			4	0.89	30.62			
	Development length	2*2	0.72			4	0.89	10.25			
	6 mm Stirrup @ 150mm c/c		2*(0.86*29*.22)+1						11.97		
	Main wall (jali) 10mm bothways @ 150mm c/c	2*2	4.30			17	0.62	181.29			
	Main wall (jali) 10mm bothways @ 150mm c/c	2*2	2.50			29	0.62	179.80			
	Main wall (jali) 10mm bothways @ 150mm c/c	2*2	2.80			17	0.62	118.05			
	Main wall (jali) 10mm bothways @ 150mm c/c	2*2	2.50			19	0.62	117.80			
	Slab(jali) 10mm bothways @ 150mm c/c	2	4.30			19	0.62	101.31			
	Slab(jali) 10mm bothways @ 150mm c/c	2	3.00			29	0.62	<u>107.88</u>			
						Total in Kg		771.95			
						Total in Qntl		7.72			
	Add 3% wastage							<u>0.23</u>			
								7.95	9,938.00	79,017.92	
9/19.15	Providing drain (open surface)with bed and wall thickness of 100 mm finished with cement plaster 1:3(1-cement,3-sand)and a floating coat of neat cement complete as directed										
2	250mmx250mm										
a	C.C 1:3:6	Rm		4.30			4.30		650.00	<u>2,795.00</u>	
							Total			2,18,582.06	
								Say		2,18,582.00	
(Rupees Two Lakh Eighteen Thousand Five Hundred Eighty Two Only)											



Detail estimate for the construction of Water Tank at Nongmalang Village as per M.P.W.D Building S.O.R(2013-2014)
(2nd Year)

Beneficiaries: Community

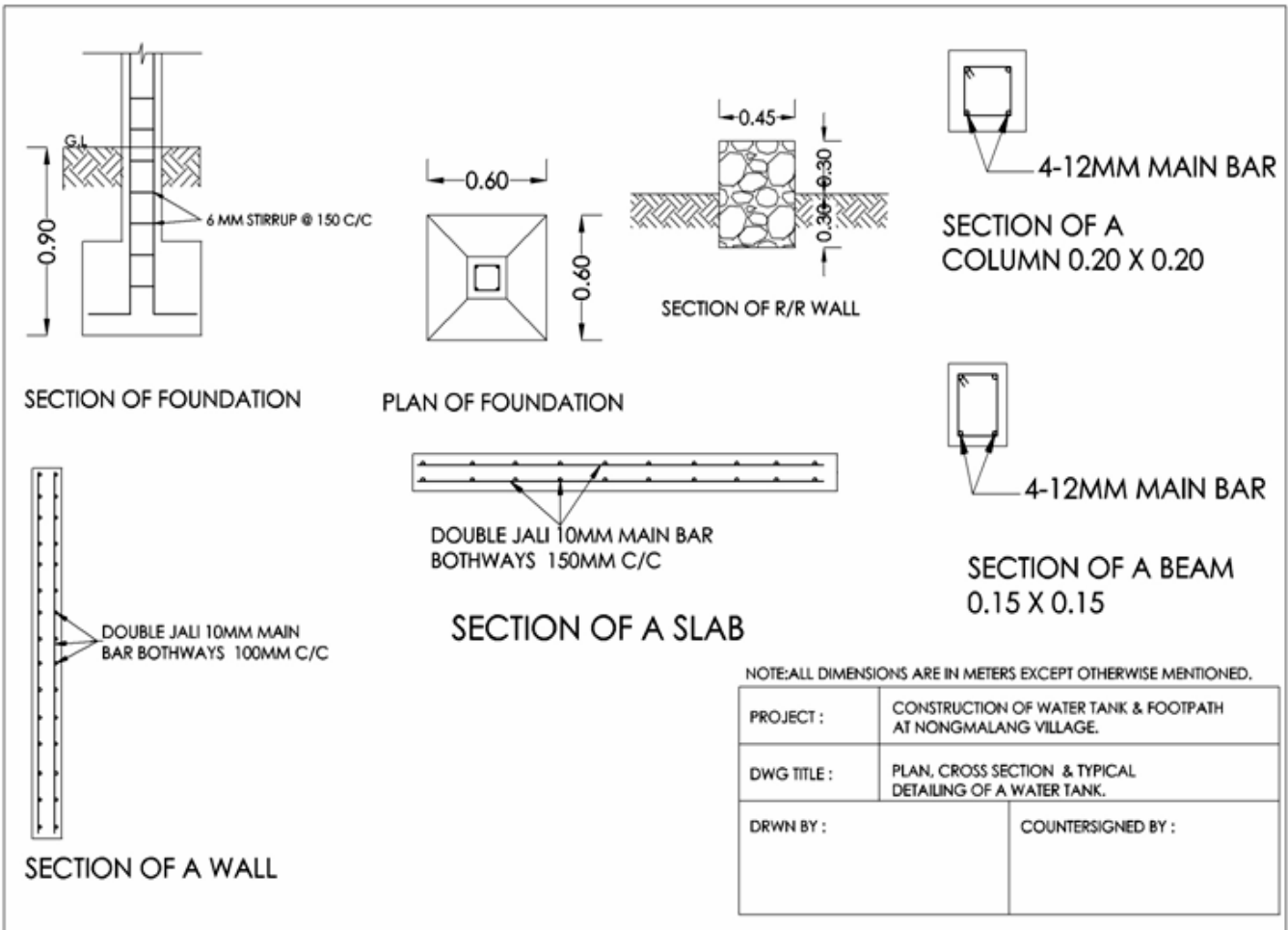
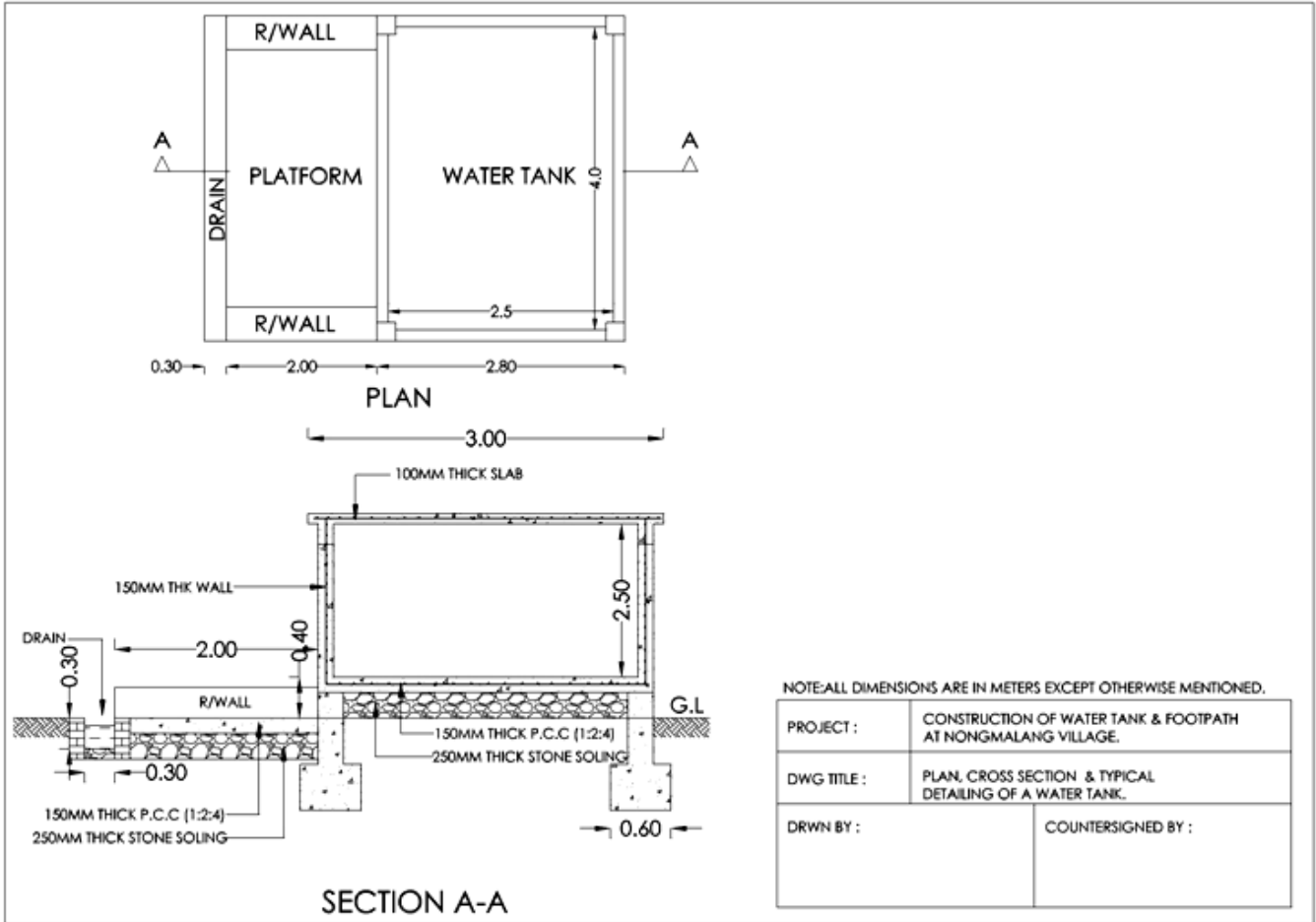
Geographical Coordinates: E 91° 10' 0.26"

N 25° 19' 3.59"

Sl/No	Particulars	Units	Nos	Length	Breadth	Height	Quantity	Rate	Amount
1/1.1	Earthwork in excavation in foundation trenches,including dressing of sides and ramming of the bottom including including stacking of serviceable stones,disposal and removal of excavated earth within a lead of 50m lift of 1.50m complete as directed.								
(b)	Hard soil or mixed with moorum,gravel,boulder upo one man size(above 0.03 cum each)								
	Footing		4	0.60	0.60	0.90	1.296		
	Wall		2	4.30	0.30	0.20	0.516		
	Wall		2	2.80	0.30	0.20	0.336		
	Wall		2	2.00	0.30	0.20	0.24		
	Water tank			4.30	2.80	0.20	2.41		
	Platform			4.30	2.00	0.30	2.58		
	Drain			4.30	0.60	0.60	<u>1.55</u>		
		Cum					8.92	159.00	1,418.92
2/3.5	Providing coursed random rubble stone masonry in foundation and plinth with unsized stone(mawthup)bonded with cement mortar of proportion 1:6(1-cement ,6-sand)including curing complete.(Average size is not less than 20 cm x 20 cm x 25 cm)								
	Wall		2	4.30	0.30	0.45	1.161		
	Wall		2	2.80	0.30	0.45	0.756		
	Wall		2	2.00	0.30	0.45	<u>0.54</u>		
		Cum					2.457	3810.00	9,361.17
3/4.5	Providing 100 mm thick soling with approved quality of stones including carriage,ramming,consolidating and filling the interstices with stone aggregates complete								
	Footing		4	0.60	0.60		1.44		
	Water tank			4.30	2.80		12.04		
	Platform			4.30	2.00		<u>8.60</u>		
		Sqm					22.08	220.00	4,857.60
4/2.3	Providing and laying cement concrete in proportion 1:2:4 corresponding to M15 (1 cement : 2 sand : 4 stone aggregates of 20mm and down graded) including curing etc complete excluding shuttering,in foundation and below plinth and in septic tank,inspection pits etc,complete								

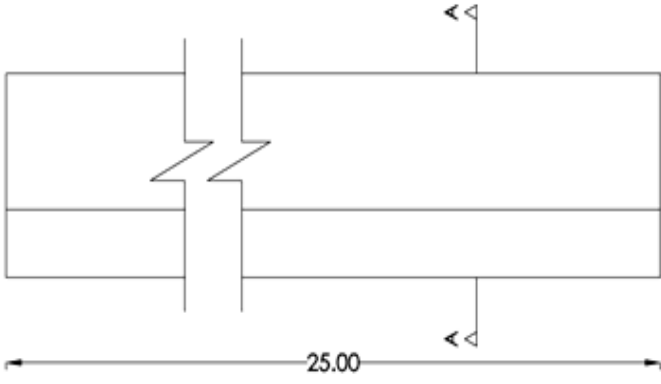
	Foundation		4	0.60	0.60	0.45	0.65		
	Column		4	0.25	0.25	3.35	0.84		
	Tie beam		2	4.30	0.20	0.25	0.43		
	Tie beam		2	2.80	0.20	0.25	0.28		
	Main wall		2	4.30	0.15	1.50	1.94		
	Main wall		2	2.80	0.15	1.50	1.26		
	Slab			3.00	4.30	0.10	1.29		
	Water tank floor			4.30	2.80	0.15	1.81		
	Platform floor			4.30	2.00	0.15	<u>1.29</u>		
		Cum					9.78	7239.00	70,772.08
5/2.9 (a)	Providing shuttering including centering for flat surface such as slabs,shelves,chajja and for vertical faces such as columns,walls,ends of beams etc with dressed plank not less than 25cm thick firmly fixed etc								
	Foundation		4	2.40		0.45	4.32		
	Column		4	1.00		3.35	13.40		
	Tie beam		2	4.30		0.50	4.30		
	Tie beam		2	2.80		0.50	2.80		
	Main wall		2*2	4.30		1.50	25.80		
	Main wall		2*2	2.80		1.50	16.80		
	Slab			3.00	4.30		12.90		
	Do (sides)		2	7.30		0.10	<u>1.46</u>		
		Sqm					81.78	389.00	31,812.42
6/4.1	Providing 12mm thick cement plaster i/c cleaning the surface and curing complete as directed								
	Column		4	1.00		2.50	10.00		
	Tie beam		2	4.30		0.25	2.15		
	Tie beam		2	2.80		0.25	1.40		
	Wall		2	2.00		0.60	2.40		
	do(top)		2	2.00		0.45	<u>1.80</u>		
		Sqm					17.75	213.00	3,780.75
7/4.1 0	Providing cement concrete topping proportion is 1:1:2 corresponding to M25 (1 cement : 1 sand : 2 stone chip of 12mm and down graded) to the proper level and slope including curing and trowel finished with a floating coat of neat cement slurry @ 2.75kg of cement per sqm for floor complete as directed								
(a)	20mm thick topping								
	Main wall		2*2	4.30		1.50	25.80		
	Main wall		2*2	2.80		1.50	16.80		
	Slab		1	4.30	3.00		12.90		
	Water tank floor			4.30	2.80	0.15	1.81		
	Platform floor			4.30	2.00	0.15	<u>1.29</u>		
		Sqm					58.60	252.00	14766.19

8/6.2	Providing tor steel reinforcement in RCC work including cutting,bending,cranking and tying in position with binding wire,20 gauge,as shown in drawings,complete upto floor two level	Nos	Lengt h	Breadt h	Height	Nos of reinforcement	Unit weig ht in kg/m	Quantit y	Rate	Amount	
	Column sub structure (250x250) 4-12mm dia	4	1.60			4	0.89	22.78			
	Development length	4	0.60			4	0.89	8.54			
	6 mm Stirrup @ 150mm c/c		(0.84*11*4*0.22)+1						9.13		
	Column super structure (250x250) 4-12mm dia	4	1.75			4	0.89	24.92			
	Development length	4	0.60			4	0.89	8.54			
	6 mm Stirrup @ 150mm c/c		(0.84*12*4*0.22)+1						9.87		
	Tie beam (200x250) 2-12mm dia alt top bottom	2	2.80			4	0.89	19.94			
	Development length	2*2	0.72			4	0.89	10.25			
	6 mm Stirrup @ 150mm c/c		2*(0.86*19*.22)+1						8.19		
	Tie beam (200x250) 2-12mm dia alt top bottom	2	4.30			4	0.89	30.62			
	Development length	2*2	0.72			4	0.89	10.25			
	6 mm Stirrup @ 150mm c/c		2*(0.86*29*.22)+1						11.97		
	Main wall (jali) 10mm bothways @ 150mm c/c	2*2	4.30			17	0.62	181.29			
	Main wall (jali) 10mm bothways @ 150mm c/c	2*2	2.50			29	0.62	179.80			
	Main wall (jali) 10mm bothways @ 150mm c/c	2*2	2.80			17	0.62	118.05			
	Main wall (jali) 10mm bothways @ 150mm c/c	2*2	2.50			19	0.62	117.80			
	Slab(jali) 10mm bothways @ 150mm c/c	2	4.30			19	0.62	101.31			
	Slab(jali) 10mm bothways @ 150mm c/c	2	3.00			29	0.62	<u>107.88</u>			
						Total in Kg		771.95			
						Total in Qntl		7.72			
	Add 3% wastage							<u>0.23</u>			
								7.95	9,938.00	79,017.92	
9/19.15	Providing drain (open surface)with bed and wall thickness of 100 mm finished with cement plaster 1:3(1-cement,3-sand)and a floating coat of neat cement complete as directed										
2	250mmx250mm										
a	C.C 1:3:6	Rm		4.30			4.30	650.00		<u>2,795.00</u>	
							Total			2,18,582.06	
								Say		2,18,582.00	
	(Rupees Two Lakh Eighteen Thousand Five Hundred Eighty Two Only)										

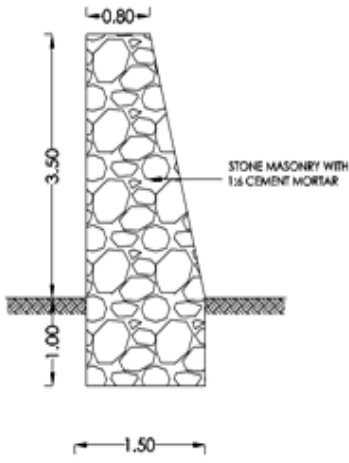


**Detail estimate for the construction of Protection wall at Wahkaji as per
(Rates as per Schedule of rates for roads and bridge works for the year 2012-2013)(2nd Year)
Beneficiaries: Community Geographical Coordinates: E 91° 15' 6.28" N 25° 21' 8.55"**

SI/No	MORD Specification	Particulars	Units	Nos	Length	Breadth	Height	Quantity	Rate	Amount
1/4.1(a)	300	Earthwork in excavation for structures as per drawing and Technical Specification Clause 305.1 including setting out construction of shoring and bracing,removal of stumps and other deleterious materials and disposal upto a lead of 50 m dressing of side and bottom and back filling in trenches with excavated suitable material.								
		Ordinary Soil								
(i)		Upto 3 m depth								
		Protection wall	Cum		25.00	1.50	1.00	37.50	118.00	4425
2/4.4	700& 1200	Stone masonry work in foundation complete as per drawing and Technical Specification Clauses 702,704,1202,1203.								
(B) (ii)		Random Rubble Masonry								
		In cement mortar 1:6								
		Protection wall			25.00	1.50	1.00	37.50		
		Do			25.00	1.5+0.8/2=1.15	3.50	<u>100.63</u>		
			Cum					138.13	2029.00	<u>2,80,255.63</u>
								Total		2,84,680.63
								Say		2,84,681.00
(Rupees Two Lakh Eighty Four Thousand Six Hundred Eighty One Only)										



PLAN



SECTION A-A

NOTE: ALL DIMENSIONS ARE IN METERS EXCEPT OTHERWISE MENTIONED.

PROJECT :	CONSTRUCTION OF PROTECTION WALL AT WAHKAJI .
DWG TITLE :	PLAN & CROSS SECTION OF A PROTECTION WALL.
DRWN BY :	COUNTERSIGNED BY :

Detail estimate for the construction of Protection wall at Domiasiat (2nd Year)

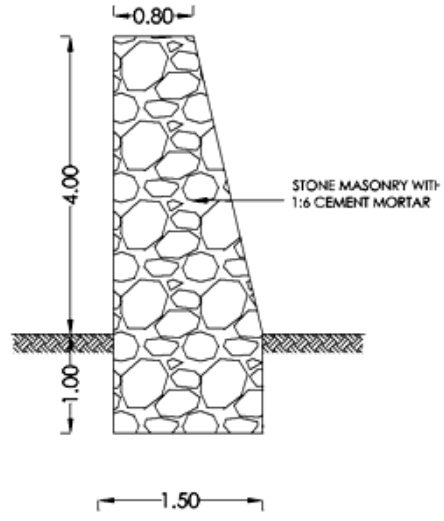
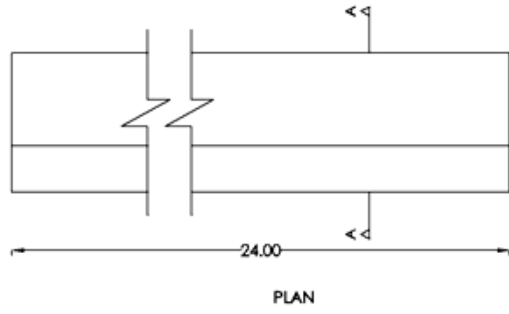
(Rates as per Schedule of rates for roads and bridge works for the year 2012-2013)

Beneficiaries: Community

Geographical Coordinates: E 91° 13'28.4"

N 25° 20' 32.9"

Sl/No	MORD Specification	Particulars	Units	Nos	Length	Breadth	Height	Quantity	Rate	Amount
1/4.1(a)	300	Earthwork in excavation for structures as per drawing and Technical Specification Clause 305.1 including setting out construction of shoring and bracing, removal of stumps and other deleterious materials and disposal upto a lead of 50 m dressing of side and bottom and back filling in trenches with excavated suitable material.								
		Ordinary Soil								
(i)		Upto 3 m depth								
		Protection wall	Cum		24.00	1.50	1.00	36.00	118.00	4248
2/4.4	700& 1200	Stone masonry work in foundation complete as per drawing and Technical Specification Clauses 702,704,1202,1203.								
(B)(ii)		Random Rubble Masonry								
		In cement mortar 1:6								
		Protection wall			24.00	1.50	1.00	36.00		
		Do			24.00	1.5+0.8/2=1.15	4.00	<u>110.40</u>		
			Cum					146.40	2029.00	<u>2,97,045.60</u>
								Total		3,01,293.60
									Say	3,01,294.00
		(Rupees Three Lakh One Thousand Two Hundred Ninety Four Only)								



SECTION A-A

NOTE: ALL DIMENSIONS ARE IN METERS EXCEPT OTHERWISE MENTIONED.

PROJECT :	CONSTRUCTION OF PROTECTION WALL AT DOMIASIAT .
DWG TITLE :	PLAN & CROSS SECTION OF A PROTECTION WALL.
DRWN BY :	COUNTERSIGNED BY :

ESTIMATE FOR THE CONSTRUCTION OF WATER HARVESTING AT STRUCTURE AT WAHKAJI (2nd Year)
(Rates as per Schedule of rates for roads and bridge works for the year 2012-2013)

Beneficiaries: Shri Bastibal Syiemiong

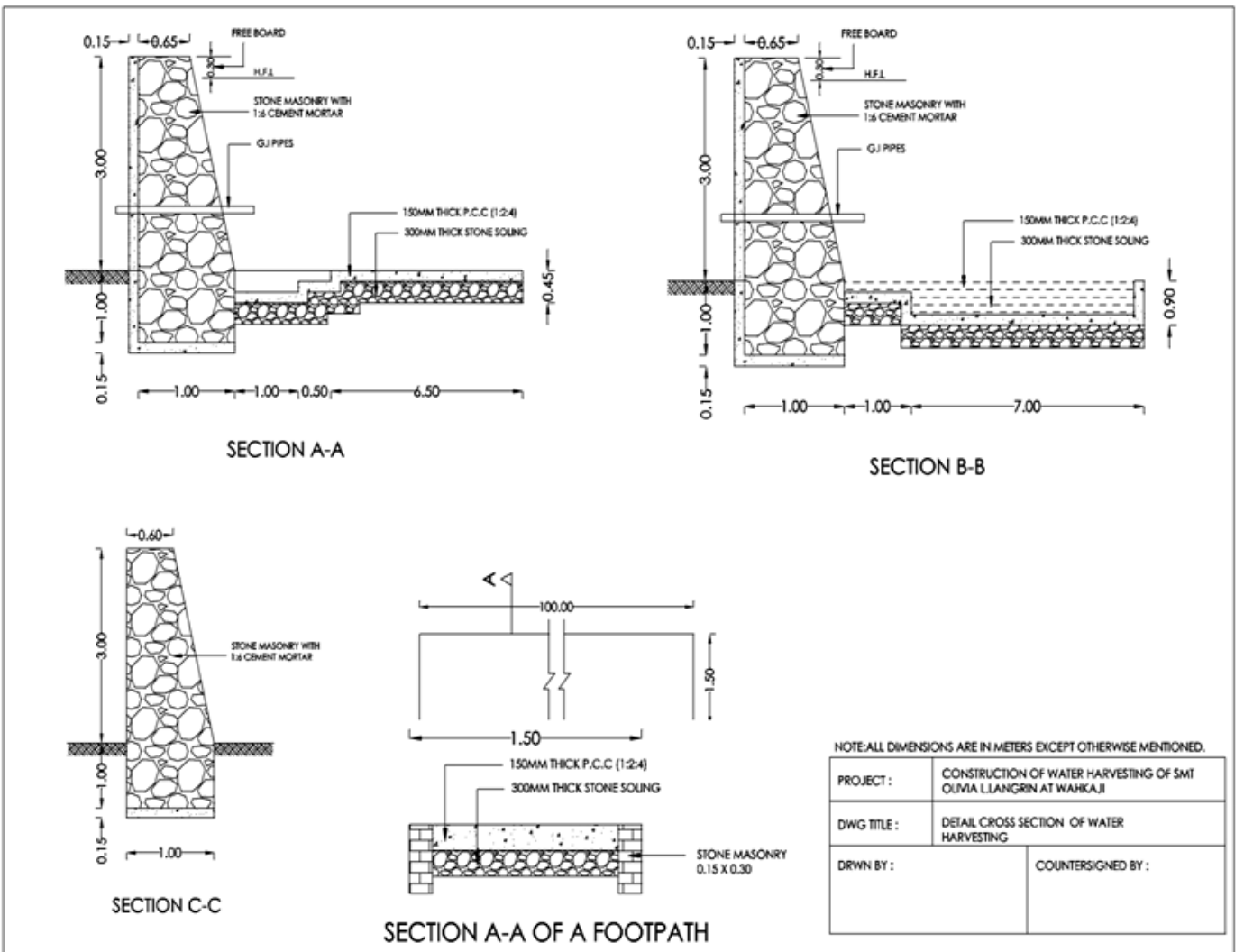
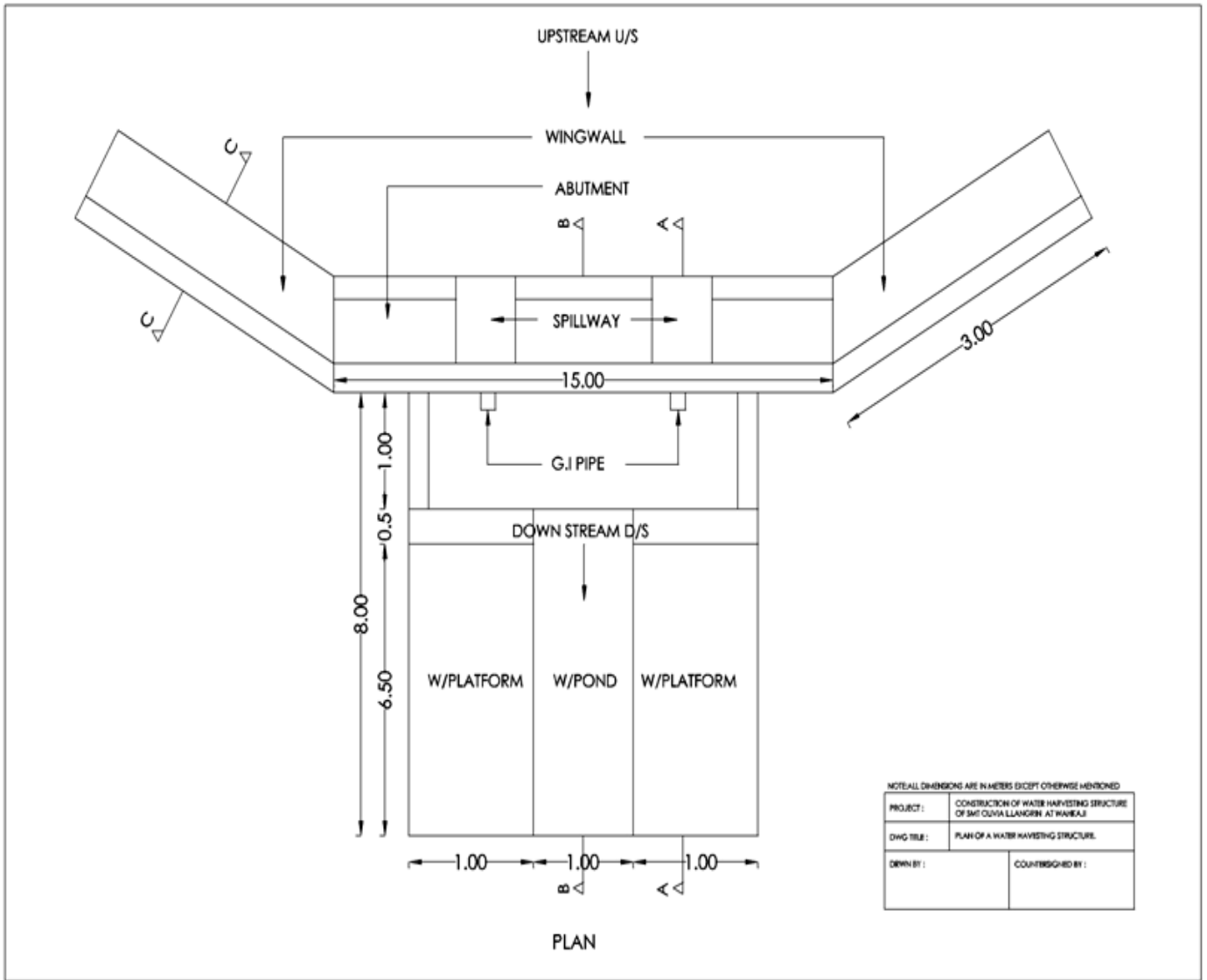
Geographical Coordinates: E 91° 13' 42.1"

N 25° 17' 20.2"

Sl/ No	MORD Specification	Particulars	Units	Nos	Length	Breadth	Height	Quantity	Rate	Amount
1/6.1	300	Earthwork in excavation for structure by manual means as per drawing and technical specification Clause 305.1 including setting out, construction of shoring and bracing, removal of stumps and other deleterious material and disposal upto a lead of 50m including dressing the sides and bottom and back filling in trenches with excavated suitable material								
	A	Ordinary soil								
		Upto 3.0m depth without dewatering								
		Abutment		1	15.00	1.15	1.15	19.84		
		W/wall		2	3.00	1.00	1.15	6.90		
		W/platform		2	1.00	1.00	0.75	1.50		
		W/platform		2	1.00	0.50	0.60	0.60		
		W/platform		2	6.50	1.00	0.45	5.85		
		W/pond		1	8.00	1.00	0.90	<u>7.20</u>		
			Cum					41.89	214.00	8,963.93
2/7.8	1200	Back filling behind abutment, wing wall and return wall complete as per drawing and technical specification Clause 1204.3.8								
	(a)	Granular material								
		W/platform		2	6.50	1.00	0.30	3.90		
		W/pond		1	6.50	1.00	0.30	<u>1.95</u>		
			Cum					5.85	756.00	4,422.60
3/7.2	800& 1200	Plain cement concrete in sub-structure complete as per drawings and technical specification Clause 802,804,806,807,1202, 1204								
	A	PCC Grade M15(uotp 5.0m ht)								
(i)		Nominal mix 1:2.5:5								
		Abutment bed		1	15.00	1.15	0.15	2.59		
		Abutment wall U/S		1	15.00	0.15	4.00	9.00		

		W/wall bed		2	3.00	1.00	0.15	0.90		
		W/platform		2	1.00	1.00	0.15	0.30		
		W/platform		2	6.50	1.00	0.15	1.95		
		W/platform		2	1.00	0.50	0.15	0.15		
		W/pond		1	6.50	1.00	0.15	0.98		
		W/pond (sides)		2	1.00	0.15	0.50	0.15		
		Deduct spillway		2	2.50	0.15	0.30	<u>-0.23</u>		
			Cum					15.79	4910.00	77,516.63
4/7.1	700& 1200	Stone masonry work in cement mortar for sub-structure as per drawing and technical specification clauses 702,704,1202,1204.								
©		Random Rubble Masonry								
(iii)		In cement mortar 1:6								
		Abutment		1	15.00	1.00	1.00	15.00		
		Abutment		1	15.00	$1.0+0.65/2=0.83$	3.00	37.35		
		W/wall		2	3.00	1.00	1.00	6.00		
		W/wall		2	3.00	$1+0.6/2=0.8$	3.00	14.40		
		Deduct spillway		2	2.50	1.50	0.30	<u>-2.25</u>		
			Cum					70.50	2587.00	1,82,383.50
5/2.9(a)		Providing shuttering including centering for flat surface such as slabs,shelves,chajja and for vertical faces such as columns,walls,ends of beams etc with dressed plank not less than 25cm thick firmly fixed etc								
		Abutment wall U/S		1	15.00		4.00	60.00		
		W/pond (sides)		2	1.00		0.65	1.30		
		Do		2		1.00	0.65	<u>1.30</u>		
			Sqm					62.60	389.00	24,351.40
6/9.1	600	Providing 12mm thick cement plastering including cleaning the surface, curing and carriage of all materials within 200 m complete as per Technical Specification.(No. plastering is to be done I abutments,wing walls,well piers and retaining walls)								
(iii)		Proportion 1:4								
		Abutment		1	15.00		3.00	45.00		
		Abutment		1	15.00		3.30	49.50		
		Abutment		1	15.00	0.80		12.00		
		Spillway (sides)		2		0.65	0.30	0.39		

		W/wall		2	3.00		3.00	18.00		
		W/wall		2	3.00	0.60		3.60		
		W/platform		2	1.00	1.00		2.00		
		W/platform		2	6.50	1.00		13.00		
		W/platform		2	1.00	0.50		1.00		
		W/pond		1	8.00	1.00		8.00		
		W/pond		2	8.00		0.45	7.20		
		W/pond (sides)		2		1.00	0.45	0.90		
		Deduct spillway		2	2.50		0.30	<u>-1.50</u>		
			Sqm					159.09	137.00	<u>21,795.33</u>
									Total	3,19,433.38
									Say	3,19,433.00
(Rupees Three Lakh Nineteen Thousand Four Hundred Thirty Three Only)										

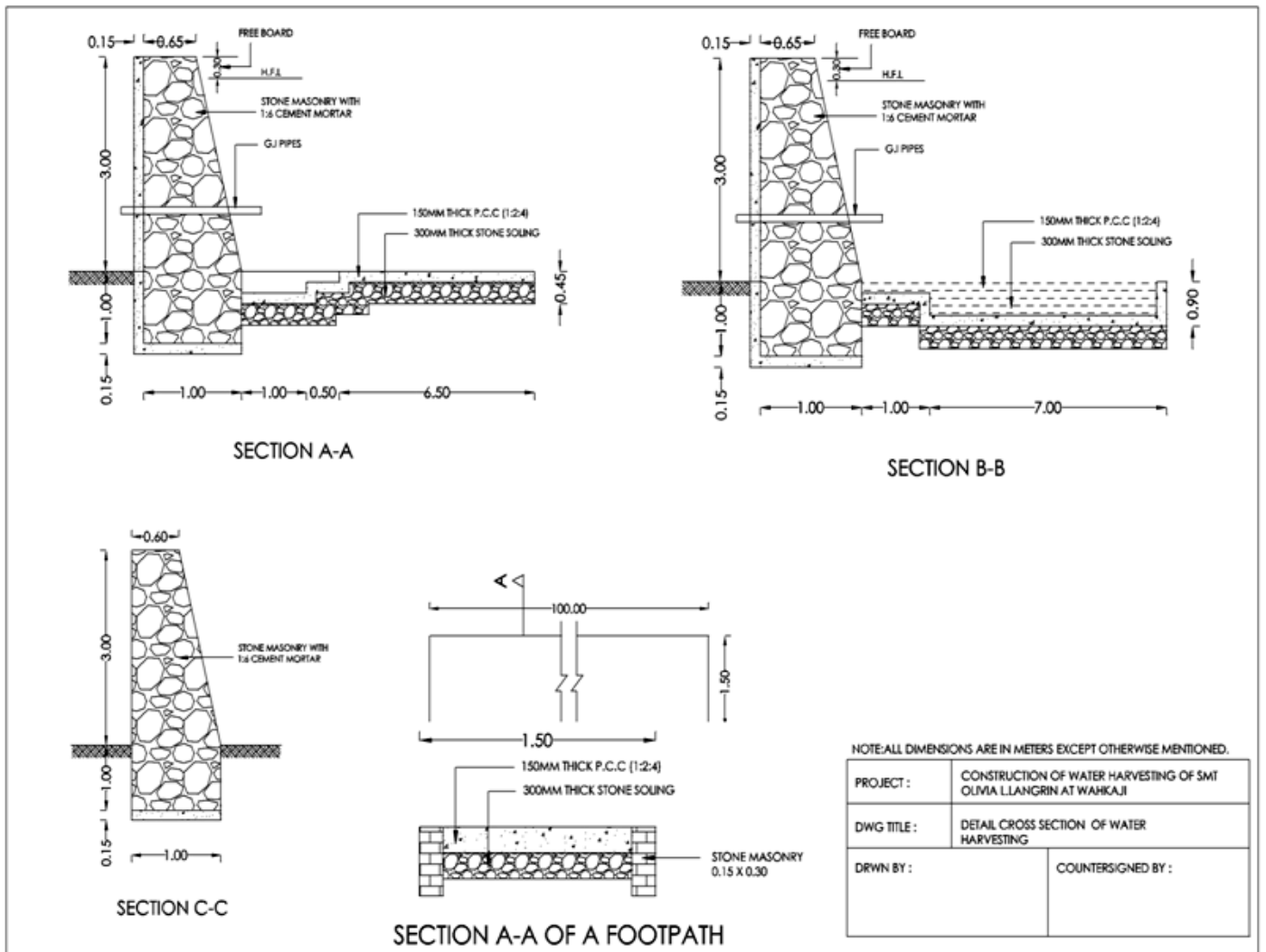
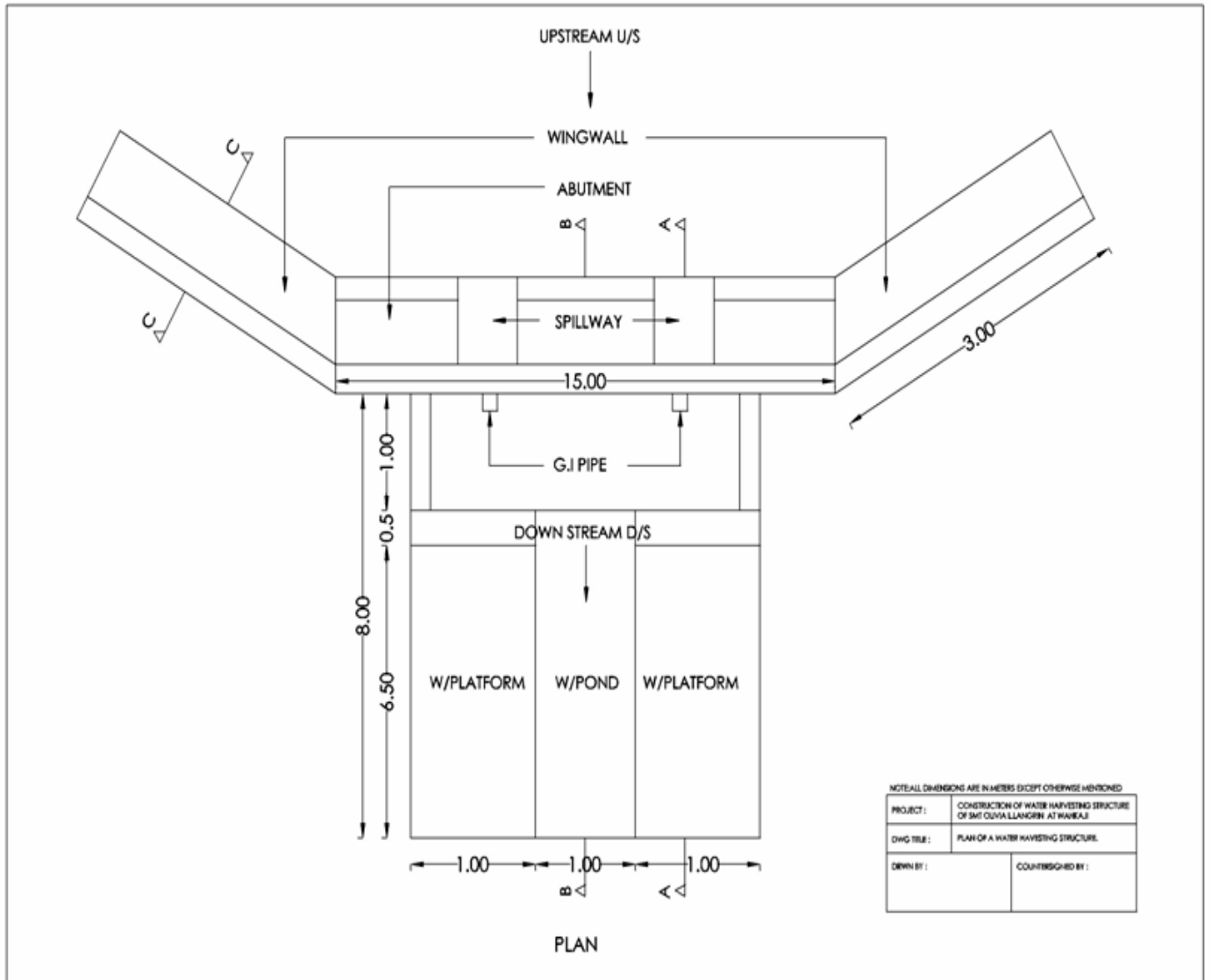


ESTIMATE FOR THE CONSTRUCTION OF WATER HARVESTING AT STRUCTURE AT WAHKAJI OF SMTI OLIVIA L.LANGRIN (Rates as per Schedule of rates for roads and bridge works for the year 2012-2013) (2nd Year)
Beneficiaries: Olivia L Langrin Geographical Coordinates: E 91° 15' 43.19" N 25° 22' 59.46"

Sl/No	MORD Specification	Particulars	Units	Nos	Length	Breadth	Height	Quantity	Rate	Amount
1/6.1	300	Earthwork in excavation for structure by manual means as per drawing and technical specification Clause 305.1 including setting out, construction of shoring and bracing, removal of stumps and other deleterious material and disposal upto a lead of 50m including dressing the sides and bottom and back filling in trenches with excavated suitable material								
	A	Ordinary soil								
		Upto 3.0m depth without dewatering								
		Abutment		1	15.00	1.15	1.15	19.84		
		W/wall		2	3.00	1.00	1.15	6.90		
		W/platform		2	1.00	1.00	0.75	1.50		
		W/platform		2	1.00	0.50	0.60	0.60		
		W/platform		2	6.50	1.00	0.45	5.85		
		W/pond		1	8.00	1.00	0.90	<u>7.20</u>		
			Cum					41.89	214.00	8,963.93
2/7.8	1200	Back filling behind abutment, wing wall and return wall complete as per drawing and technical specification Clause 1204.3.8								
	(a)	Granular material								
		W/platform		2	6.50	1.00	0.30	3.90		
		W/pond		1	6.50	1.00	0.30	<u>1.95</u>		
			Cum					5.85	756.00	4,422.60
3/7.2	800& 1200	Plain cement concrete in sub-structure complete as per drawings and technical specification Clause 802,804,806,807, 1202, 1204								
	A	PCC Grade M15(upto 5.0m								

		ht)								
(i)		Nominal mix 1:2.5:5								
		Abutment bed		1	15.00	1.15	0.15	2.59		
		Abutment wall U/S		1	15.00	0.15	4.00	9.00		
		W/wall bed		2	3.00	1.00	0.15	0.90		
		W/platform		2	1.00	1.00	0.15	0.30		
		W/platform		2	6.50	1.00	0.15	1.95		
		W/platform		2	1.00	0.50	0.15	0.15		
		W/pond		1	6.50	1.00	0.15	0.98		
		W/pond (sides)		2	1.00	0.15	0.50	0.15		
		Deduct spillway		2	2.50	0.15	0.30	<u>-0.23</u>		
			Cum					15.79	4910.0 0	77,516.63
4/7. 1	700& 1200	Stone masonry work in cement mortar for sub- structure as per drawing and technical specification clauses 702,704,1202,120 4.								
©		Random Rubble Masonry								
(iii)		In cement mortar 1:6								
		Abutment		1	15.00	1.00	1.00	15.00		
		Abutment		1	15.00	$1.0+0.65/2=0.83$	3.00	37.35		
		W/wall		2	3.00	1.00	1.00	6.00		
		W/wall		2	3.00	$1+0.6/2=0.8$	3.00	14.40		
		Deduct spillway		2	2.50	1.50	0.30	<u>-2.25</u>		
			Cum					70.50	2587.0 0	1,82,383.50
5/2. 9 (a)		Providing shuttering including centering for flat surface such as slabs,shelves,chajj a and for vertical faces such as columns,walls,en ds of beams etc with dressed plank not less than 25cm thick firmly fixed etc								
		Abutment wall U/S		1	15.00		4.00	60.00		
		W/pond (sides)		2	1.00		0.65	1.30		
		Do		2		1.00	0.65	<u>1.30</u>		
			Sqm					62.60	389.00	24,351.40

6/9. 1	600	Providing 12mm thick cement plastering including cleaning the surface, curing and carriage of all materials within 200 m complete as per Technical Specification.(No. plastering is to be done I abutments, wing walls, well piers and retaining walls)								
(iii)		Proportion 1:4								
		Abutment		1	15.00		3.00	45.00		
		Abutment		1	15.00		3.30	49.50		
		Abutment		1	15.00	0.80		12.00		
		Spillway (sides)		2		0.65	0.30	0.39		
		W/wall		2	3.00		3.00	18.00		
		W/wall		2	3.00	0.60		3.60		
		W/platform		2	1.00	1.00		2.00		
		W/platform		2	6.50	1.00		13.00		
		W/platform		2	1.00	0.50		1.00		
		W/pond		1	8.00	1.00		8.00		
		W/pond		2	8.00		0.45	7.20		
		W/pond (sides)		2		1.00	0.45	0.90		
		Deduct spillway		2	2.50		0.30	-1.50		
			Sqm					159.09	137.00	<u>21,795.33</u>
									Total	3,19,433.38
									Say	3,19,433.00
(Rupees Three Lakh Nineteen Thousand Four Hundred Thirty Three Only)										



ESTIMATE FOR THE CONSTRUCTION OF CHECK DAM CUM FARM POND OF SHRI TORAL NONGBRI AT NEW PHANWER(2ndYear)

(PHUDSOH SYNRT) (Rates as per Schedule of rates for roads and bridge works for the year 2012-2013)

Beneficiaries: Shri Toral Nongbri

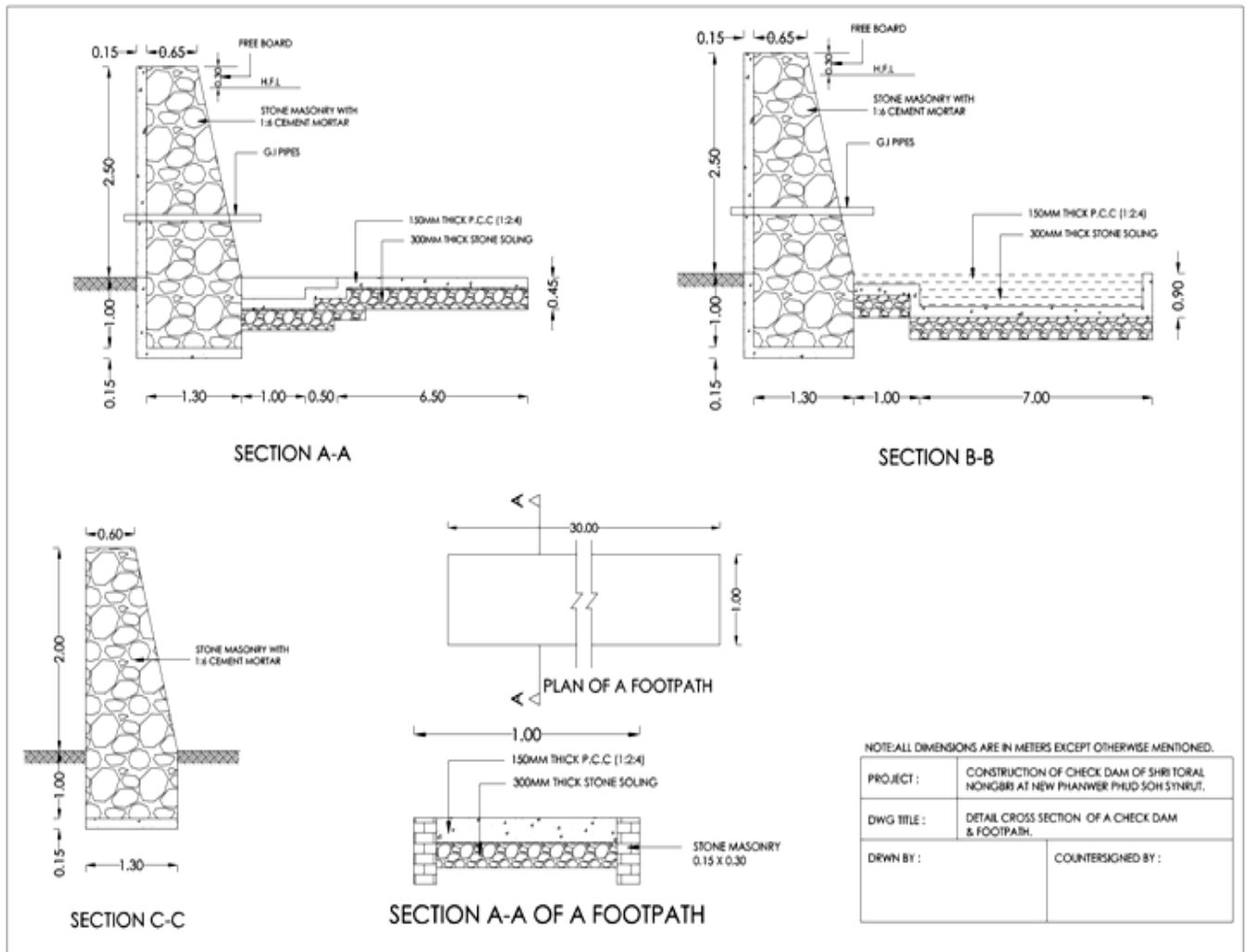
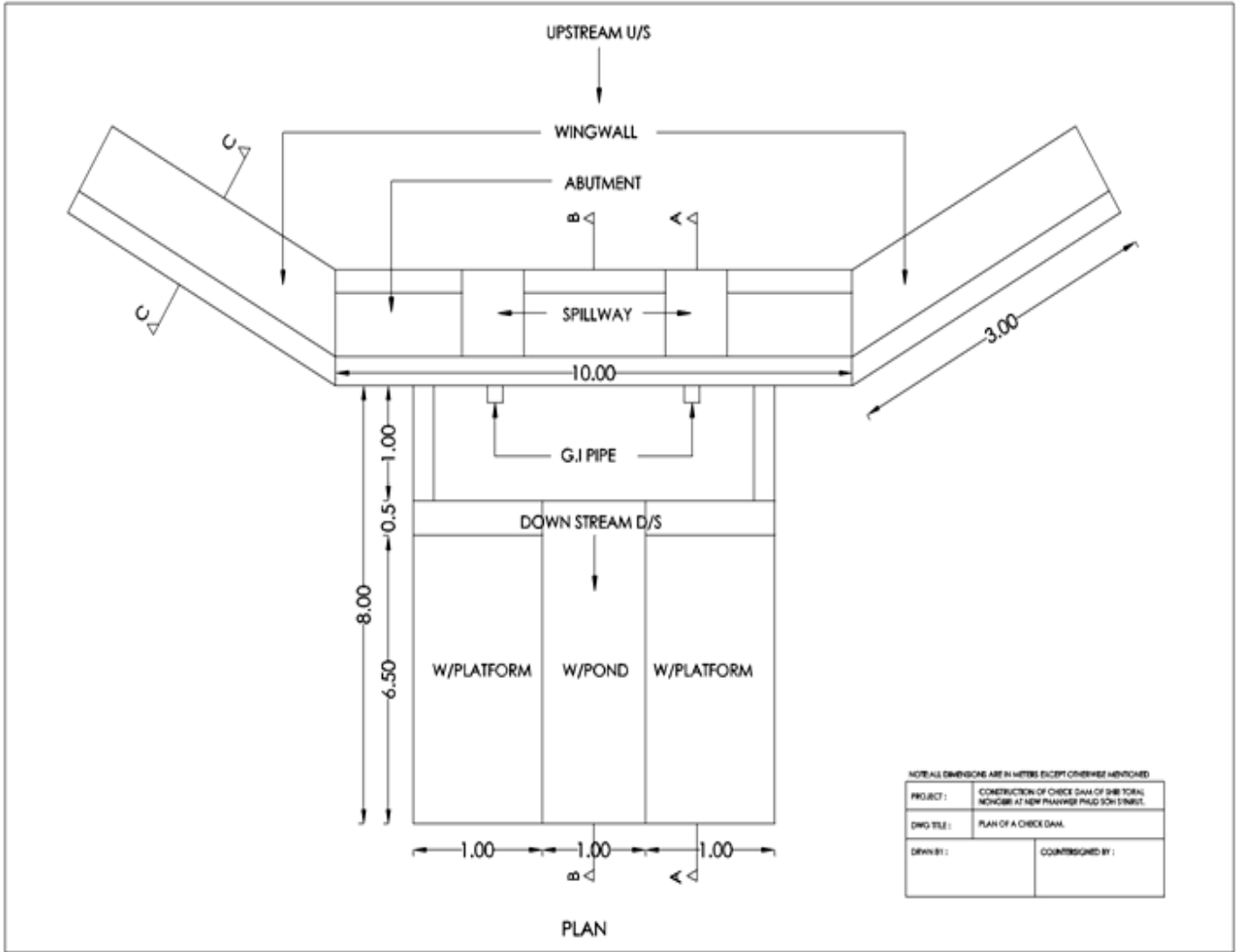
Geographical Coordinates: E 91° 13' 33.5"

N 25° 16' 47.8"

SI/No	MORD Specification	Particulars	Units	Nos	Length	Breadth	Height	Quantity	Rate	Amount
1/6.1	300	Earthwork in excavation for structure by manual means as per drawing and technical specification Clause 305.1 including setting out, construction of shoring and bracing, removal of stumps and other deleterious material and disposal upto a lead of 50m including dressing the sides and bottom and back filling in trenches with excavated suitable material								
	A	Ordinary soil								
		Upto 3.0m depth without dewatering								
		Abutment		1	10.00	1.45	1.15	16.68		
		W/wall		2	3.00	1.30	1.15	8.97		
		W/platform		2	1.00	1.00	0.75	1.50		
		W/platform		2	1.00	0.50	0.60	0.60		
		W/platform		2	6.50	1.00	0.45	5.85		
		W/pond		1	8.00	1.00	0.90	7.20		
		Footpath			30.00	1.00	0.20	6.00		
			Cum					46.80	214.00	10,014.13
2/7.8	1200	Back filling behind abutment, wing wall and return wall complete as per drawing and technical specification Clause 1204.3.8								
	(a)	Granular material								
		W/platform		2	8.00	1.00	0.30	4.80		
		W/pond		1	8.00	1.00	0.30	2.40		
		Footpath			30.00	1.00	0.10	3.00		
			Cum					10.20	756.00	7,711.20
3/7.2	800 & 1200	Plain cement concrete in sub-structure complete as per drawings and technical specification Clause 802, 804, 806, 807, 1202, 1204								
	A	PCC Grade M15 (uotp 5.0m ht)								
	(i)	Nominal mix 1:2.5:5								
		Abutment bed		1	10.00	1.45	0.15	2.18		
		Abutment wall U/S		1	10.00	0.15	3.50	5.25		
		W/wall bed		2	3.00	1.30	0.15	1.17		
		W/platform		2	1.00	1.00	0.15	0.30		
		W/platform		2	6.50	1.00	0.15	1.95		
		W/platform		2	1.00	0.50	0.15	0.15		
		W/pond		1	8.00	1.00	0.15	1.20		
		W/pond (sides)		2	1.00	0.15	0.50	0.15		

		Deduct spillway		2	2.50	0.15	0.30	-0.23		
		Footpath			30.00	1.00	0.15	<u>4.50</u>		
			Cum					16.62	4910.00	81,604.20
4/7.1	700& 1200	Stone masonry work in cement mortar for sub-structure as per drawing and technical specification clauses 702,704,1202,1204.								
©		Random Rubble Masonry								
(iii)		In cement mortar 1:6								
		Abutment		1	10.00	1.30	1.00	13.00		
		Abutment		1	10.00	$1.3+0.65/2=0.98$	2.50	24.50		
		W/wall		2	3.00	1.30	1.00	7.80		
		W/wall		2	3.00	$1.3+0.6/2=0.95$	2.00	11.40		
		Deduct spillway		2	2.50	1.30	0.30	-1.95		
		Footpath		2	30.00	0.15	0.30	<u>2.70</u>		
			Cum					57.45	2587.00	1,48,623.15
5/2.9 (a)		Providing shuttering including centering for flat surface such as slabs,shelves,chajja and for vertical faces such as columns,walls,ends of beams etc with dressed plank not less than 25cm thick firmly fixed etc								
		Abutment wall U/S		1	10.00		3.50	35.00		
		W/pond (sides)		2	6.50		0.65	8.45		
		Do		2		1.00	0.65	<u>1.30</u>		
			Sqm					44.75	389.00	17,407.75
6/9.1	600	Providing 12mm thick cement plastering including cleaning the surface, curing and carriage of all materials within 200 m complete as per Technical Specification.(No. plastering is to be done I abutments,wing walls,well piers and retaining walls)								
(iii)		Proportion 1:4								
		Abutment		1	10.00		2.50	25.00		
		Abutment		1	10.00		2.80	28.00		
		Abutment		1	10.00	0.80		8.00		
		Spillway (sides)		2		0.65	0.30	0.39		
		W/wall		2	3.00		2.00	12.00		
		W/wall		2	3.00	0.60		3.60		
		W/platform		2	1.00	1.00		2.00		
		W/platform		2	6.50	1.00		13.00		
		W/platform		2	1.00	0.50		1.00		
		W/pond		1	8.00	1.00		8.00		
		W/pond		2	8.00		0.45	7.20		
		W/pond (sides)		2		1.00	0.45	0.90		
		Deduct spillway		2	2.50		0.30	1.50		
		Footpath			30.00	1.00		<u>30.00</u>		
			Sqm					140.59	137.00	19,260.83

7/8.1 0	1200	Providing and fixing in position pipe railing consisting of IS joist post designation IS MB 100 (100 x 75) at 2.5 m interval and three rows of 50mm dia steel pipes (light) including fixing in position on bridge deck complete as per drawing and technical specification Clause 1208.2								
			Rm		10			10.00	4657.0 0	<u>46570.00</u>
								Total		3,31,191.26
									Say	3,31,191.00
(Rupees Three Lakh Thirty One Thousand One Hundred Ninety One Only)										



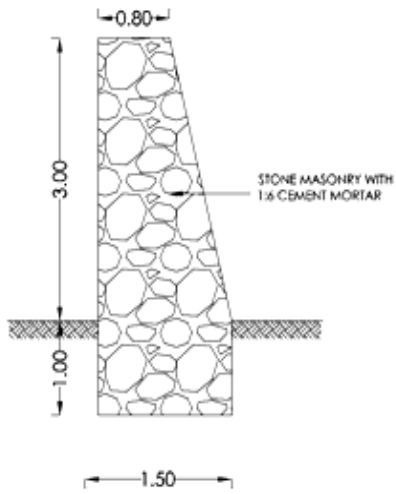
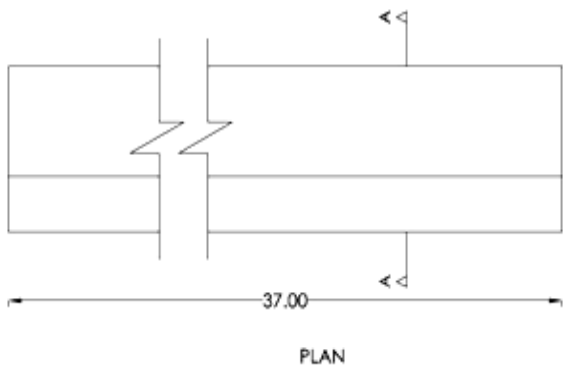
**Detail estimate for the construction of Protection wall at Wahkaji as per
(Rates as per Schedule of rates for roads and bridge works for the year 2012-2013)(2nd Year)**

Beneficiaries: Olivia L Langrin

Geographical Coordinates: E 91° 15'47.18"

N 25° 21'56.50"

Sl/No	MORD Specification	Particulars	Units	Nos	Length	Breadth	Height	Quantity	Rate	Amount
1/4.1(a)	300	Earthwork in excavation for structures as per drawing and Technical Specification Clause 305.1 including setting out construction of shoring and bracing, removal of stumps and other deleterious materials and disposal upto a lead of 50 m dressing of side and bottom and back filling in trenches with excavated suitable material.								
		Ordinary Soil								
(i)		Upto 3 m depth								
		Protection wall	Cum		37.00	1.50	1.00	55.50	118.00	6549
2/4.4	700& 1200	Stone masonry work in foundation complete as per drawing and Technical Specification Clauses 702,704,1202,1203.								
(B)(ii)		Random Rubble Masonry								
		In cement mortar 1:6								
		Protection wall			37.00	1.50	1.00	55.50		
		Do			37.00	1.5+0.8/2=1.15	3.00	<u>127.65</u>		
			Cum					183.15	2029.00	<u>3,71,611.35</u>
								Total		3,78,160.35
								Say		3,78,160.00
		(Rupees Three Lakh Seventy Eight Thousand One Hundred Sixty Only)								



NOTE: ALL DIMENSIONS ARE IN METERS EXCEPT OTHERWISE MENTIONED.

PROJECT :	CONSTRUCTION OF PROTECTION WALL AT WAHKAJI .	
DWG TITLE :	PLAN & CROSS SECTION OF A PROTECTION WALL.	
DRWN BY :	COUNTERSIGNED BY :	

ESTIMATE FOR THE CONSTRUCTION OF CHECK DAM AT PHUD UMIAP LANGKYRA(2nd Year)

(Rates as per Schedule of rates for roads and bridge works for the year 2012-2013)

Beneficiaries: Community

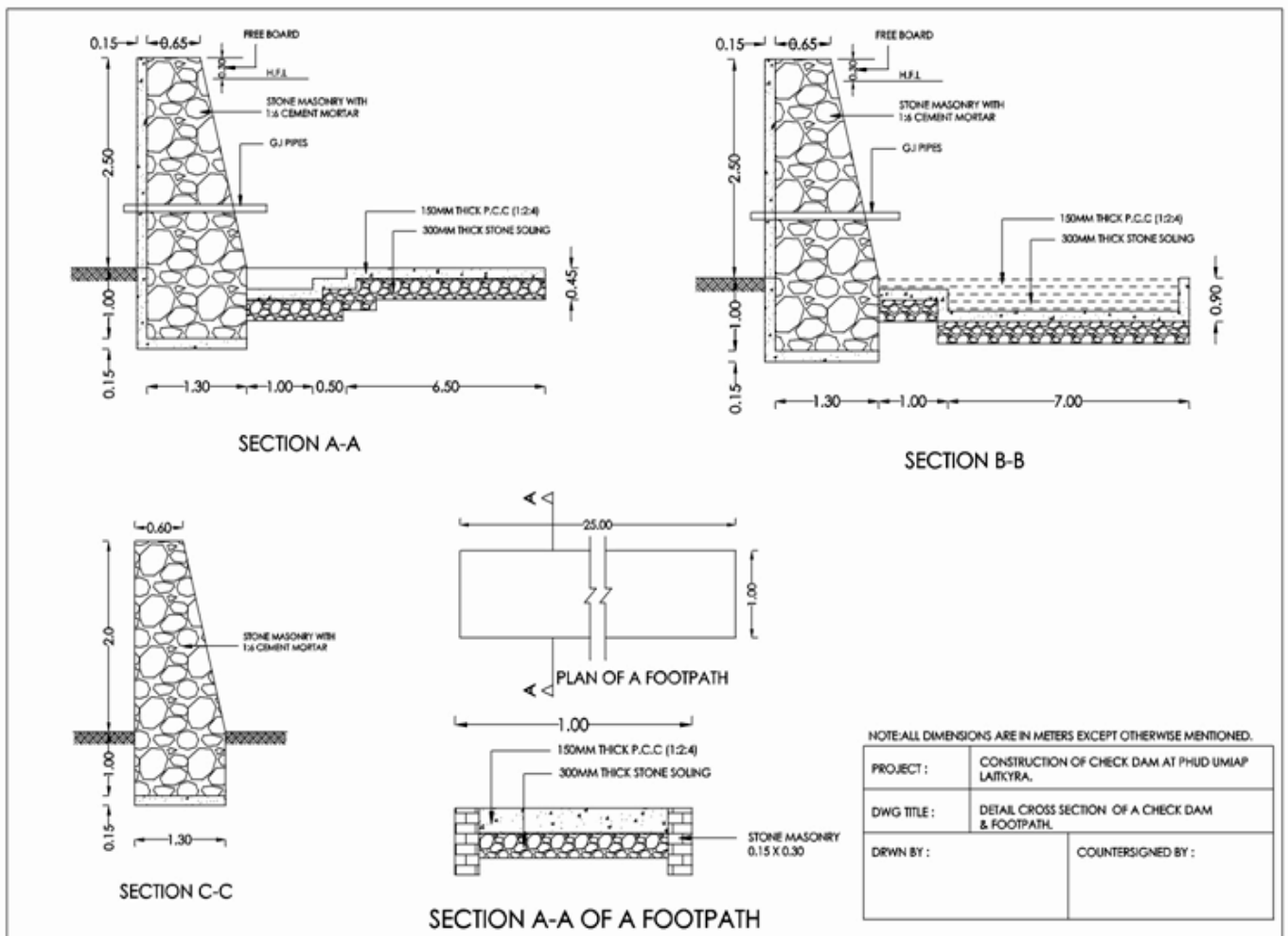
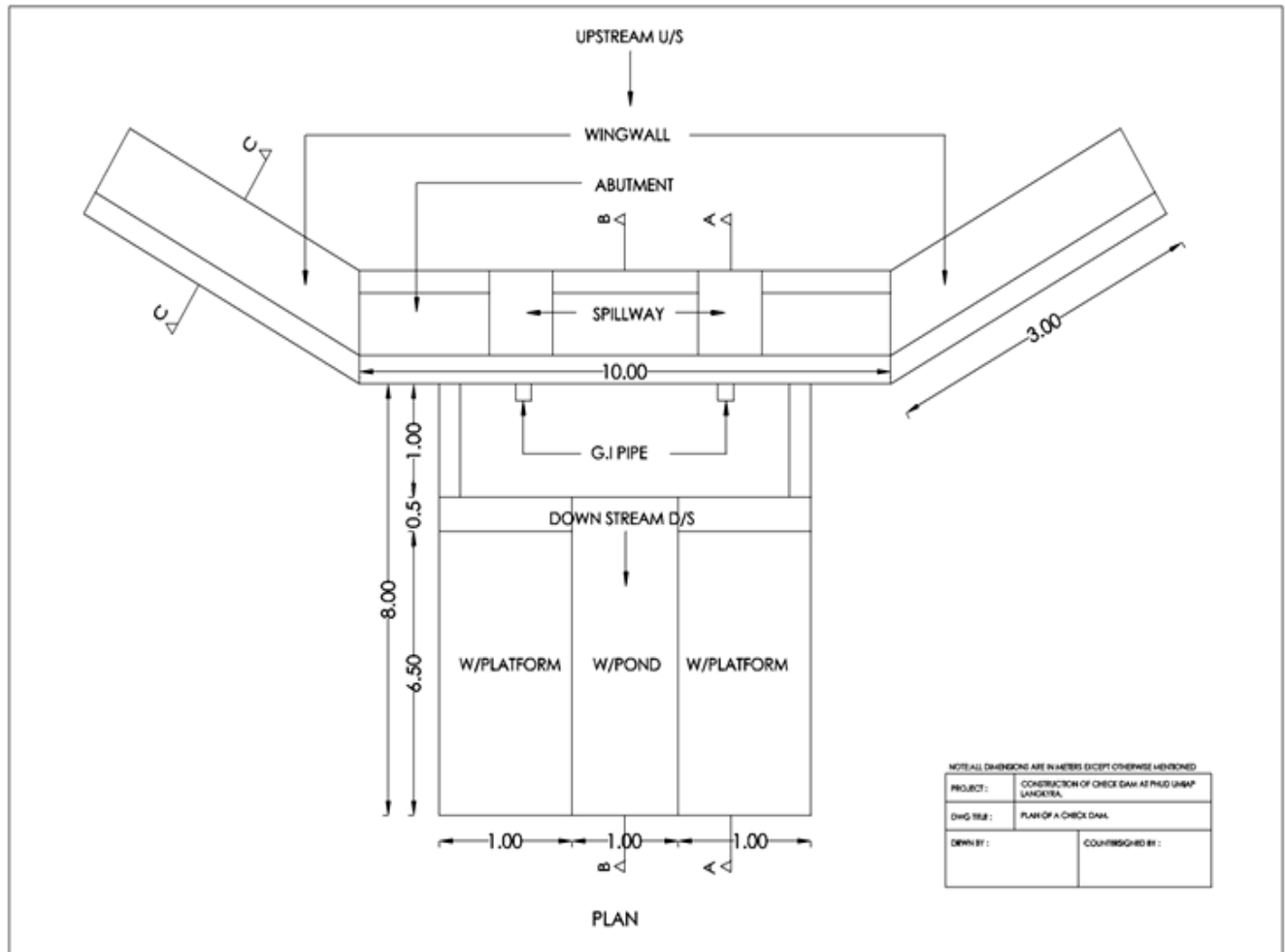
Geographical Coordinates: E 91° 13' 15.2"

N 25° 16' 17.1"

Sl/No	MORD Specification	Particulars	Units	Nos	Length	Breadth	Height	Quantity	Rate	Amount
1/6.1	300	Earthwork in excavation for structure by manual means as per drawing and technical specification Clause 305.1 including setting out, construction of shoring and bracing, removal of stumps and other deleterious material and disposal upto a lead of 50m including dressing the sides and bottom and back filling in trenches with excavated suitable material								
	A	Ordinary soil								
		Upto 3.0m depth without dewatering								
(a)		Ordinary soil								
		Abutment		1	10.00	1.45	1.15	16.68		
		W/wall		2	3.00	1.45	1.15	10.01		
		W/platform		2	1.00	1.00	0.75	1.50		
		W/platform		2	1.00	0.50	0.60	0.60		
		W/platform		2	6.50	1.00	0.45	5.85		
		W/pond		1	8.00	1.00	0.90	7.20		
		Footpath			25.00	1.00	0.20	<u>5.00</u>		
			Cum					46.83	214.00	10,021.62
2/7.8	1200	Back filling behind abutment, wing wall and return wall complete as per drawing and technical specification Clause 1204.3.8								
	(a)	Granular material								
		W/platform		2	8.00	1.00	0.30	4.80		
		W/pond		1	8.00	1.00	0.30	2.40		
		Footpath			25.00	1.00	0.10	<u>2.50</u>		
			Sqm					9.70	756.00	7,333.20
3/7.2	800 & 1200	Plain cement concrete in sub-structure complete as per drawings and technical specification Clause 802, 804, 806, 807, 1202, 1204								
	A	PCC Grade M15 (upto 5.0m ht)								
(i)		Nominal mix 1:2.5:5								
		Abutment bed		1	10.00	1.45	0.15	2.18		
		Abutment wall U/S		1	10.00	0.15	3.00	4.50		
		W/wall bed		2	3.00	1.30	0.15	1.17		
		W/platform		2	1.00	1.00	0.15	0.30		
		W/platform		2	6.50	1.00	0.15	1.95		
		W/platform		2	1.00	0.50	0.15	0.15		

		W/pond		1	8.00	1.00	0.15	1.20		
		W/pond (sides)		2	1.00	0.15	0.50	0.15		
		Deduct spillway		2	2.50	0.15	0.30	-0.23		
		Footpath			25.00	1.00	0.15	<u>3.75</u>		
			Cum					15.12	4910.00	74,239.20
4/7.1	700&1200	Stone masonry work in cement mortar for sub-structure as per drawing and technical specification clauses 702,704,1202,1204.								
©		Random Rubble Masonry								
(iii)		In cement mortar 1:6								
		Abutment		1	10.00	1.30	1.00	13.00		
		Abutment		1	10.00	$1.3+0.65/2=0.98$	2.50	24.50		
		W/wall		2	3.00	1.30	1.00	7.80		
		W/wall		2	3.00	$1.3+0.6/2=0.95$	2.00	11.40		
		Deduct spillway		2	2.50	1.30	0.30	-1.95		
		Footpath		2	25.00	0.15	0.30	<u>2.25</u>		
			Cum					57.00	2587.00	1,47,459.00
5/2.9 (a)		Providing shuttering including centering for flat surface such as slabs,shelves,chajja and for vertical faces such as columns,walls,ends of beams etc with dressed plank not less than 25cm thick firmly fixed etc								
		Abutment wall U/S		1	10.00		3.15	31.50		
		W/pond (sides)		2	6.50		0.65	8.45		
		Do		2		1.00	0.65	<u>1.30</u>		
			Sqm					41.25	389.00	16,046.25
6/9.1	600	Providing 12mm thick cement plastering including cleaning the surface, curing and carriage of all materials within 200 m complete as per Technical Specification.(No. plastering is to be done I abutments,wing walls,well piers and retaining walls)								
(iii)		Proportion 1:4								
		Abutment		1	10.00		2.50	25.00		
		Abutment		1	10.00		2.80	28.00		
		Abutment		1	10.00	0.80		8.00		
		Spillway (sides)		2		0.65	0.30	0.39		
		W/wall		2	3.00		2.00	12.00		
		W/wall		2	3.00	0.60		3.60		
		W/platform		2	1.00	1.00		2.00		
		W/platform		2	6.50	1.00		13.00		
		W/platform		2	1.00	0.50		1.00		
		W/pond		1	8.00	1.00		8.00		
		W/pond		2	8.00		0.45	7.20		
		W/pond (sides)		2		1.00	0.45	0.90		

		Deduct spillway		2	2.50		0.30	1.50		
		Footpath			25.00	1.00		<u>25.00</u>		
			Sqm					135.59	137.00	18,575.83
7/8.10	1200	Providing and fixing in position pipe railing consisting of IS joist post designation IS MB 100 (100 x 75) at 2.5 m interval and three rows of 50mm dia steel pipes (light) including fixing in position on bridge deck complete as per drawing and technical specification Clause 1208.2								
			Rm		25.00			25.00	4657.00	<u>116425.00</u>
								Total		3,90,100.10
								Say		3,90,100.00
(Rupees Three Lakh Ninety Thousand One Hundred Only)										



ESTIMATE FOR CONSTRUCTION OF CHECK DAM AT PHUD MAWTHUNGLAMA PHLANGDILOIN (2ND Year)

Rate Based as per Schedule of Rates for Road and Bridges (Other than National Highway Works) for the Year 2012-2013.

Beneficiaries: Shri Phyrnaistar K Saw

Geographical Coordinates: E 91° 13' 58.8"

N 25° 17' 48.1"

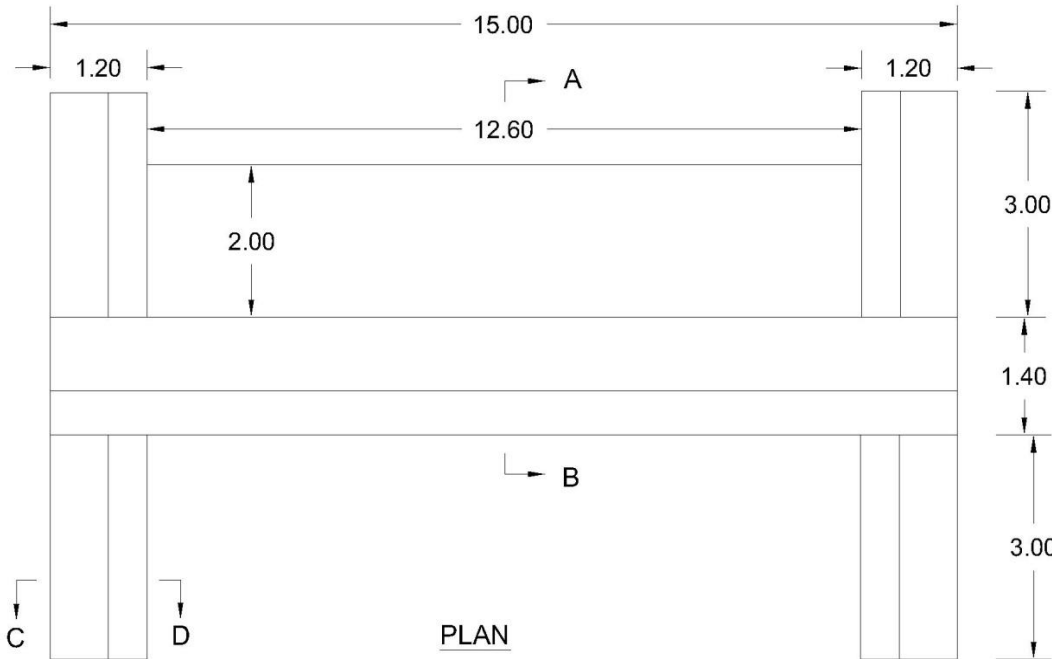
Sl no	PARTICULARS	NO	DIMENSION			QTY	UNIT	RATE	AMOUNT		
			L	B	H					(RS)	
1/4.1 B(i).	Earthwork in excavation for structures as per drawings and Technical Clauses 305.1 including setting out construction of shoring and bracing, removal of stumps and other deleterious material and disposal upto a lead of 50m dressing of side and bottom and back filling in trenches with excavated suitable materials. Dam Apron Channel on U/S. W/Walls U/S and D/S	1	15.00	1.40	1.20	25.20	Cu.m				
		1	12.60	2.00	0.25	6.30	Cu.m				
		1	6.00	0.50	0.50	1.50	Cu.m				
		4	3.00	1.20	1.00	14.40	Cu.m				
		TOTAL						47.40	Cu.m	157	7441.80
2/4.3	Providing concrete for plain/reinforced concrete in open foundations complete as per drawing and technical specifications clauses 802,803,1202,1203. Dam W/WALLS	1	15.00	1.40	0.10	2.10	Cu.m				
		4	3.00	1.20	0.10	1.44	Cu.m				
		TOTAL						3.54	Cu.m	4353	15409.62
3/4.4	Providing stone masonry work in cement mortar in foundation complete as per drawings and Technical Specification Clauses 702,703,1202,1203. W/WALLS	4	3.00	1.20	0.90	12.96	Cu.m				
		4	3.00	0.85	2.80	28.56	Cu.m				
		TOTAL						41.52	Cu.m	2093	86901.36
4/7.3	Providing reinforced cement concrete in substructure complete as per drawings and Technical Specification Clauses 802,804,805,806,1202,1204. Dam Apron Channel	1	15.00	1.40	1.20	25.20	Cu.m				
		1	15.00	0.95	2.50	35.63	Cu.m				
		1	12.60	2.00	0.10	2.52	Cu.m				
		1	6.00	0.50	0.10	0.30	Cu.m				
		2	6.00	0.30	0.10	0.36	Cu.m				
		TOTAL						64.01	Cu.m	5818	372381.09
5/5.12	Providing stone pitching with one man size boulders not less than 25cm x 25cm x 30 cm including filling the interstices with spoils and carriages of stone within a distance of 200m completed as directed Apron Channel	1	12.60	2.00	0.25	6.30	Cu.m				
		1	6.00	0.50	0.25	0.75	Cu.m				
		TOTAL						7.05	Cu.m	704	4963.20
6/9.1 ii	Providing 12mm thick cement plastering including cleaing the surface, curing carriage of sand within 200m complete as per Technical Specification. Dam	1	15.00	2.50		37.50	SQ.M				
		1	15.00	0.50		7.50	SQ.M				
	Apron Channel W/WALLS	1	12.60	2.00		25.20	SQ.M				
		1	6.00	0.30		1.80	SQ.M				
		2	6.00	0.30		3.60	SQ.M				
		4	3.00	2.80		33.60	SQ.M				
		4	3.00	0.50		6.00	SQ.M				
		TOTAL						154.05	SQ.M	157	24185.85
		GRAND TOTAL									511282.92

Say:

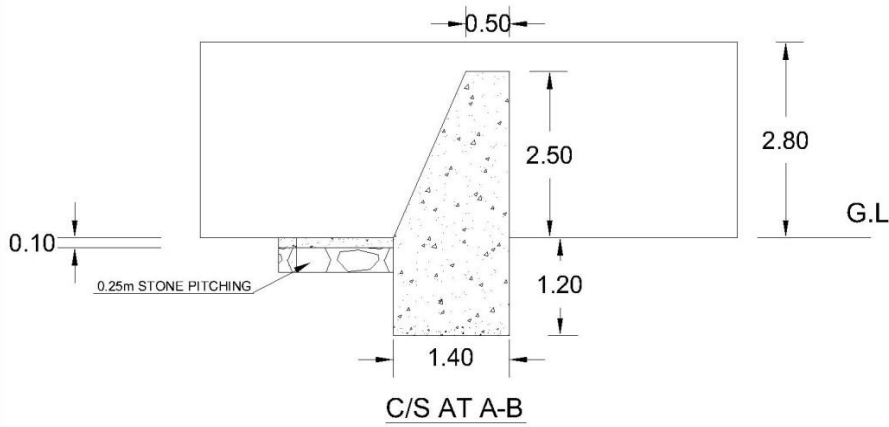
Rs 5,11,290.00

(Rupees Five Lakh Eleven Thousand Two Hundred Ninety) only.

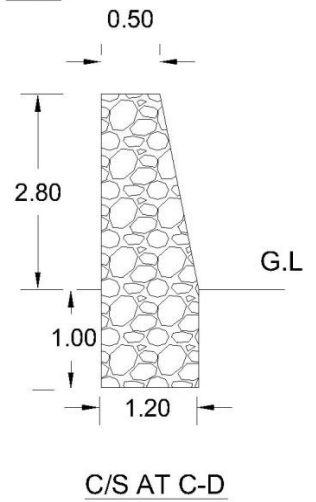
DRAWING FOR PROPOSED CHECK DAM.



PLAN



C/S AT A-B



C/S AT C-D

NOTES :- ALL DIMENSIONS ARE IN METRES UNLESS SPECIFIED.
SCALE :- 1:50.

COUNTERSIGNED :- PREPARED BY :-

ESTIMATE FOR THE CONSTRUCTION OF CHECK DAM AT DOMIASIAT (2nd Year)
(Rates as per Schedule of rates for roads and bridge works for the year 2012-2013)

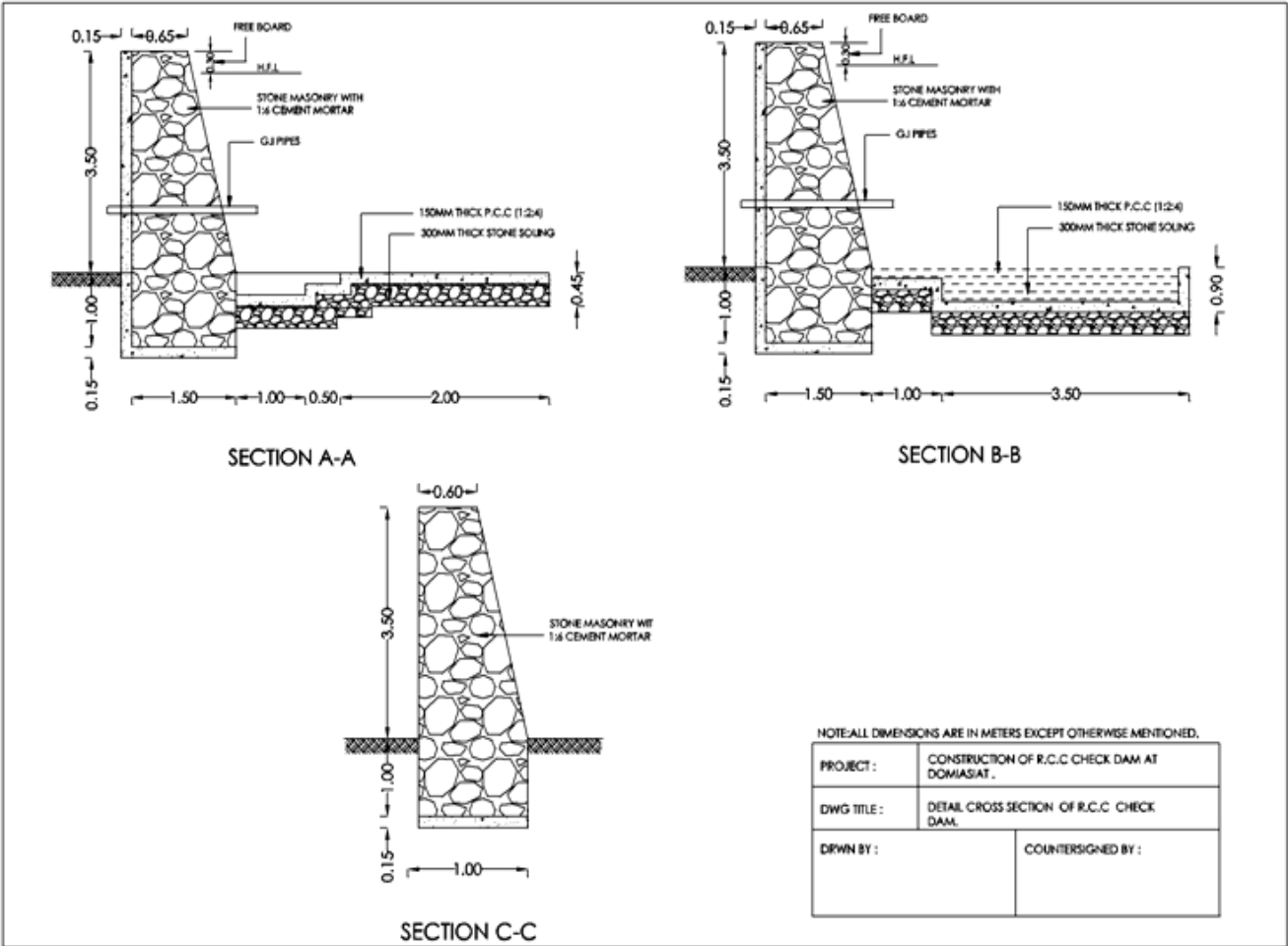
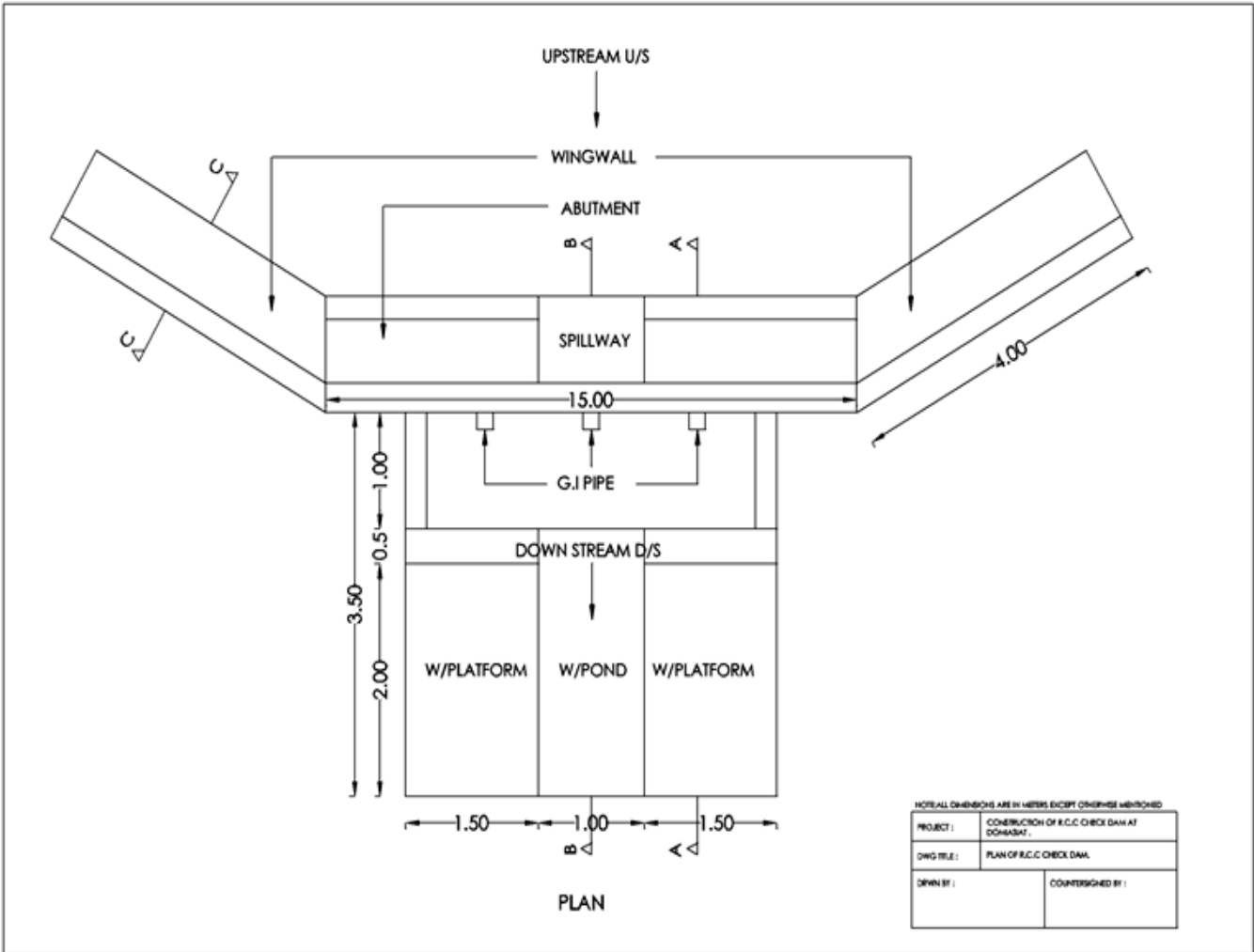
Beneficiaries: Community

Geographical Coordinates: E 91° 13' 28.6"

N 25° 20' 29.9"

Sl/No	MORD Specification	Particulars	Units	Nos	Length	Breadth	Height	Quantity	Rate	Amount
1/6.1	300	Earthwork in excavation for structure by manual means as per drawing and technical specification Clause 305.1 including setting out, construction of shoring and bracing, removal of stumps and other deleterious material and disposal upto a lead of 50m including dressing the sides and bottom and back filling in trenches with excavated suitable material								
	A	Ordinary soil								
		Upto 3.0m depth without dewatering								
		Abutment		1	15.00	1.65	1.15	28.46		
		W/wall		2	4.00	1.00	1.15	9.20		
		W/platform		2	1.00	1.50	0.75	2.25		
		W/platform		2	1.50	0.50	0.60	0.90		
		W/platform		2	2.00	1.50	0.45	2.70		
		W/pond		1	3.50	1.00	0.90	<u>3.15</u>		
			Cum					46.66	214.00	9,985.78
2/7.8	1200	Back filling behind abutment, wing wall and return wall complete as per drawing and technical specification Clause 1204.3.8								
	(a)	Granular material								
		W/platform		2	2.00	1.50	0.30	1.80		
		W/pond		1	3.50	1.00	0.30	<u>1.05</u>		
			Cum					2.85	756.00	2,154.60
3/7.2	800 & 1200	Plain cement concrete in sub-structure complete as per drawings and technical specification Clause 802, 804, 806, 807, 1202, 1204								
	A	PCC Grade M15 (uotp 5.0m ht)								
	(i)	Nominal mix 1:2.5:5								
		Abutment bed		1	15.00	1.65	0.15	3.71		
		Abutment wall U/S		1	15.00	0.15	3.15	7.09		
		W/wall bed		2	4.00	1.00	0.15	1.20		
		W/platform		2	1.00	1.50	0.15	0.45		
		W/platform		2	2.00	1.50	0.15	0.90		
		W/platform		2	1.50	0.50	0.15	0.23		
		W/pond		1	3.50	1.00	0.15	0.53		
		W/pond (sides)		1	1.00	0.15	0.50	0.08		
		Deduct spillway		1	2.50	0.15	0.30	<u>-0.11</u>		
			Cum					14.06	4910.00	69046.88

4/7. 1	700& 1200	Stone masonry work in cement mortar for sub-structure as per drawing and technical specification clauses 702,704,1202,1204.								
©		Random Rubble Masonry								
(iii)		In cement mortar 1:6								
		Abutment		1	15.00	1.50	1.00	22.50		
		Abutment		1	15.00	$1.5+0.65/2=1.08$	4.50	72.90		
		W/wall		2	4.00	1.00	1.00	8.00		
		W/wall		2	4.00	$1+0.6/2=0.8$	4.50	28.80		
		Deduct spillway		1	2.50	1.50	0.30	<u>-1.13</u>		
			Cum					131.08	2587.00	339091.03
5/2. 9 (a)		Providing shuttering including centering for flat surface such as slabs,shelves,chajja and for vertical faces such as columns,walls,ends of beams etc with dressed plank not less than 25cm thick firmly fixed etc								
		Abutment wall U/S		1	15.00		5.50	82.50		
		W/pond (sides)		2	2.00		0.65	2.60		
		Do		2		1.50	0.65	<u>1.95</u>		
			Sqm					87.05	389.00	33862.45
6/9. 1	600	Providing 12mm thick cement plastering including cleaning the surface, curing and carriage of all materials within 200 m complete as per Technical Specification.(No. plastering is to be done I abutments,wing walls,well piers and retaining walls)								
(iii)		Proportion 1:4								
		Abutment		1	15.00		4.50	67.50		
		Abutment		1	15.00		4.80	72.00		
		Abutment		1	15.00	0.80		12.00		
		Spillway (sides)		2		0.65	0.30	0.39		
		W/wall		2	4.00		2.00	16.00		
		W/wall		2	4.00	0.60		4.80		
		W/platform		2	1.00	1.50		3.00		
		W/platform		2	2.00	1.50		6.00		
		W/platform		2	1.50	0.50		1.50		
		W/pond		1	3.50	1.00		3.50		
		W/pond		2	3.50		0.45	3.15		
		W/pond (sides)		2		1.00	0.45	0.90		
		Deduct spillway		1	2.50		0.30	<u>0.75</u>		
			Sqm					191.49	137.00	<u>26234.13</u>
									Total	480374.86
									Say	480375.00
(Rupees Four Lakh Eighty Thousand Three Hundred Seventy Five Only)										



ESTIMATE FOR THE CONSTRUCTION OF CHECK DAM AT NONGBAH JINRIN (PHOTKYLLENG) (2nd Year)
(Rates as per Schedule of rates for roads and bridge works for the year 2012-2013)

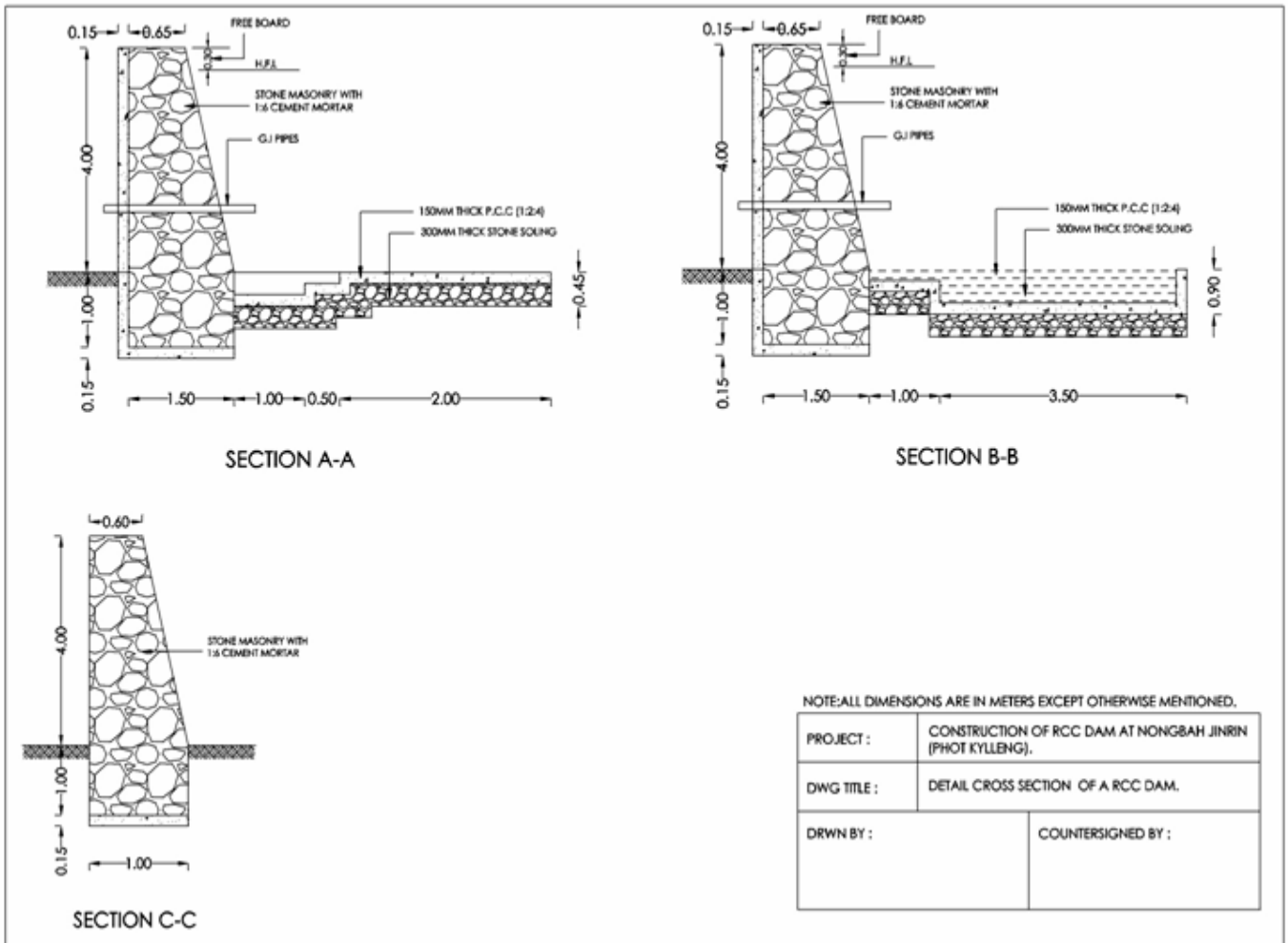
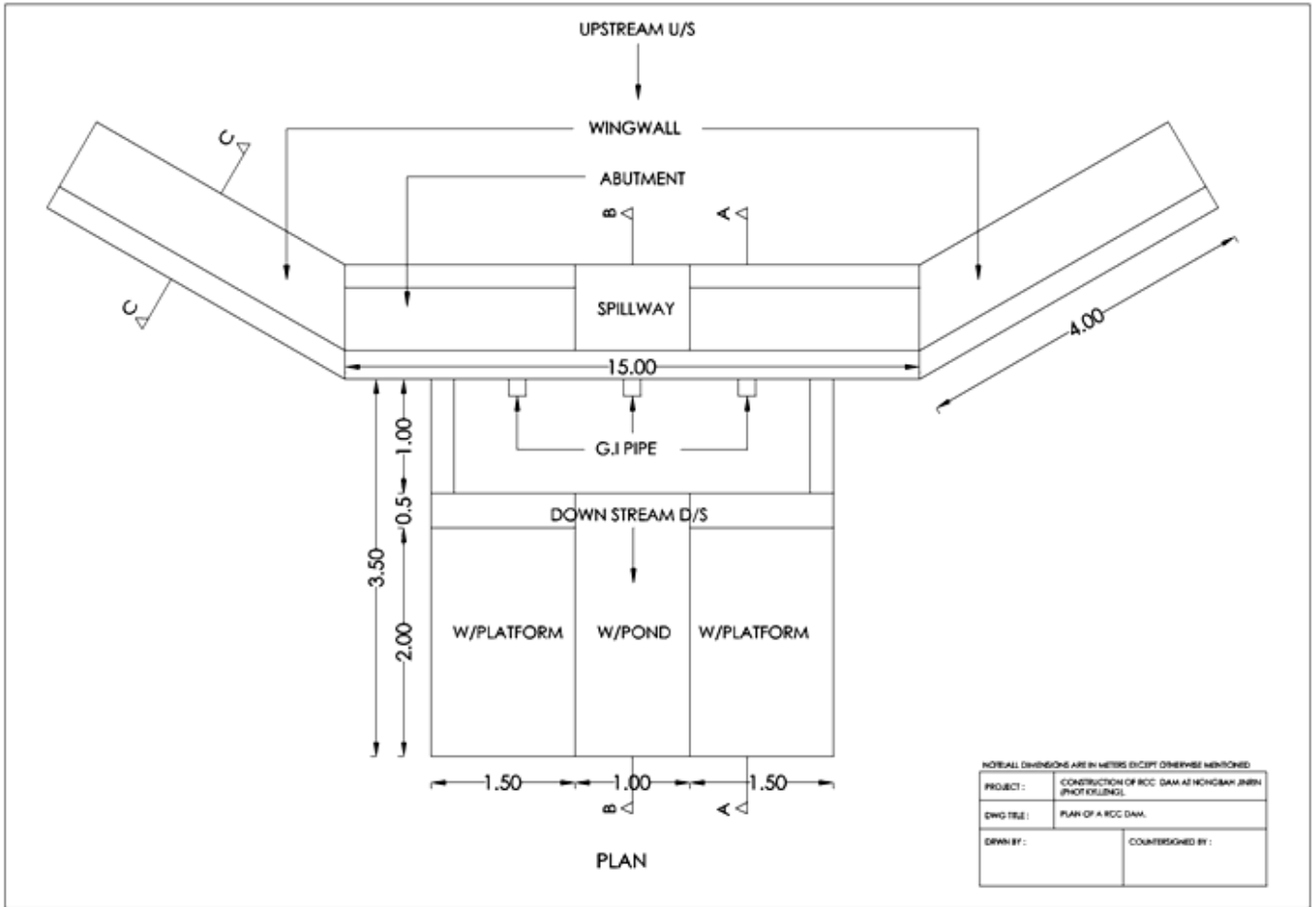
Beneficiaries: Community

Geographical Coordinates: E 91° 12' 36.6"

N 25° 19' 30.3"

SI/No	MORD Specification	Particulars	Units	Nos	Length	Breadth	Height	Quantity	Rate	Amount
1/6.1	300	Earthwork in excavation for structure by manual means as per drawing and technical specification Clause 305.1 including setting out, construction of shoring and bracing, removal of stumps and other deleterious material and disposal upto a lead of 50m including dressing the sides and bottom and back filling in trenches with excavated suitable material								
	A	Ordinary soil								
		Upto 3.0m depth without dewatering								
		Abutment		1	15.00	1.65	1.15	28.46		
		W/wall		2	4.00	1.00	1.15	9.20		
		W/platform		2	1.00	1.50	0.75	2.25		
		W/platform		2	1.50	0.50	0.60	0.90		
		W/platform		2	2.00	1.50	0.45	2.70		
		W/pond		1	3.50	1.00	0.90	<u>3.15</u>		
			Cum					46.66	214.00	9,985.78
2/7.8	1200	Back filling behind abutment, wing wall and return wall complete as per drawing and technical specification Clause 1204.3.8								
	(a)	Granular material								
		W/platform		2	2.00	1.50	0.30	1.80		
		W/pond		1	3.50	1.00	0.30	<u>1.05</u>		
			Cum					2.85	756.00	2,154.60
3/7.2	800& 1200	Plain cement concrete in sub-structure complete as per drawings and technical specification Clause 802,804,806,807,1202, 1204								
	A	PCC Grade M15(upto 5.0m ht)								
(i)		Nominal mix 1:2.5:5								
		Abutment bed		1	15.00	1.65	0.15	3.71		
		Abutment wall U/S		1	15.00	0.15	3.15	7.09		
		W/wall bed		2	4.00	1.00	0.15	1.20		
		W/platform		2	1.00	1.50	0.15	0.45		
		W/platform		2	2.00	1.50	0.15	0.90		
		W/platform		2	1.50	0.50	0.15	0.23		
		W/pond		1	3.50	1.00	0.15	0.53		
		W/pond (sides)		1	1.00	0.15	0.50	0.08		
		Deduct spillway		1	2.50	0.15	0.30	<u>-0.11</u>		
			Cum					14.06	4910.00	69046.88

4/7.1	700& 1200	Stone masonry work in cement mortar for sub-structure as per drawing and technical specification clauses 702,704,1202,1204.								
©		Random Rubble Masonry								
(iii)		In cement mortar 1:6								
		Abutment		1	15.00	1.50	1.00	22.50		
		Abutment		1	15.00	$1.5+0.65/2=1.08$	4.50	72.90		
		W/wall		2	4.00	1.00	1.00	8.00		
		W/wall		2	4.00	$1+0.6/2=0.8$	4.50	28.80		
		Deduct spillway		1	2.50	1.50	0.30	<u>-1.13</u>		
			Cum					131.08	2587.00	339091.03
5/2.9 (a)		Providing shuttering including centering for flat surface such as slabs,shelves,chajja and for vertical faces such as columns,walls,ends of beams etc with dressed plank not less than 25cm thick firmly fixed etc								
		Abutment wall U/S		1	15.00		5.50	82.50		
		W/pond (sides)		2	2.00		0.65	2.60		
		Do		2		1.50	0.65	<u>1.95</u>		
			Sqm					87.05	389.00	33862.45
6/9.1	600	Providing 12mm thick cement plastering including cleaning the surface, curing and carriage of all materials within 200 m complete as per Technical Specification.(No. plastering is to be done I abutments,wing walls,well piers and retaining walls)								
(iii)		Proportion 1:4								
		Abutment		1	15.00		4.50	67.50		
		Abutment		1	15.00		4.80	72.00		
		Abutment		1	15.00	0.80		12.00		
		Spillway (sides)		2		0.65	0.30	0.39		
		W/wall		2	4.00		2.00	16.00		
		W/wall		2	4.00	0.60		4.80		
		W/platform		2	1.00	1.50		3.00		
		W/platform		2	2.00	1.50		6.00		
		W/platform		2	1.50	0.50		1.50		
		W/pond		1	3.50	1.00		3.50		
		W/pond		2	3.50		0.45	3.15		
		W/pond (sides)		2		1.00	0.45	0.90		
		Deduct spillway		1	2.50		0.30	<u>0.75</u>		
			Sqm					191.49	137.00	<u>26234.13</u>
									Total	480374.86
									Say	480375.00
(Rupees Four Lakh Eighty Thousand Three Hundred Seventy Five Only)										



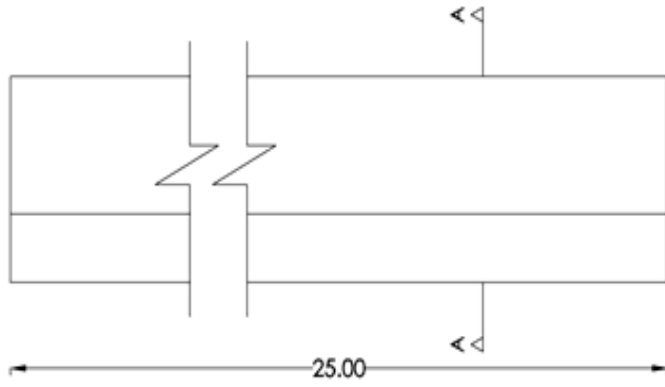
Detail estimate for the construction of Protection wall at Phud Umiap(3rd Year)
(Rates as per Schedule of rates for roads and bridge works for the year 2012-2013)

Name Of Beneficiaries: Community

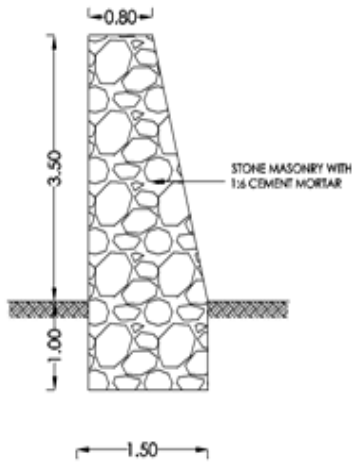
Geographical Coordinates: E 91° 13' 15.2"

N 25° 16' 21.0"

Sl/No	MORD Specification	Particulars	Units	Nos	Length	Breadth	Height	Quantity	Rate	Amount
1/4.1(a)	300	Earthwork in excavation for structures as per drawing and Technical Specification Clause 305.1 including setting out construction of shoring and bracing,removal of stumps and other deleterious materials and disposal upto a lead of 50 m dressing of side and bottom and back filling in trenches with excavated suitable material.								
		Ordinary Soil								
(i)		Upto 3 m depth								
		Protection wall	Cum		25.00	1.50	1.00	37.50	118.00	4425
2/4.4	700& 1200	Stone masonry work in foundation complete as per drawing and Technical Specification Clauses 702,704,1202,1203.								
(B)		Random Rubble Masonry								
(ii)		In cement mortar 1:6								
		Protection wall			25.00	1.50	1.00	37.50		
		Do			25.00	1.5+0.8/2=1.15	3.50	<u>100.63</u>		
			Cum					138.13	2029.00	<u>2,80,255.63</u>
								Total		2,84,680.63
								Say		2,84,681.00
		(Rupees Two Lakh Eighty Four Thousand Six Hundred Eighty One Only)								



PLAN



SECTION A-A

NOTE: ALL DIMENSIONS ARE IN METERS EXCEPT OTHERWISE MENTIONED.

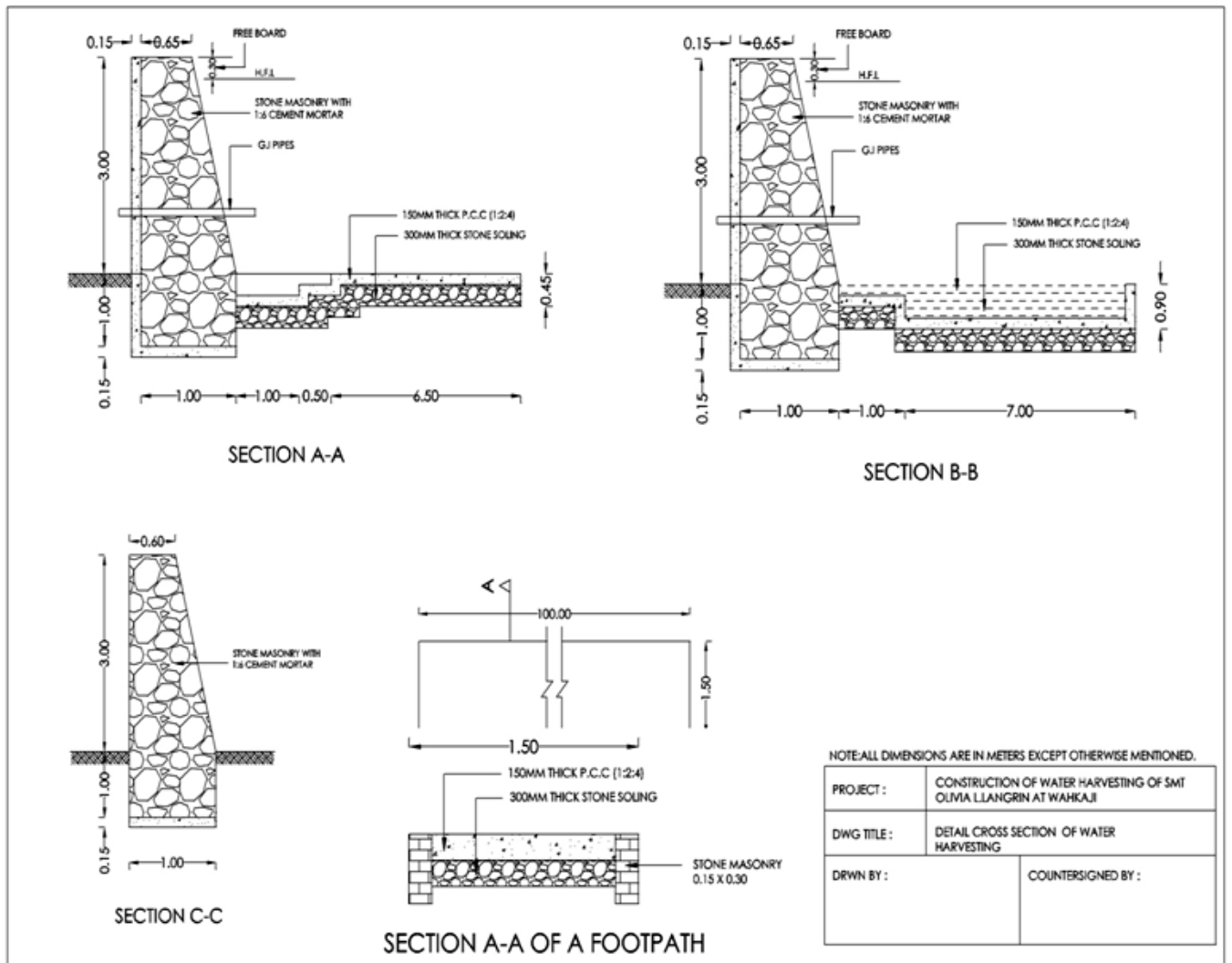
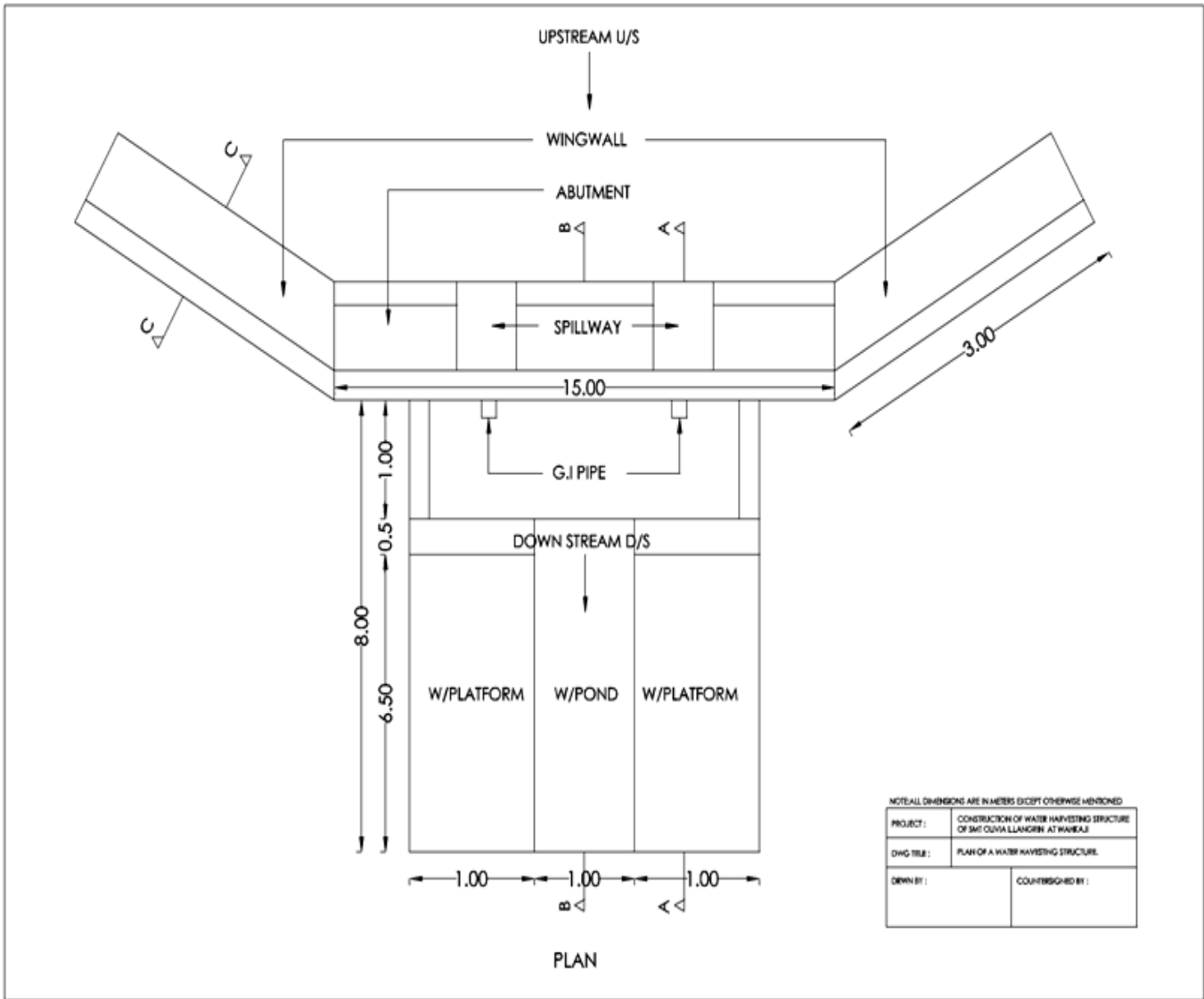
PROJECT :	CONSTRUCTION OF PROTECTION WALL AT WAHKAJI .
DWG TITLE :	PLAN & CROSS SECTION OF A PROTECTION WALL.
DRWN BY :	COUNTERSIGNED BY :

**ESTIMATE FOR THE CONSTRUCTION OF WATER HARVESTING AT STRUCTURE AT
NEWPHANWER (3rd Year)**
(Rates as per Schedule of rates for roads and bridge works for the year 2012-2013)
Beneficiaries: Shri Behul K.Saw Geographical Coordinates: E 91° 13' 42.9" N 25° 17' 21.1"

Sl/No	MORD Specification	Particulars	Units	Nos	Length	Breadth	Height	Quantity	Rate	Amount
1/6.1	300	Earthwork in excavation for structure by manual means as per drawing and technical specification Clause 305.1 including setting out, construction of shoring and bracing, removal of stumps and other deleterious material and disposal upto a lead of 50m including dressing the sides and bottom and back filling in trenches with excavated suitable material								
	A	Ordinary soil								
		Upto 3.0m depth without dewatering								
		Abutment		1	15.00	1.15	1.15	19.84		
		W/wall		2	3.00	1.00	1.15	6.90		
		W/platform		2	1.00	1.00	0.75	1.50		
		W/platform		2	1.00	0.50	0.60	0.60		
		W/platform		2	6.50	1.00	0.45	5.85		
		W/pond		1	8.00	1.00	0.90	<u>7.20</u>		
			Cum					41.89	214.00	8,963.93
2/7.8	1200	Back filling behind abutment, wing wall and return wall complete as per drawing and technical specification Clause 1204.3.8								
	(a)	Granular material								
		W/platform		2	6.50	1.00	0.30	3.90		
		W/pond		1	6.50	1.00	0.30	<u>1.95</u>		
			Cum					5.85	756.00	4,422.60
3/7.2	800& 1200	Plain cement concrete in sub-structure complete as per drawings and technical specification Clause 802,804,806,807,1202, 1204								
	A	PCC Grade M15(utp 5.0m ht)								
	(i)	Nominal mix 1:2.5:5								
		Abutment bed		1	15.00	1.15	0.15	2.59		
		Abutment wall U/S		1	15.00	0.15	4.00	9.00		
		W/wall bed		2	3.00	1.00	0.15	0.90		

		W/platform		2	1.00	1.00	0.15	0.30		
		W/platform		2	6.50	1.00	0.15	1.95		
		W/platform		2	1.00	0.50	0.15	0.15		
		W/pond		1	6.50	1.00	0.15	0.98		
		W/pond (sides)		2	1.00	0.15	0.50	0.15		
		Deduct spillway		2	2.50	0.15	0.30	<u>-0.23</u>		
			Cum					15.79	4910.00	77,516.63
4/7.1	700& 1200	Stone masonry work in cement mortar for sub-structure as per drawing and technical specification clauses 702,704,1202,1204.								
©		Random Rubble Masonry								
(iii)		In cement mortar 1:6								
		Abutment		1	15.00	1.00	1.00	15.00		
		Abutment		1	15.00	1.0+0.65/2=0.83	3.00	37.35		
		W/wall		2	3.00	1.00	1.00	6.00		
		W/wall		2	3.00	1+0.6/2=0.8	3.00	14.40		
		Deduct spillway		2	2.50	1.50	0.30	<u>-2.25</u>		
			Cum					70.50	2587.00	1,82,383.50
5/2.9 (a)		Providing shuttering including centering for flat surface such as slabs,shelves,chajja and for vertical faces such as columns,walls,ends of beams etc with dressed plank not less than 25cm thick firmly fixed etc								
		Abutment wall U/S		1	15.00		4.00	60.00		
		W/pond (sides)		2	1.00		0.65	1.30		
		Do		2		1.00	0.65	<u>1.30</u>		
			Sqm					62.60	389.00	24,351.40
6/9.1	600	Providing 12mm thick cement plastering including cleaning the surface, curing and carriage of all materials within 200 m complete as per Technical Specification.(No. plastering is to be done I abutments,wing walls,well piers and retaining walls)								
(iii)		Proportion 1:4								
		Abutment		1	15.00		3.00	45.00		
		Abutment		1	15.00		3.30	49.50		
		Abutment		1	15.00	0.80		12.00		
		Spillway (sides)		2		0.65	0.30	0.39		
		W/wall		2	3.00		3.00	18.00		

		W/wall		2	3.00	0.60		3.60		
		W/platform		2	1.00	1.00		2.00		
		W/platform		2	6.50	1.00		13.00		
		W/platform		2	1.00	0.50		1.00		
		W/pond		1	8.00	1.00		8.00		
		W/pond		2	8.00		0.45	7.20		
		W/pond (sides)		2		1.00	0.45	0.90		
		Deduct spillway		2	2.50		0.30	<u>-1.50</u>		
			Sqm					159.09	137.00	<u>21,795.33</u>
									Total	3,19,433.38
									Say	3,19,433.00
(Rupees Three Lakh Nineteen Thousand Four Hundred Thirty Three Only)										



ESTIMATE FOR THE CONSTRUCTION OF DRINKING WELL AT KHMUT PHOT NAMLANG(3rd Year)
(Rates as per Schedule of rates for building for the year 2013-2014

Name Of Beneficiaries: Community

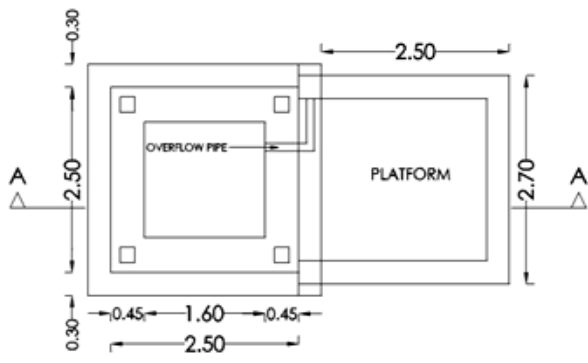
Geographical Coordinates: E 91° 15'6.41"

N 25° 21' 7.38"

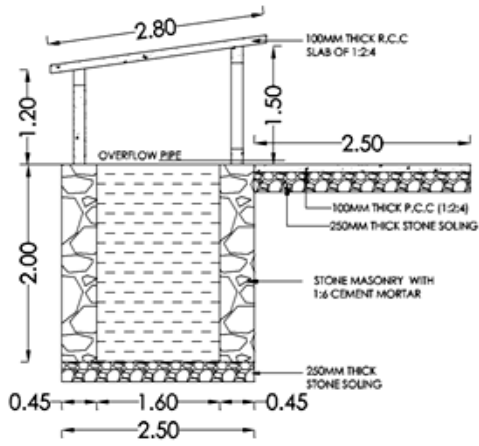
SI /No	Particulars	Units	Nos	Length	Breadth	Height	Quantity	Rate	Amount
1/1.1	Earthwork in excavation in foundation trenches,including dressing of sides and ramming of the bottom including including stacking of serviceable stones,disposal and removal of excavated earth within a lead of 50m lift of 1.50m complete as directed.								
(d)	Soft laminated rock or medium shale								
	Well			2.50	2.50	2.25	14.06		
	Platform			2.70	2.50	0.20	1.35		
	Footpath			100.00	1.50	0.30	45.00		
		Cum					60.41	286.00	17,277.98
2/3.5	Providing coursed random rubble stone masonry in foundation and plinth with unsized stone(mawthup)bonded with cement mortar of proportion 1:6(1-cement ,6-sand)including curing complete.(Average size is not less than 20 cm x 20 cm x 25 cm)								
	Wall		2	2.50	0.45	2.40	5.400		
	Wall		2	2.50	0.45	2.40	5.4		
	Footpath		2	100.00	0.15	0.30	9.000		
		Cum					19.800	3810.00	75,438.00
3/4.5	Providing 100 mm thick soling with approved quality of stones including carriage,ramming,consolidating and filling the interstices with stone aggregates complete								
	Well			2.50	2.50		6.25		
	Platform			2.70	2.50		6.75		
	Footpath			100.00	1.40		140.00		
		Sqm					153.00	220.00	33,660.00
4/2.3	Providing and laying cement concrete in proportion 1:2:4 corresponding to M15 (1 cement : 2 sand : 4 stone aggregates of 20mm and down graded) including curing etc complete excluding shuttering,in foundation and below plinth and in septic tank,inspection pits etc,complete								
	Platform		1	2.50	2.50	0.10	0.63		
	Slab		1	2.80	2.40	0.10	0.67		
	Column		2	0.20	0.20	1.20	0.10		
	Column		2	0.20	0.20	1.50	0.12		
	Beam		2	2.50	0.15	0.15	0.11		

	Beam		2	2.50	0.15	0.15	0.11		
	Wall		2	2.50	0.15	$1.2+1.5/2 = 1.35$	1.01		
	Wall		1	2.50	0.15	1.50	0.56		
	Wall		1	2.40	0.15	1.20	0.43		
	Footpath			100.00	1.40	0.15	<u>21.00</u>		
		Cum					24.75	7239.00	1,79,129.06
5/ 2. 9 (a)	Providing shuttering including centering for flat surface such as slabs,shelves,chajja and for vertical faces such as columns,walls,ends of beams etc with dressed plank not less than 25cm thick firmly fixed etc								
	Slab		1	2.50	2.50		6.25		
	Slab		2	2.50		0.10	0.50		
	Slab		2	2.50		0.10	0.50		
	Column		2	0.80		1.20	1.92		
	Column		2	0.80		1.50	2.40		
	Beam		2	2.50		0.45	2.25		
	Beam		2	2.50		0.45	2.25		
	Wall		2	2.50		$1.2+1.5/2 = 1.35$	6.75		
	Wall		1	2.50		1.50	3.75		
	Wall		1	2.50		1.20	<u>3.00</u>		
		Sqm					29.57	389.00	11,502.73
6/ 4. 1	Providing 12mm thick cement plaster i/c cleaning the surface and curing complete as directed								
	Slab		1	2.50	2.50		6.25		
	Slab		2	2.50		0.10	0.50		
	Slab		2	2.50		0.10	0.50		
	Column		2	0.80		1.20	1.92		
	Column		2	0.80		1.50	2.40		
	Beam		2	2.50		0.45	2.25		
	Beam		2	2.50		0.45	2.25		
	Wall		2	2.50		$1.2+1.5/2 = 1.35$	6.75		
	Wall		1	2.50		1.50	3.75		
	Wall		1	2.50		1.20	<u>3.00</u>		
		Sqm					29.57	213.00	6,298.41
7/ 4. 10	Providing cement concrete topping proportion is 1:1:2 corresponding to M25 (1 cement : 1 sand : 2 stone chip of 12mm and down graded) to the proper level and slope including curing and trowel finished with a floating coat of neat cement slurry @ 2.75kg of cement per sqm for floor complete as directed								
(a)	20mm thick topping								
	Footpath			100.00	1.40		140.00		
	Platform			2.70	2.50		<u>6.75</u>		
		Sqm					146.75	252.00	36981.00

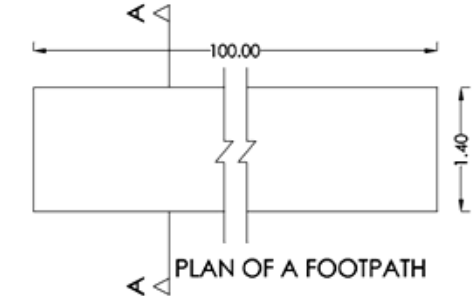
8/6.2	Providing tor steel reinforcement in RCC work including cutting,bending,cranking and tying in position with binding wire,20 gauge,as shown in drawings,complete upto floor two level	Nos	Length	Breadth	Height	Nos of reinforcement	Unit weight in kg/m	Quantity	Rate	Amount
	Column super structure (200x200) 4-12mm dia	2	1.50			4	0.89	10.68		
	Development length	2	0.60			4	0.89	4.27		
	6 mm Stirrup @ 150mm c/c		(0.84*10*2*0.22)+1					4.70		
	Column super structure (200x200) 4-12mm dia	2	1.20			4	0.89	8.54		
	Development length	2	0.60			4	0.89	4.27		
	6 mm Stirrup @ 150mm c/c		(0.84*8*2*0.22)+1					3.96		
	Beam (150x150) 2-12mm dia alt top bottom	2	2.50			4	0.89	17.80		
	Development length	2*2	0.72			4	0.89	10.25		
	6 mm Stirrup @ 150mm c/c		2*(0.86*17*.22)+1					7.43		
	Beam (150x150) 2-12mm dia alt top bottom	2	2.50			4	0.89	17.80		
	Development length	2*2	0.72			4	0.89	10.25		
	6 mm Stirrup @ 150mm c/c		2*(0.86*17*.22)+1					7.43		
	Wall (jali) 10mm bothways @ 150mm c/c	2	2.50			9	0.62	27.90		
	Wall (jali) 10mm bothways @ 150mm c/c	2	1.35			17	0.62	28.46		
	Wall (jali) 10mm bothways @ 150mm c/c	1	2.50			17	0.62	26.35		
	Wall (jali) 10mm bothways @ 150mm c/c	1	1.50			16	0.62	14.88		
	Wall (jali) 10mm bothways @ 150mm c/c	1	2.50			17	0.62	26.35		
	Wall (jali) 10mm bothways @ 150mm c/c	1	1.20			16	0.62	<u>11.90</u>		
						Total in Kg		243.23		
						Total in Qntl		2.43		
	Add 3% wastage							<u>0.07</u>		
								2.51	9,938.00	<u>24,897.77</u>
						Total				3,85,184.94
									Say	3,85,185.00
	(Rupees Three Lakh Eighty Five Thousand One Hundred Eighty Five Only)									



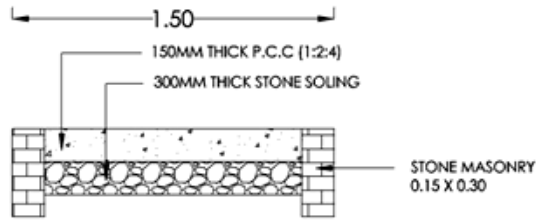
PLAN



SECTION A-A



PLAN OF A FOOTPATH



SECTION A-A OF A FOOTPATH

NOTE: ALL DIMENSIONS ARE IN METERS EXCEPT OTHERWISE MENTIONED.

PROJECT :	CONSTRUCTION OF A DRINKING WELL AT KHMUT PHOT NAMLANG	
DWG TITLE :	PLAN & CROSS SECTION OF A DRINKING WELL & FOOTPATH.	
DRWN BY :		COUNTERSIGNED BY :

**ESTIMATE FOR THE CONSTRUCTION OF CHECK DAM CUM FARM POND OF BINERENDA THONGNI AT NEW PHANWER
(PHUD DIRANG)(3rd Year)**

(Rates as per Schedule of rates for roads and bridge works for the year 2012-2013)

Name Of Beneficiaries: Binerenda Thongni

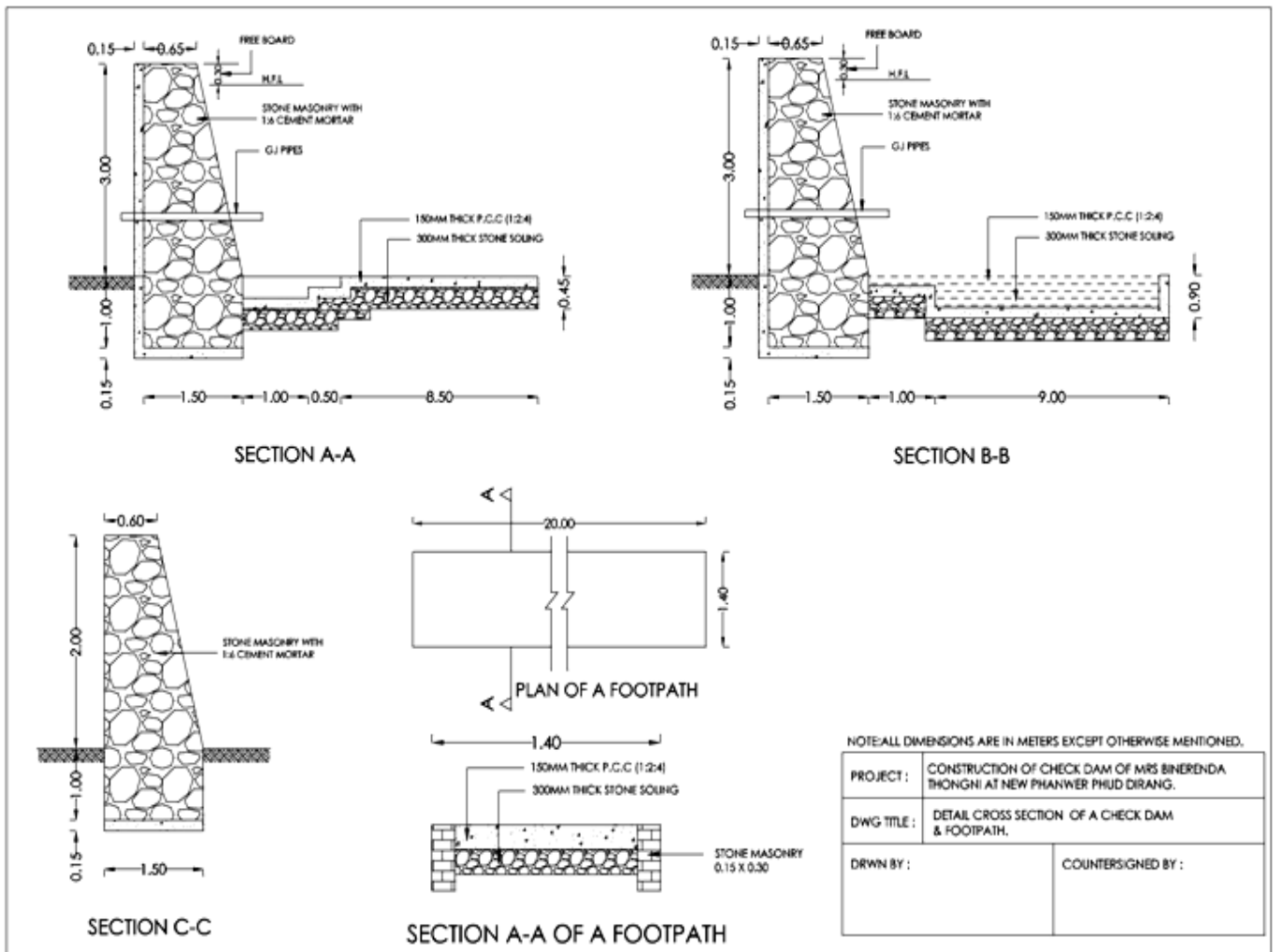
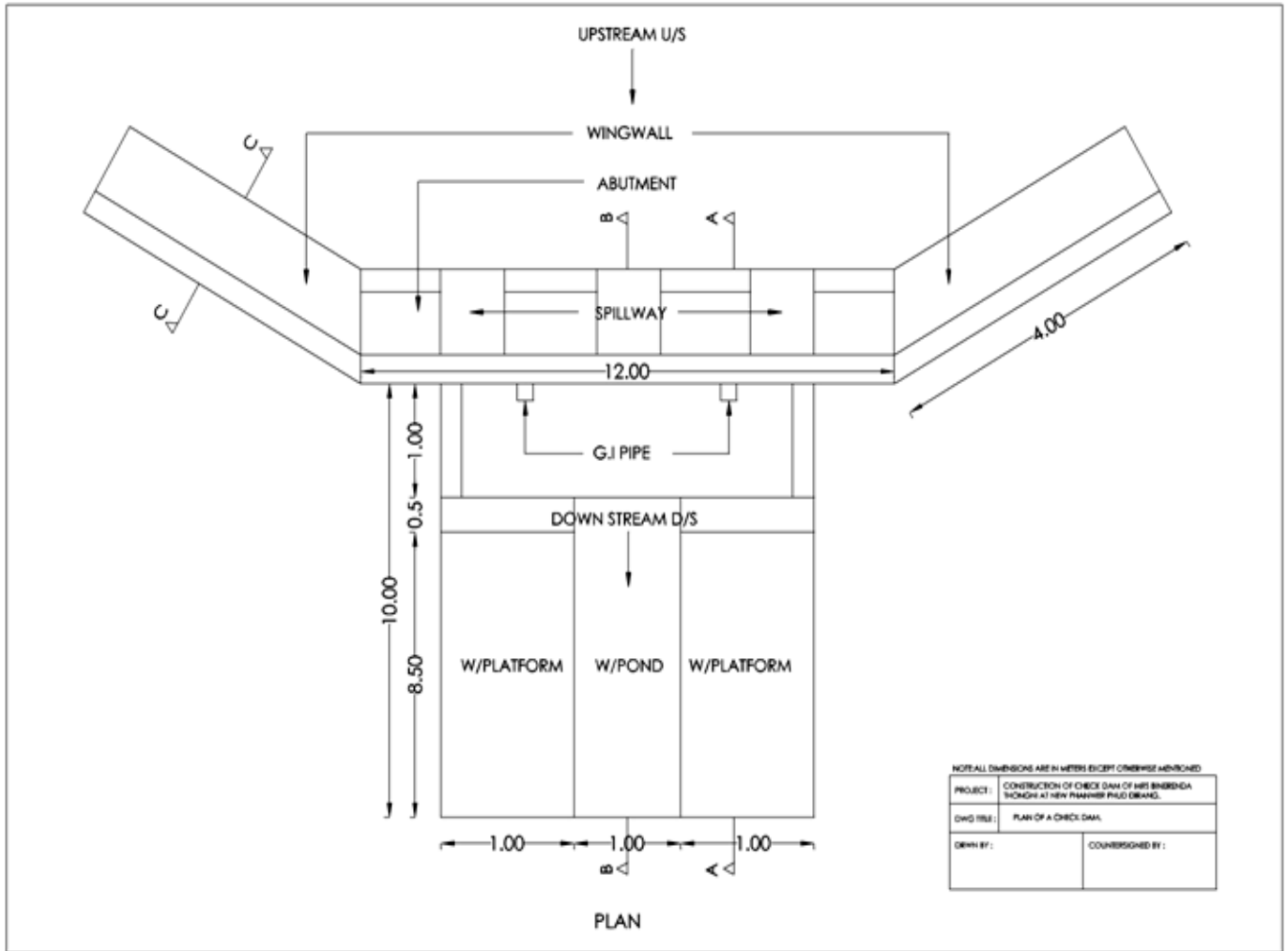
Geographical Coordinates: E 91° 13' 26.5"

N 25° 16' 52.3"

SI/No	MORD Specification	Particulars	Units	Nos	Length	Breadth	Height	Quantity	Rate	Amount
1/6.1	300	Earthwork in excavation forstructure by manual means as per drawing and technical specification Clause 305.1 including setting out,construction of shoring and bracing,removal of stumps and other deleterious material and disposal upto a lead of 50m including dressing the sides and bottom and back filling in trenches with xcavated suitable material								
	A	Ordinary soil								
		Upto 3.0m depth without dewatering								
		Abutment		1	12.00	1.65	1.15	22.77		
		W/wall		2	4.00	1.50	1.15	13.80		
		W/platform		2	1.00	1.00	0.75	1.50		
		W/platform		2	1.00	0.50	0.60	0.60		
		W/platform		2	8.50	1.00	0.45	7.65		
		W/pond		1	10.00	1.00	0.90	9.00		
		Footpath			20.00	1.40	0.20	<u>5.60</u>		
			Cum					60.92	214.00	13,036.88
2/7.8	1200	Back filling behind abutment,wing wall and return wall complete as per drawing and technical specification Clause 1204.3.8								
	(a)	Granular material								
		W/platform		2	10.00	1.00	0.30	6.00		
		W/pond		1	10.00	1.00	0.30	3.00		
		Footpath			20.00	1.40	0.10	<u>2.80</u>		
			Cum					11.80	756.00	8,920.80
3/7.2	800& 1200	Plain cement concrete in sub-structure complete as per drawings and technical specification Clause 802,804,806,807,1202, 1204								
	A	PCC Grade M15(uotp 5.0m ht)								
	(i)	Nominal mix 1:2.5:5								
		Abutment bed		1	12.00	1.65	0.15	2.97		
		Abutment wall U/S		1	12.00	0.15	4.00	7.20		
		W/wall bed		2	4.00	1.50	0.15	1.80		
		W/platform		2	1.00	1.00	0.15	0.30		
		W/platform		2	8.50	1.00	0.15	2.55		
		W/platform		2	1.00	0.50	0.15	0.15		
		W/pond		1	10.00	1.00	0.15	1.50		
		W/pond (sides)		2	1.00	0.15	0.50	0.15		
		Deduct spillway		3	2.50	0.15	0.30	-0.34		

		Footpath			20.00	1.40	0.15	<u>4.20</u>		
			Cum					20.48	4910.00	1,00,569.08
4/7.1	700& 1200	Stone masonry work in cement mortar for sub-structure as per drawing and technical specification clauses 702,704,1202,1204.								
©		Random Rubble Masonry								
(iii)		In cement mortar 1:6								
		Abutment		1	12.00	1.50	1.00	18.00		
		Abutment		1	12.00	1.5+0.65/2=1.08	3.00	38.88		
		W/wall		2	4.00	1.50	1.00	12.00		
		W/wall		2	4.00	1.5+0.6/2=1.05	2.00	16.80		
		Deduct spillway		3	2.50	1.50	0.30	-3.38		
		Footpath		2	20.00	0.15	0.30	<u>1.80</u>		
			Cum					84.11	2587.00	2,17,579.64
5/2.9 (a)		Providing shuttering including centering for flat surface such as slabs,shelves,chajja and for vertical faces such as columns,walls,ends of beams etc with dressed plank not less than 25cm thick firmly fixed etc								
		Abutment wall U/S		1	12.00		4.00	48.00		
		W/pond (sides)		2	2.00		0.65	2.60		
		Do		2		1.00	0.65	<u>1.30</u>		
			Sqm					51.90	389.00	20,189.10
6/9.1	600	Providing 12mm thick cement plastering including cleaning the surface, curing and carriage of all materials within 200 m complete as per Technical Specification.(No. plastering is to be done I abutments,wing walls,well piers and retaining walls)								
(iii)		Proportion 1:4								
		Abutment		1	12.00		3.00	36.00		
		Abutment		1	12.00		3.30	39.60		
		Abutment		1	12.00	0.80		9.60		
		Spillway (sides)		3*2		0.65	0.30	1.17		
		W/wall		2	4.00		2.00	16.00		
		W/wall		2	4.00	0.60		4.80		
		W/platform		2	1.00	1.00		2.00		
		W/platform		2	8.50	1.00		17.00		
		W/platform		2	1.00	0.50		1.00		
		W/pond		1	10.00	1.00		10.00		
		W/pond		2	10.00		0.45	9.00		
		W/pond (sides)		2		1.00	0.45	0.90		
		Deduct spillway		3	2.50		0.30	2.25		
		Footpath			20.00	1.00		<u>20.00</u>		
			Sqm					169.32	137.00	23,196.84

7/8.10	1200	Providing and fixing in position pipe railing consisting of IS joist post designation IS MB 100 (100 x 75) at 2.5 m interval and three rows of 50mm dia steel pipes (light) including fixing in position on bridge deck complete as per drawing and technical specification Clause 1208.2								
			Rm		3			3.00	4657.00	<u>13971.00</u>
								Total		3,97,463.33
									Say	3,97,463.00
(Rupees Three Lakh Ninety Seven Thousand Four Hundred Sixty Three Only)										



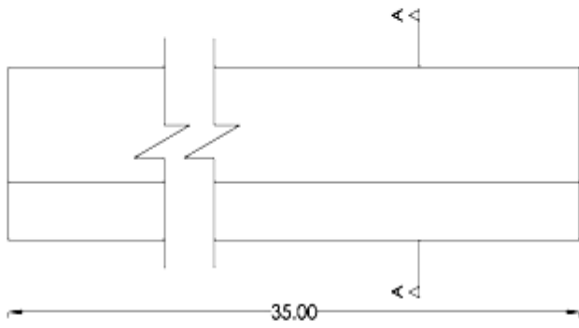
Detail estimate for the construction of Protection wall at Phud Umiap (3rd Year)
(Rates as per Schedule of rates for roads and bridge works for the year 2012-2013)

Name Of Beneficiaries: Community

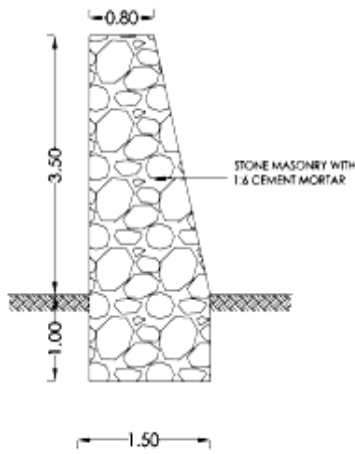
Geographical Coordinates: E 91° 13' 32.0"

N 25° 16' 22.9"

Sl/No	MORD Specification	Particulars	Units	Nos	Length	Breadth	Height	Quantity	Rate	Amount
1/4.1(a)	300	Earthwork in excavation for structures as per drawing and Technical Specification Clause 305.1 including setting out construction of shoring and bracing, removal of stumps and other deleterious materials and disposal upto a lead of 50 m dressing of side and bottom and back filling in trenches with excavated suitable material.								
		Ordinary Soil								
(i)		Upto 3 m depth								
		Protection wall	Cum		35.00	1.50	1.00	52.50	118.00	6195
2/4.4	700& 1200	Stone masonry work in foundation complete as per drawing and Technical Specification Clauses 702,704,1202,1203.								
(B)		Random Rubble Masonry								
(iiI)		In cement mortar 1:6								
		Protection wall			35.00	1.50	1.00	52.50		
		Do			35.00	1.5+0.8/2=1.15	3.50	140.88		
			Cum					193.38	2029.00	3,92,357.88
								Total		3,98,552.88
								Say		3,98,553.00
		(Rupees Three Lakh Ninety Eight Thousand Five Hundred Fifty Three Only)								



PLAN



SECTION A-A

NOTE: ALL DIMENSIONS ARE IN METERS EXCEPT OTHERWISE MENTIONED.

PROJECT :	CONSTRUCTION OF PROTECTION WALL AT WAHKAJI .	
DWG TITLE :	PLAN & CROSS SECTION OF A PROTECTION WALL.	
DRWN BY :		COUNTERSIGNED BY :

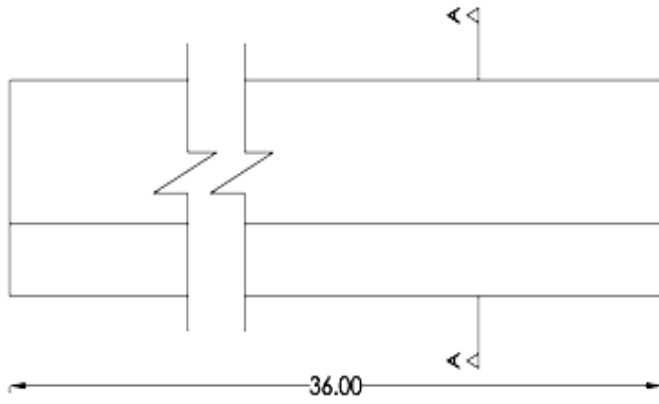
Detail estimate for the construction of Protection wall at Wahkaji (3rd Year)
(Rates as per Schedule of rates for roads and bridge works for the year 2012-2013)

Name Of Beneficiaries: Community

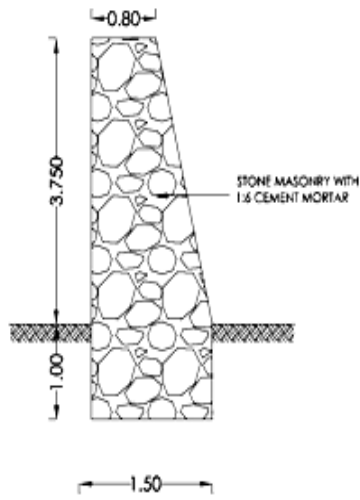
Geographical Coordinates: E 91° 15'29.54"

N 25° 22'3.2"

Sl/No	MORD Specification	Particulars	Units	Nos	Length	Breadth	Height	Quantity	Rate	Amount
1/4.1(a)	300	Earthwork in excavation for structures as per drawing and Technical Specification Clause 305.1 including setting out construction of shoring and bracing, removal of stumps and other deleterious materials and disposal upto a lead of 50 m dressing of side and bottom and back filling in trenches with excavated suitable material.								
		Ordinary Soil								
(i)		Upto 3 m depth								
		Protection wall	Cum		36.00	1.50	1.00	54.00	118.00	6372
2/4.4	700& 1200	Stone masonry work in foundation complete as per drawing and Technical Specification Clauses 702,704,1202,1203.								
(B)(ii)		Random Rubble Masonry								
		In cement mortar 1:6								
		Protection wall			36.00	1.50	1.00	54.00		
		Do			36.00	1.5+0.8/2=1.15	3.75	<u>155.25</u>		
			Cum					209.25	2029.00	<u>4,24,568.25</u>
								Total		4,30,940.25
								Say		4,30,940.00
(Rupees Four Lakh Thirty Thousand Nine Hundred Forty Only)										



PLAN



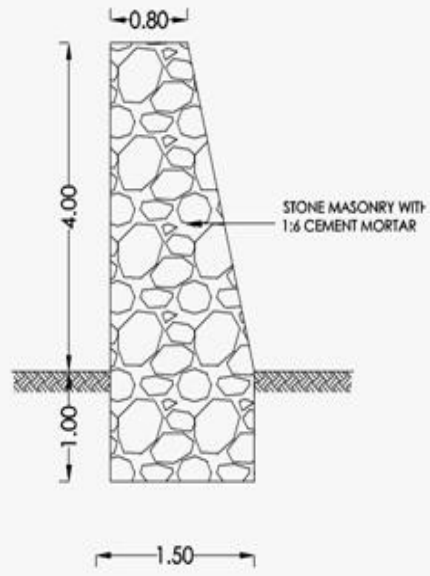
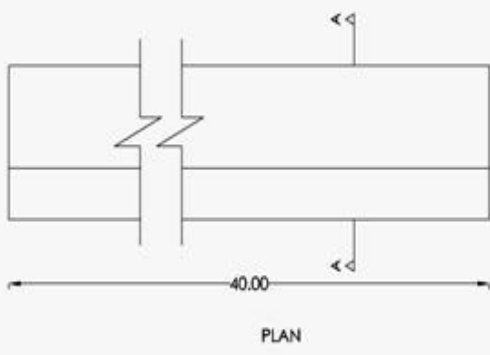
SECTION A-A

NOTE: ALL DIMENSIONS ARE IN METERS EXCEPT OTHERWISE MENTIONED.

PROJECT :	CONSTRUCTION OF PROTECTION WALL AT WAHKAJI .
DWG TITLE :	PLAN & CROSS SECTION OF A PROTECTION WALL.
DRWN BY :	COUNTERSIGNED BY :

Detail estimate for the construction of Protection wall at Nongbah Jinrin.(3rd Year)
(Rates as per Schedule of rates for roads and bridge works for the year 2012-2013)
Name Of Beneficiaries: Community Geographical Coordinates: E 91° 12' 35.6" N 25° 19' 30.3"

SI/No	MORD Specification	Particulars	Units	No s	Length	Breadth	Height	Quantity	Rate	Amount
1/4.1(a)	300	Earthwork in excavation for structures as per drawing and Technical Specification Clause 305.1 including setting out construction of shoring and bracing,removal of stumps and other deleterious materials and disposal upto a lead of 50 m dressing of side and bottom and back filling in trenches with excavated suitable material.								
		Ordinary Soil								
(i)		Upto 3 m depth								
		Protection wall	Cum		43.00	1.50	1.00	64.50	118.00	7611
2/4.4	700& 1200	Stone masonry work in foundation complete as per drawing and Technical Specification Clauses 702,704,1202,1203.								
(B)		Random Rubble Masonry								
(iiI)		In cement mortar 1:6								
		Protection wall			43.00	1.50	1.00	64.50		
		Do			43.00	1.5+0.8/2=1.15	3.00	148.35		
			Cum					212.85	2029.00	4,31,872.65
								Total		4,39,483.65
								Say		4,39,484.00
(Rupees Four Lakh Thirty Nine Thousand Four Hundred Eighty Four Only)										



SECTION A-A

NOTE: ALL DIMENSIONS ARE IN METERS EXCEPT OTHERWISE MENTIONED.

PROJECT :	CONSTRUCTION OF PROTECTION WALL AT NONGBAH JINRIN .
DWG TITLE :	PLAN & CROSS SECTION OF A PROTECTION WALL
DRWN BY :	COUNTERSIGNED BY :

**ESTIMATE FOR THE CONSTRUCTION OF CHECK DAM CUM FARM POND OF OF SHRI PHRANGSTARWELL THONGNI AT
NEW PHANWER (PHUDSAD NONGTRAI)(3rd Year)**

(Rates as per Schedule of rates for roads and bridge works for the year 2012-2013)

Name Of Beneficiaries: Shri Phrangstarwell Thongni

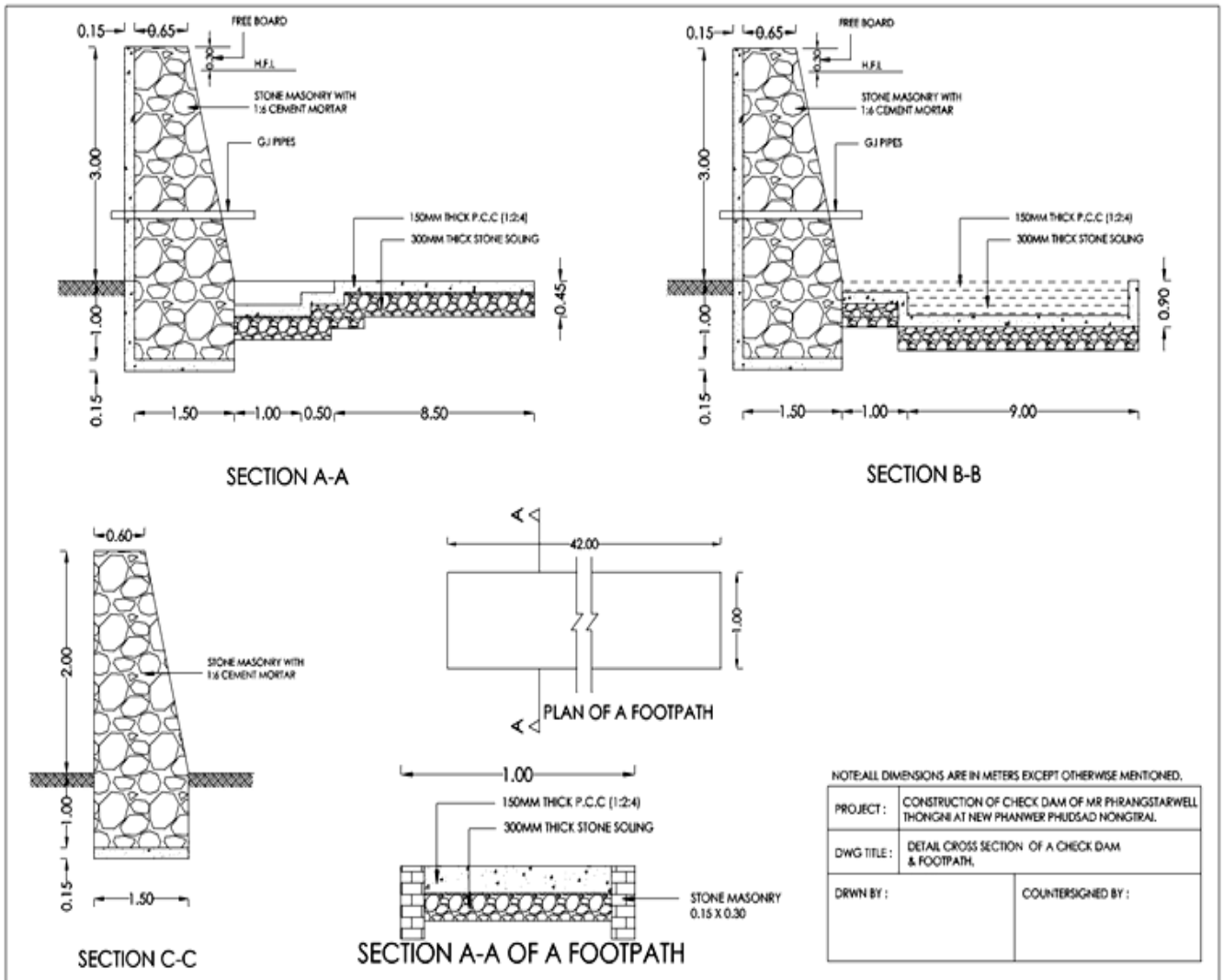
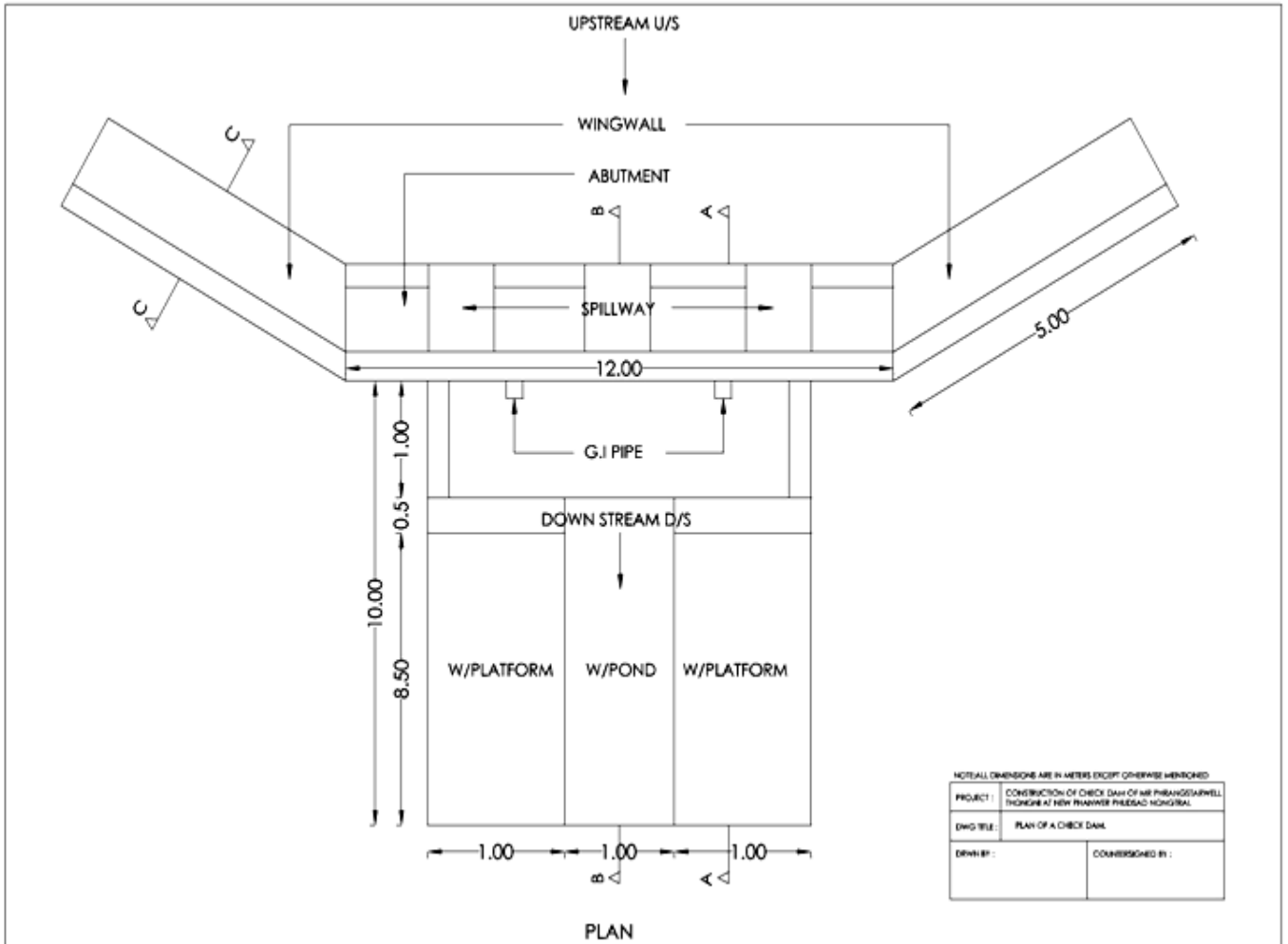
Geographical Coordinates: E 91° 13' 27.5"

N 25° 16' 43.6"

Sl/ No	MORD Specification	Particulars	Units	Nos	Length	Breadth	Height	Quantity	Rate	Amount
1/6.1	300	Earthwork in excavation for structure by manual means as per drawing and technical specification Clause 305.1 including setting out, construction of shoring and bracing, removal of stumps and other deleterious material and disposal upto a lead of 50m including dressing the sides and bottom and back filling in trenches with excavated suitable material								
	A	Ordinary soil								
		Upto 3.0m depth without dewatering								
		Abutment		1	12.00	1.65	1.15	22.77		
		W/wall		2	5.00	1.50	1.15	17.25		
		W/platform		2	1.00	1.00	0.75	1.50		
		W/platform		2	1.00	0.50	0.60	0.60		
		W/platform		2	8.50	1.00	0.45	7.65		
		W/pond		1	10.00	1.00	0.90	9.00		
		Footpath			42.00	1.00	0.20	8.40		
			Cum					67.17	214.00	14,374.38
2/7.8	1200	Back filling behind abutment, wing wall and return wall complete as per drawing and technical specification Clause 1204.3.8								
	(a)	Granular material								
		W/platform		2	10.00	1.00	0.30	6.00		
		W/pond		1	10.00	1.00	0.30	3.00		
		Footpath			42.00	1.00	0.10	4.20		
			Cum					13.20	756.00	9,979.20
3/7.2	800& 1200	Plain cement concrete in sub-structure complete as per drawings and technical specification Clause 802,804,806,807,1202, 1204								
	A	PCC Grade M15(utop 5.0m ht)								
	(i)	Nominal mix 1:2.5:5								
		Abutment bed		1	12.00	1.65	0.15	2.97		
		Abutment wall U/S		1	12.00	0.15	3.15	5.67		
		W/wall bed		2	5.00	1.50	0.15	2.25		
		W/platform		2	1.00	1.00	0.15	0.30		
		W/platform		2	8.50	1.00	0.15	2.55		
		W/platform		2	1.00	0.50	0.15	0.15		
		W/pond		1	10.00	1.00	0.15	1.50		
		W/pond (sides)		2	1.00	0.15	0.50	0.15		
		Deduct spillway		3	2.50	0.15	0.30	-0.34		
		Footpath			42.00	1.00	0.15	6.30		

			Cum					21.50	4910.00	1,05,577.28
4/7.1	700& 1200	Stone masonry work in cement mortar for sub-structure as per drawing and technical specification clauses 702,704,1202,1204.								
©		Random Rubble Masonry								
(iii)		In cement mortar 1:6								
		Abutment		1	12.00	1.50	1.00	18.00		
		Abutment		1	12.00	$1.5+0.65/2=1.08$	3.00	38.88		
		W/wall		2	5.00	1.50	1.00	15.00		
		W/wall		2	5.00	$1.5+0.6/2=1.05$	2.00	21.00		
		Deduct spillway		3	2.50	1.50	0.30	-3.38		
		Footpath		2	42.00	0.15	0.30	<u>3.78</u>		
			Cum					93.29	2587.00	2,41,328.30
5/2.9(a)		Providing shuttering including centering for flat surface such as slabs,shelves,chajja and for vertical faces such as columns,walls,ends of beams etc with dressed plank not less than 25cm thick firmly fixed etc								
		Abutment wall U/S		1	12.00		3.00	36.00		
		W/pond (sides)		2	8.50		0.65	11.05		
		Do		2		1.00	0.65	<u>1.30</u>		
			Sqm					48.35	389.00	18,808.15
6/9.1	600	Providing 12mm thick cement plastering including cleaning the surface, curing and carriage of all materials within 200 m complete as per Technical Specification.(No. plastering is to be done I abutments,wing walls,well piers and retaining walls)								
(iii)		Proportion 1:4								
		Abutment		1	12.00		3.00	36.00		
		Abutment		1	12.00		3.30	39.60		
		Abutment		1	12.00	0.80		9.60		
		Spillway (sides)		2*3		0.65	0.30	1.17		
		W/wall		2	5.00		2.00	20.00		
		W/wall		2	5.00	0.60		6.00		
		W/platform		2	1.00	1.00		2.00		
		W/platform		2	8.50	1.50		25.50		
		W/platform		2	1.00	0.50		1.00		
		W/pond		1	10.00	1.00		10.00		
		W/pond		2	10.00		0.45	9.00		
		W/pond (sides)		2		1.00	0.45	0.90		
		Deduct spillway		3	2.50		0.30	2.25		
		Footpath			42.00	1.00		<u>42.00</u>		
			Sqm					205.02	137.00	28,087.74

7/ 8. 10	1200	Providing and fixing in position pipe railing consisting of IS joist post designation IS MB 100 (100 x 75) at 2.5 m interval and three rows of 50mm dia steel pipes (light) including fixing in position on bridge deck complete as per drawing and technical specification Clause 1208.2								
			Rm		12.00			12.00	4657.00	<u>55884.00</u>
								Total		4,74,039.04
									Say	4,74,039.00
(Rupees Four Lakh Seventy Four Thousand Thirty Nine Only)										



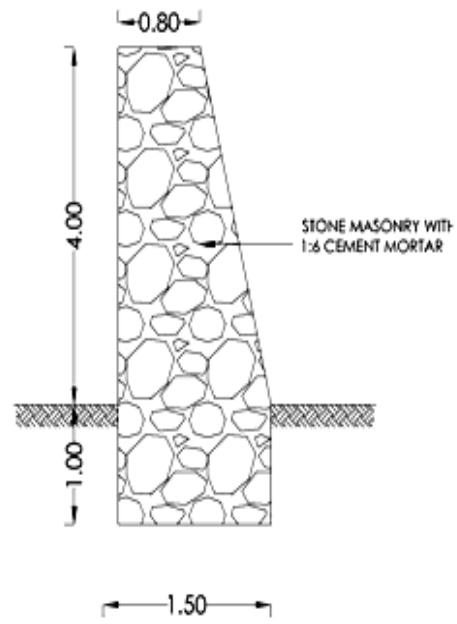
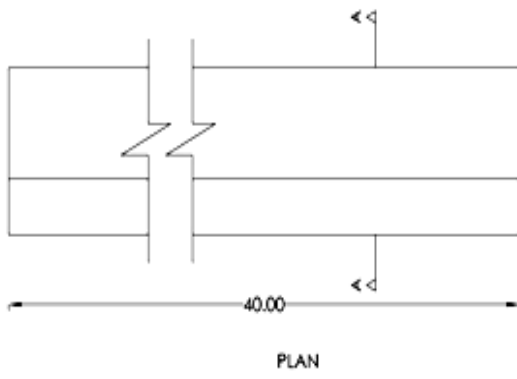
**Detail estimate for the construction of Protection wall at Nongbah Jynrin . (3rd Year)
(Rates as per Schedule of rates for roads and bridge works for the year 2012-2013)**

Name Of Beneficiaries: Community

Geographical Coordinates: E 91° 12'1.42"

N 25° 19' 16.5"

SI/No	MORD Specificati on	Particulars	Units	Nos	Length	Breadth	Height	Quantity	Rate	Amount
1/4.1(a)	300	Earthwork in excavation for structures as per drawing and Technical Specification Clause 305.1 including setting out construction of shoring and bracing,removal of stumps and other deleterious materials and disposal upto a lead of 50 m dressing of side and bottom and back filling in trenches with excavated suitable material.								
		Ordinary Soil								
(i)		Upto 3 m depth								
		Protection wall	Cum		40.00	1.50	1.00	60.00	118.00	7080
2/4.4	700& 1200	Stone masonry work in foundation complete as per drawing and Technical Specification Clauses 702,704,1202,1203.								
(B) (iiI)		Random Rubble Masonry								
		In cement mortar 1:6								
		Protection wall			40.00	1.50	1.00	60.00		
		Do			40.00	$1.5+0.8/2=1.15$	4.00	<u>184.00</u>		
			Cum					244.00	2029.00	<u>4,95,076.00</u>
								Total		5,02,156.00
									Say	5,02,156.00
		(Rupees Five Lakh Two Thousand One Hundred Fifty Six Only)								



SECTION A-A

NOTE: ALL DIMENSIONS ARE IN METERS EXCEPT OTHERWISE MENTIONED.

PROJECT :	CONSTRUCTION OF PROTECTION WALL AT NONGBAH JINRIN .	
DWG TITLE :	PLAN & CROSS SECTION OF A PROTECTION WALL	
DRWN BY :		COUNTERSIGNED BY :

ESTIMATE FOR CONSTRUCTION OF CHECK DAM AT NEWPHANWER URSNIANG(3rd year)

Rate Based as per Schedule of Rates for Road and Bridges (Other than National Highway Works) for the Year 2012-2013.

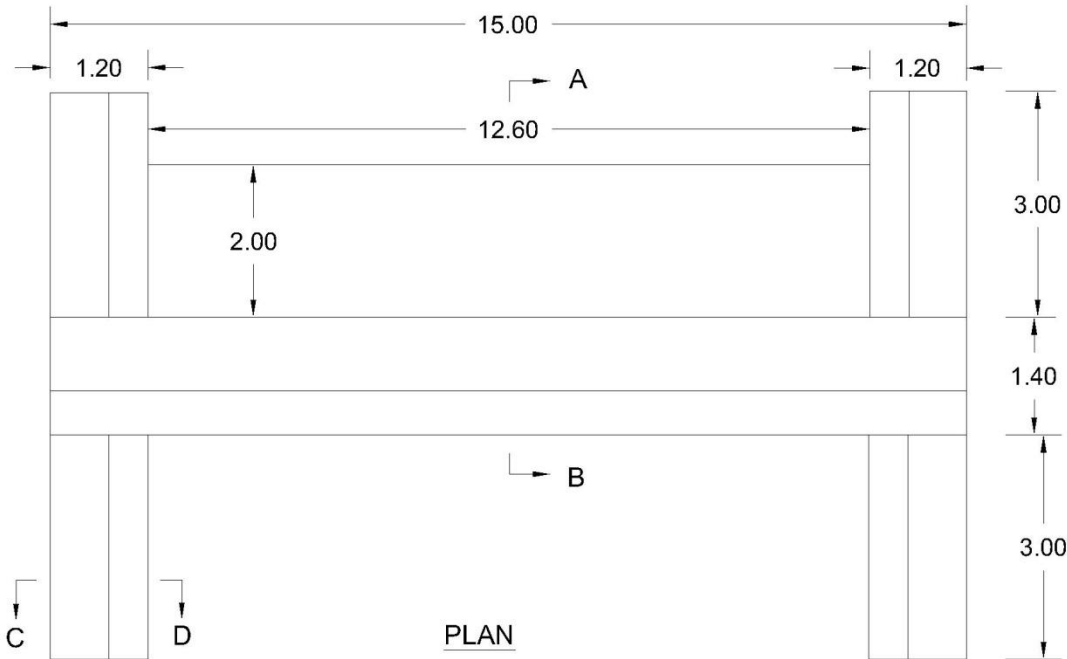
Name Of Beneficiaries: Shri Hanfree Wahlang Geographical Coordinates: E 91° 14' 00.1" N 25° 17' 57.4"

Sl no	PARTICULARS	NO	DIMENSION			QTY	UNIT	RATE	AMOUNT (RS)
			L	B	H				
1/4.1 B(i).	Earthwork in excavation for structures as per drawings and Technical Clauses 305.1 including setting out construction of shoring and bracing, removal of stumps and other deleterious material and disposal upto a lead of 50m dressing of side and bottom and back filling in trenches with excavated suitable materials. Dam Apron Channel on U/S. W/Walls U/S and D/S	1	15.00	1.40	1.20	25.20	Cu.m		
		1	12.60	2.00	0.25	6.30	Cu.m		
		1	6.00	0.50	0.50	1.50	Cu.m		
		4	3.00	1.20	1.00	14.40	Cu.m		
		TOTAL					47.40	Cu.m	157
2/4.3	Providing concrete for plain/reinforced concrete in open foundations complete as per drawing and technical specifications clauses 802,803,1202,1203. Dam W/WALLS	1	15.00	1.40	0.10	2.10	Cu.m		
		4	3.00	1.20	0.10	1.44	Cu.m		
		TOTAL					3.54	Cu.m	4353
3/4.4	Providing stone masonry work in cement mortar in foundation complete as per drawings and Technical Specification Clauses 702,703,1202,1203. W/WALLS	4	3.00	1.20	0.90	12.96	Cu.m		
		4	3.00	0.85	2.80	28.56	Cu.m		
		TOTAL					41.52	Cu.m	2093
4/7.3	Providing reinforced cement concrete in substructure complete as per drawings and Technical Specification Clauses 802,804,805,806,1202,1204. Dam Apron Channel	1	15.00	1.40	1.20	25.20	Cu.m		
		1	15.00	0.95	2.50	35.63	Cu.m		
		1	12.60	2.00	0.10	2.52	Cu.m		
		1	6.00	0.50	0.10	0.30	Cu.m		
		2	6.00	0.30	0.10	0.36	Cu.m		
		TOTAL					64.01	Cu.m	5818
5/5.12	Providing stone pitching with one man size boulders not less than 25cm x 25cm x 30 cm including filling the interstices with spoils and carriages of stone within a distance of 200m completed as directed Apron Channel	1	12.60	2.00	0.25	6.30	Cu.m		
		1	6.00	0.50	0.25	0.75	Cu.m		
		TOTAL					7.05	Cu.m	704
6/9.1 ii	Providing 12mm thick cement plastering including cleaing the surface, curing carriage of sand within 200m complete as per Technical Specification. Dam	1	15.00	2.50		37.50	SQ.M		
		1	15.00	0.50		7.50	SQ.M		
	Apron Channel W/WALLS	1	12.60	2.00		25.20	SQ.M		
		1	6.00	0.30		1.80	SQ.M		
		2	6.00	0.30		3.60	SQ.M		
		4	3.00	2.80		33.60	SQ.M		
		4	3.00	0.50		6.00	SQ.M		
		TOTAL					154.05	SQ.M	157
GRAND TOTAL								511282.92	

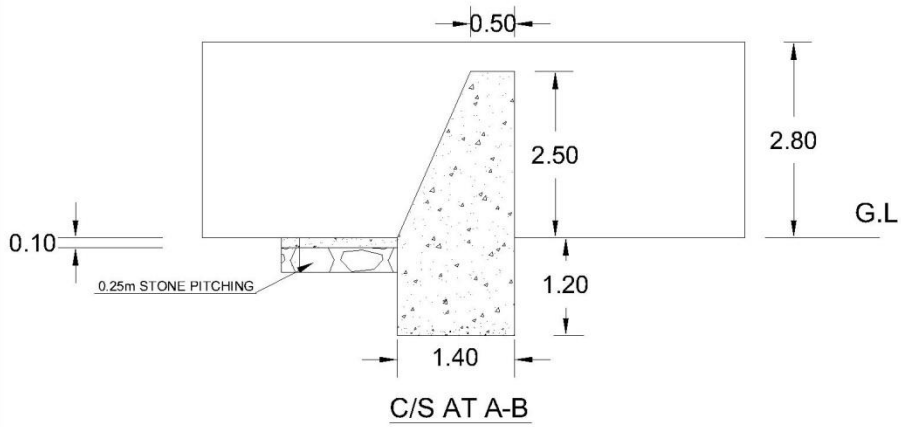
Say: Rs 5,11,290.00

(Rupees Five Lakh Eleven Thousand Two Hundred Ninety) only.

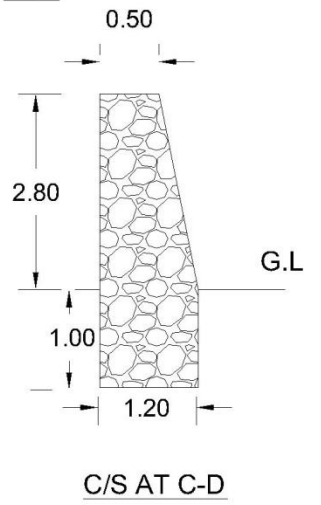
DRAWING FOR PROPOSED CHECK DAM.



PLAN



C/S AT A-B



C/S AT C-D

NOTES :- ALL DIMENSIONS ARE IN METRES UNLESS SPECIFIED.
SCALE :- 1:50.

COUNTERSIGNED :- PREPARED BY :-

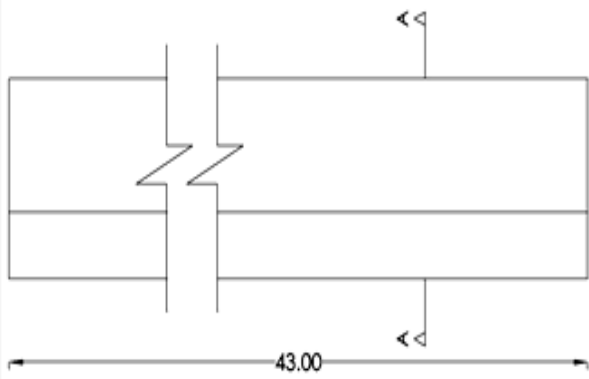
Detail estimate for the construction of Protection wall at Wahkaji (3rd Year)
(Rates as per Schedule of rates for roads and bridge works for the year 2012-2013)

Name Of Beneficiaries: Community

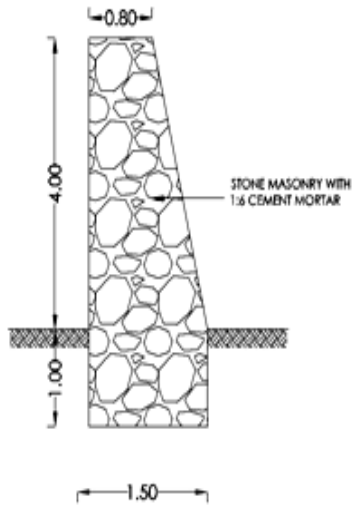
Geographical Coordinates: E 91° 15' 6.40"

N 25° 21' 7.38"

SI/No	MORD Specification	Particulars	Units	Nos	Length	Breadth	Height	Quantity	Rate	Amount
1/4.1(a)	300	Earthwork in excavation for structures as per drawing and Technical Specification Clause 305.1 including setting out construction of shoring and bracing, removal of stumps and other deleterious materials and disposal upto a lead of 50 m dressing of side and bottom and back filling in trenches with excavated suitable material.								
		Ordinary Soil								
(i)		Upto 3 m depth								
		Protection wall	Cum		43.00	1.50	1.00	64.50	118.00	7611
2/4.4	700& 1200	Stone masonry work in foundation complete as per drawing and Technical Specification Clauses 702,704,1202,1203.								
(B) (ii)		Random Rubble Masonry								
		In cement mortar 1:6								
		Protection wall			43.00	1.50	1.00	64.50		
		Do			43.00	1.5+0.8/2=1.15	4.00	<u>197.80</u>		
			Cum					262.30	2029.00	<u>5,32,206.70</u>
								Total		5,39,817.70
									Say	5,39,818.00
		(Rupees Five Lakh Thirty Nine Thousand Eight Hundred Eighteen Only)								



PLAN



SECTION A-A

NOTE: ALL DIMENSIONS ARE IN METERS EXCEPT OTHERWISE MENTIONED.

PROJECT :	CONSTRUCTION OF PROTECTION WALL AT WAHKAJI .
DWG TITLE :	PLAN & CROSS SECTION OF A PROTECTION WALL.
DRWN BY :	COUNTERSIGNED BY :

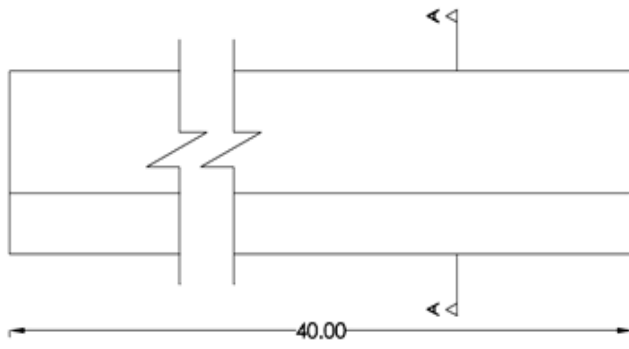
**Detail estimate for the construction of Protection wall at Nongmalang (3rd Year)
(Rates as per Schedule of rates for roads and bridge works for the year 2012-2013)**

Name Of Beneficiaries: Community

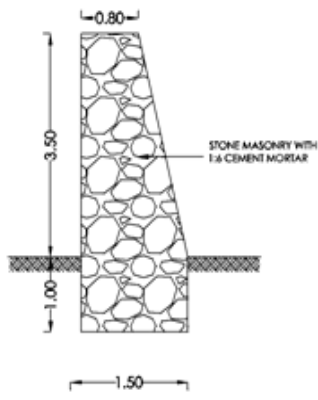
Geographical Coordinates: E 91° 09' 51.66"

N 25° 19' 1.69"

Sl/No	MORD Specification	Particulars	Units	No s	Length	Breadth	Height	Quantity	Rate	Amount
1/4.1(a)	300	Earthwork in excavation for structures as per drawing and Technical Specification Clause 305.1 including setting out construction of shoring and bracing, removal of stumps and other deleterious materials and disposal upto a lead of 50 m dressing of side and bottom and back filling in trenches with excavated suitable material.								
		Ordinary Soil								
(i)		Upto 3 m depth								
		Protection wall	Cum		40.00	1.50	1.00	60.00	118.00	7080
2/4.4	700& 1200	Stone masonry work in foundation complete as per drawing and Technical Specification Clauses 702,704,1202,1203								
(B) (ii)		Random Rubble Masonry								
		In cement mortar 1:6								
		Protection wall			40.00	1.50	1.00	60.00		
		Do			45.00	1.5+0.8/2=1.15	3.50	<u>207.00</u>		
			Cum					267.00	2029.00	<u>5,41,743.00</u>
								Total		5,48,823.00
								Say		5,48,823.00
		(Rupees Five Lakh Forty Eight Thousand Eight Hundred Twenty Three Only)								



PLAN



SECTION A-A

NOTE: ALL DIMENSIONS ARE IN METERS EXCEPT OTHERWISE MENTIONED.

PROJECT :	CONSTRUCTION OF PROTECTION WALL AT WAHKAJI .
DWG TITLE :	PLAN & CROSS SECTION OF A PROTECTION WALL
DRWN BY :	COUNTERSIGNED BY :

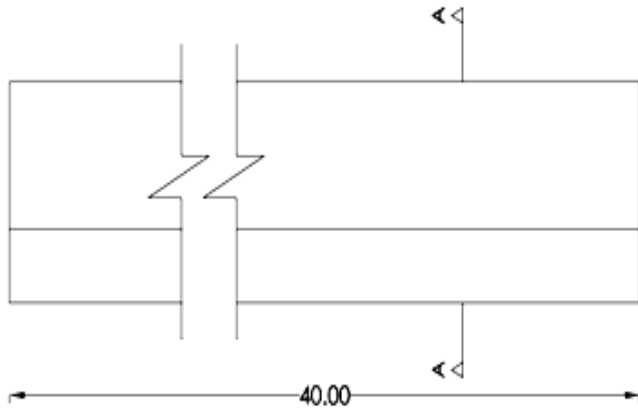
Detail estimate for the construction of Protection wall at Wahkaji (3rd Year)
(Rates as per Schedule of rates for roads and bridge works for the year 2012-2013)

Name Of Beneficiaries: Community

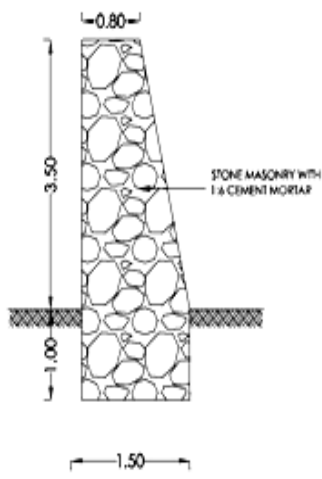
Geographical Coordinates: E 91° 15' 28.2"

N 25° 22' 12.8"

SI/No	MORD Specification	Particulars	Units	Nos	Length	Breadth	Height	Quantity	Rate	Amount
1/4.1(a)	300	Earthwork in excavation for structures as per drawing and Technical Specification Clause 305.1 including setting out construction of shoring and bracing, removal of stumps and other deleterious materials and disposal upto a lead of 50 m dressing of side and bottom and back filling in trenches with excavated suitable material.								
		Ordinary Soil								
(i)		Upto 3 m depth								
		Protection wall	Cum		40.00	1.50	1.00	60.00	118.00	7080
2/4.4	700& 1200	Stone masonry work in foundation complete as per drawing and Technical Specification Clauses 702,704,1202,1203.								
(B)(ii)		Random Rubble Masonry								
		In cement mortar 1:6								
		Protection wall			40.00	1.50	1.00	60.00		
		Do			45.00	1.5+0.8/2=1.15	3.50	207.00		
			Cum					267.00	2029.00	5,41,743.00
								Total		5,48,823.00
								Say		5,48,823.00
		(Rupees Five Lakh Forty Eight Thousand Eight Hundred Twenty Three Only)								



PLAN



SECTION A-A

NOTE: ALL DIMENSIONS ARE IN METERS EXCEPT OTHERWISE MENTIONED.

PROJECT :	CONSTRUCTION OF PROTECTION WALL AT WAHKAJI .	
DWG TITLE :	PLAN & CROSS SECTION OF A PROTECTION WALL.	
DRWN BY :	COUNTERSIGNED BY :	

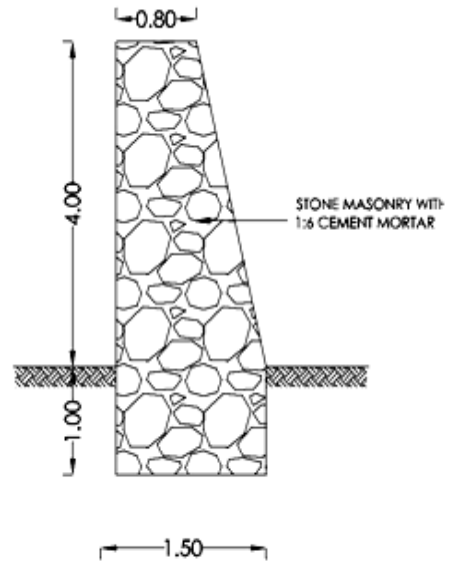
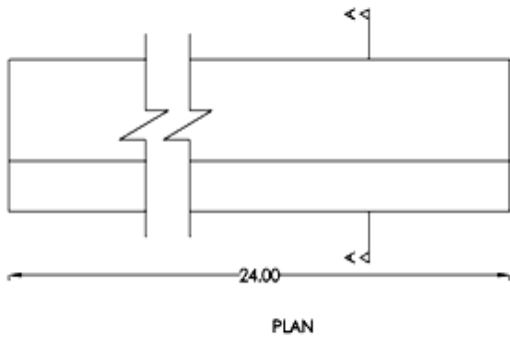
Detail estimate for the construction of Protection wall at Domiasiat (3rd Year)
(Rates as per Schedule of rates for roads and bridge works for the year 2012-2013)

Name Of Beneficiaries: Community

Geographical Coordinates: E 91° 13' 28.1"

N 25° 20' 12.5"

Sl/No	MORD Specification	Particulars	Units	Nos	Length	Breadth	Height	Quantity	Rate	Amount
1/4.1(a)	300	Earthwork in excavation for structures as per drawing and Technical Specification Clause 305.1 including setting out construction of shoring and bracing, removal of stumps and other deleterious materials and disposal upto a lead of 50 m dressing of side and bottom and back filling in trenches with excavated suitable material.								
		Ordinary Soil								
(i)		Upto 3 m depth								
		Protection wall	Cum		45.00	1.50	1.00	67.50	118.00	7965
2/4.4	700& 1200	Stone masonry work in foundation complete as per drawing and Technical Specification Clauses 702,704,1202,1203.								
(B)		Random Rubble Masonry								
(ii)		In cement mortar 1:6								
		Protection wall			45.00	1.50	1.00	67.50		
		Do			45.00	1.5+0.8/2=1.15	4.00	207.00		
			Cum					274.50	2029.00	5,56,960.50
								Total		5,64,925.50
								Say		5,64,926.00
		(Rupees Five Lakh Sixty Four Thousand Nine Hundred Twenty Six Only)								



SECTION A-A

NOTE: ALL DIMENSIONS ARE IN METERS EXCEPT OTHERWISE MENTIONED.

PROJECT :	CONSTRUCTION OF PROTECTION WALL AT DOMIASIAT .
DWG TITLE :	PLAN & CROSS SECTION OF A PROTECTION WALL.
DRWN BY :	COUNTERSIGNED BY :

**ESTIMATE FOR CONSTRUCTION OF WATER HARVESTING STRUCTURE CUM WASHING PLACE AT WAHKAJI
(3RD YEAR)**

Rate Based as per Schedule of Rates for Road and Bridges (Other than National Highway Works) for the Year 2012-2013.

Name Of Beneficiaries: Smt. Ethelrida L Langrin

Geographical Coordinates: E 91° 15' 36.14"

N 25° 22' 3.35"

Sl no	PARTICULARS	NO	DIMENSION			QTY	UNIT	RATE	AMOUNT
			L	B	H				
1/4.1 B(i).	Earthwork in excavation for structures as per drawings and Technical Clauses 305.1 including setting out construction of shoring and bracing, removal of stumps and other deleterious material and disposal upto a lead of 50m dressing of side and bottom and back filling in trenches with excavated suitable materials. Dam W/Walls U/S .	1	20.00	1.40	1.20	33.60	Cu.m		
		2	3.00	1.20	1.00	7.20	Cu.m		
		TOTAL					40.80	Cu.m	157
2/4.3	Providing concrete for plain/reinforced concrete in open foundations complete as per drawing and technical specifications clauses 802,803,1202,1203. Dam W/WALLS	1	20.00	1.40	0.10	2.80	Cu.m		
		2	3.00	1.20	0.10	0.72	Cu.m		
		TOTAL					3.52	Cu.m	4353
3/4.4	Providing stone masonry work in cement mortar in foundation complete as per drawings and Technical Specification Clauses 702,703,1202,1203. W/WALLS	2	3.00	1.20	0.90	6.48	Cu.m		
		2	3.00	0.85	3.10	15.81	Cu.m		
							22.29	Cu.m	2093
4/7.3	Providing reinforced cement concrete in substructure complete as per drawings and Technical Specification Clauses 802,804,805,806,1202,1204. Dam	1	20.00	1.40	1.20	33.60	Cu.m		
		1	20.00	1.00	2.80	56.00	Cu.m		
		TOTAL					89.60	Cu.m	5818
5/9.1 ii	Providing 12mm thick cement plastering including cleaing the surface, curing carriage of sand within 200m complete as per Technical Specification. Dam W/WALLS	1	20.00	2.80		56.00	SQ.M		
		1	20.00	2.89		57.80	SQ.M		
		1	20.00	0.60		12.00	SQ.M		
		2	3.00	3.10		18.60	SQ.M		
		2	3.00	0.50		3.00	SQ.M		
		TOTAL					147.40	SQ.M	157

GRAND TOTAL

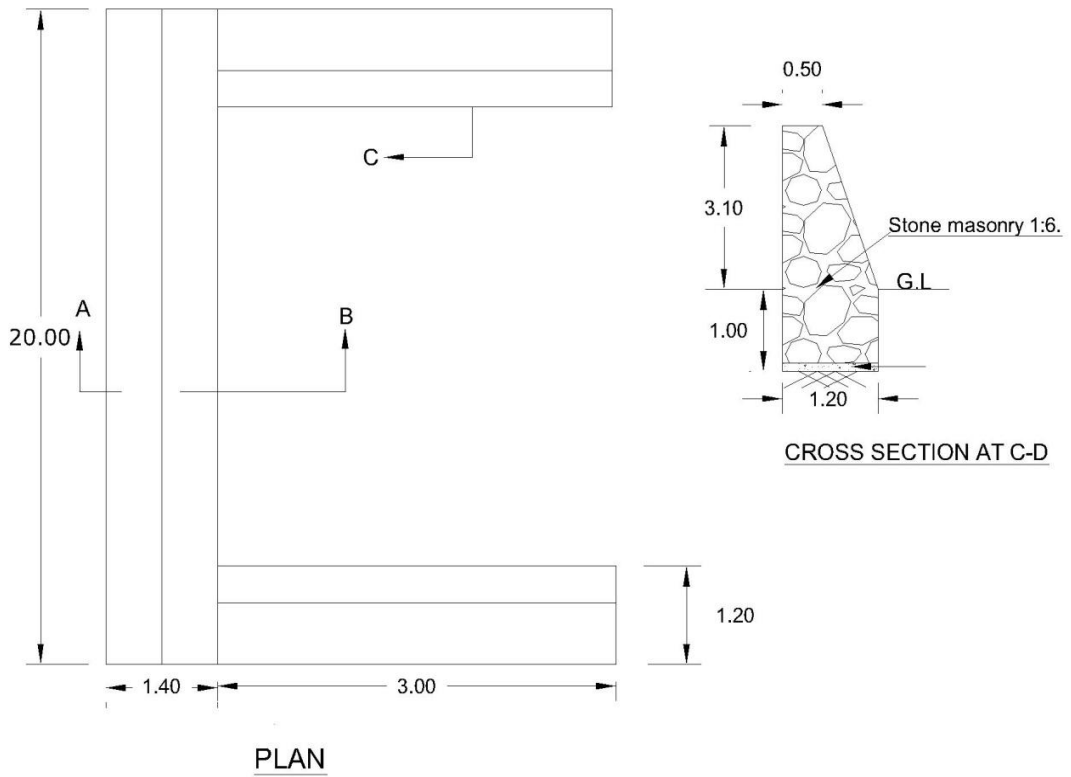
612815.7

Say

Rs 6,12,820.00

(Rupees Six Lakh Twelve Thousand Eight Hundred Twenty) only.

PROPOSED WATER HARVESTING STRUCTURE.



NOTES :-
ALL DIMENSIONS ARE IN METRES UNLESS SPECIFIED.
SCALE :- 1:50.

COUNTERSIGNED:-

PREPARED BY :-

Detail estimate for the construction of Protection wall at Mawthabah.(3rd Year)

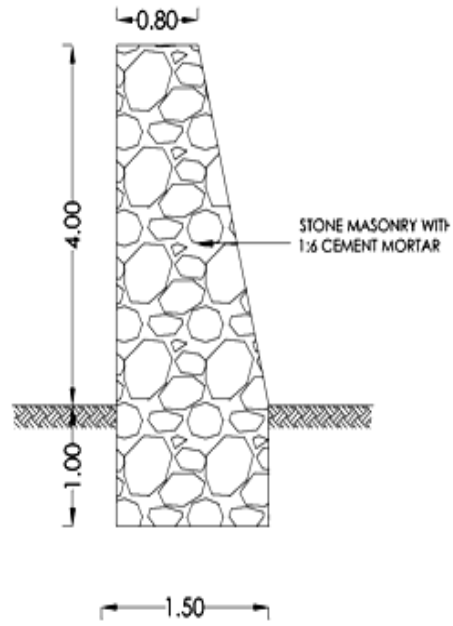
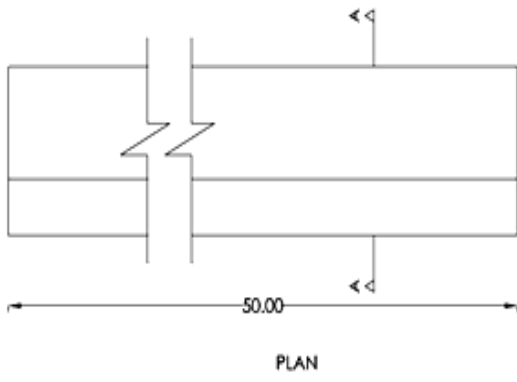
(Rates as per Schedule of rates for roads and bridge works for the year 2012-2013)

Name Of Beneficiaries: Community

Geographical Coordinates: E 91° 11' 05.6"

N 25° 18' 04.0"

SI/No	MORD Specification	Particulars	Units	Nos	Length	Breadth	Height	Quantity	Rate	Amount
4.1(a)	300	Earthwork in excavation for structures as per drawing and Technical Specification Clause 305.1 including setting out construction of shoring and bracing,removal of stumps and other deleterious materials and disposal upto a lead of 50 m dressing of side and bottom and back filling in trenches with excavated suitable material.								
		Ordinary Soil								
(i)		Upto 3 m depth								
		Protection wall	Cum		50.00	1.50	1.00	75.00	118.00	8850
4	700& 1200	Stone masonry work in foundation complete as per drawing and Technical Specification Clauses 702,704,1202,1203.								
(B)(ii)		Random Rubble Masonry								
		In cement mortar 1:6								
		Protection wall			50.00	1.50	1.00	75.00		
		Do			50.00	$1.5+0.8/2=1.15$	4.00	<u>230.00</u>		
			Cum					305.00	2029.00	<u>6,18,845.00</u>
									Total	6,27,695.00
									Say	6,27,695.00
		(Rupees Six Lakh Twenty Seven Thousand Six Hundred Ninety Five Only)								



SECTION A-A

NOTE: ALL DIMENSIONS ARE IN METERS EXCEPT OTHERWISE MENTIONED.

PROJECT :	CONSTRUCTION OF PROTECTION WALL AT MAWTHABAH .	
DWG TITLE :	PLAN & CROSS SECTION OF A PROTECTION WALL.	
DRWN BY :	COUNTERSIGNED BY :	

Detail estimate for the construction of Protection wall at Newphanwer. (3rd Year)

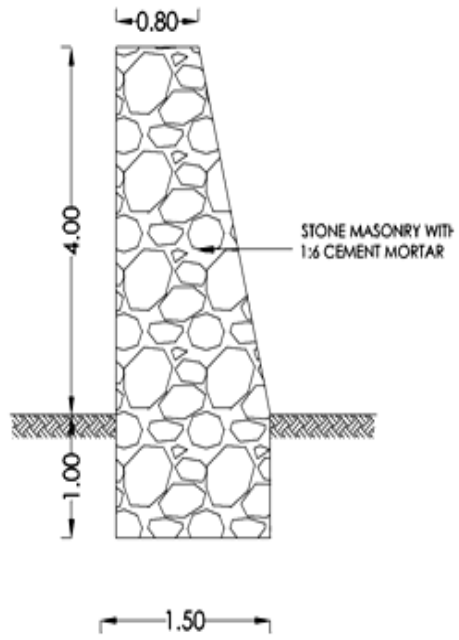
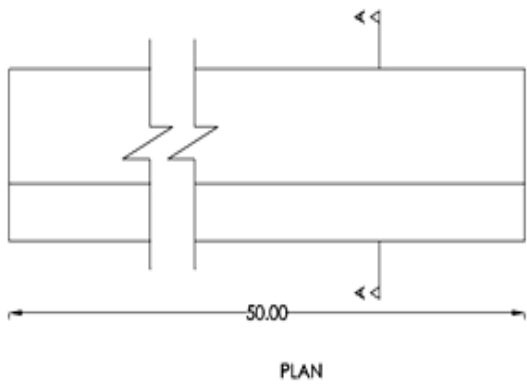
(Rates as per Schedule of rates for roads and bridge works for the year 2012-2013)

Name Of Beneficiaries: Community

Geographical Coordinates: E 91° 13' 36.1"

N 25° 17' 0.7"

SI/No	MORD Specification	Particulars	Units	Nos	Length	Breadth	Height	Quantity	Rate	Amount
4.1(a)	300	Earthwork in excavation for structures as per drawing and Technical Specification Clause 305.1 including setting out construction of shoring and bracing, removal of stumps and other deleterious materials and disposal upto a lead of 50 m dressing of side and bottom and back filling in trenches with excavated suitable material.								
		Ordinary Soil								
(i)		Upto 3 m depth								
		Protection wall	Cum		50.00	1.50	1.00	75.00	118.00	8850
4	700 & 1200	Stone masonry work in foundation complete as per drawing and Technical Specification Clauses 702, 704, 1202, 1203.								
(B)(ii)		Random Rubble Masonry								
		In cement mortar 1:6								
		Protection wall			50.00	1.50	1.00	75.00		
		Do			50.00	$1.5 + 0.8/2 = 1.15$	4.00	<u>230.00</u>		
			Cum					305.00	2029.00	<u>6,18,845.00</u>
									Total	6,27,695.00
									Say	6,27,695.00
(Rupees Six Lakh Twenty Seven Thousand Six Hundred Ninety Five Only)										



SECTION A-A

NOTE: ALL DIMENSIONS ARE IN METERS EXCEPT OTHERWISE MENTIONED.

PROJECT :	CONSTRUCTION OF PROTECTION WALL AT MAWTHABAH .	
DWG TITLE :	PLAN & CROSS SECTION OF A PROTECTION WALL.	
DRWN BY :		COUNTERSIGNED BY :

ESTIMATE FOR CONSTRUCTION OF CHECK DAM AT NEWPHANWER PHUD THRI (3RD Year)

Rate Based as per Schedule of Rates for Road and Bridges (Other than National Highway Works) for the Year 2012-2013.

Name Of Beneficiaries: Community

Geographical Coordinates: E 91° 13' 30.6"

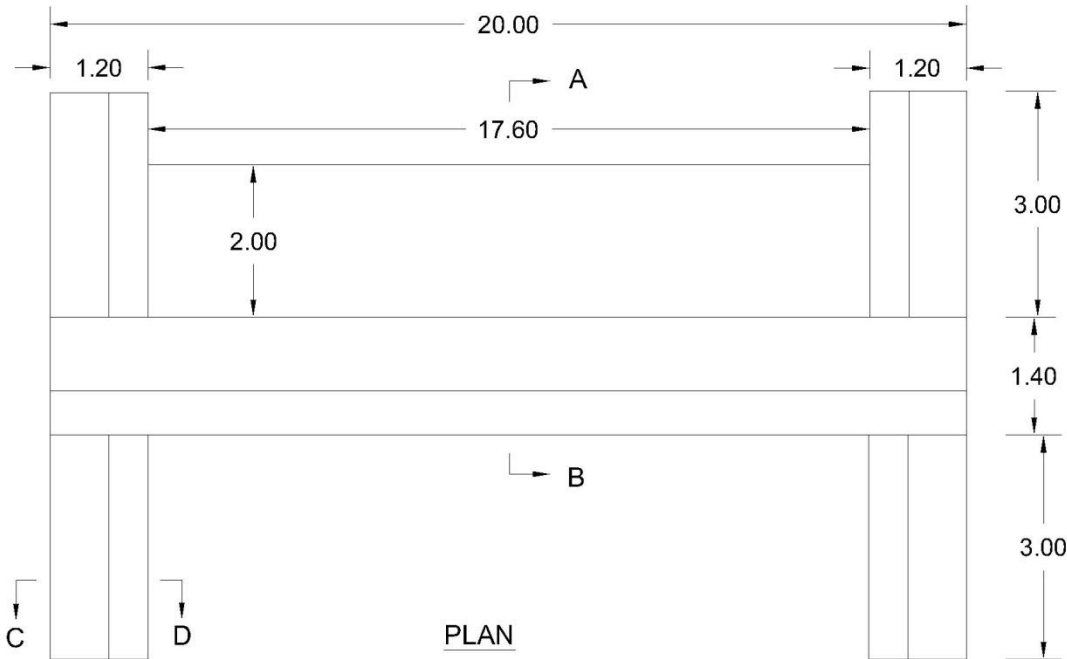
N 25° 16' 52.6"

Sl no	PARTICULARS	NO	DIMENSION			QTY	UNIT	RATE	AMOUNT (RS)	
			L	B	H					
1/4.1 B(i).	Earthwork in excavation for structures as per drawings and Technical Clauses 305.1 including setting out construction of shoring and bracing, removal of stumps and other deleterious material and disposal upto a lead of 50m dressing of side and bottom and back filling in trenches with excavated suitable materials. Dam Apron W/Walls U/S and D/S	1	20.00	1.40	1.20	33.60	Cu.m			
		1	17.60	2.00	0.25	8.80	Cu.m			
		4	3.00	1.20	1.00	14.40	Cu.m			
		TOTAL					56.80	Cu.m	157	8917.60
2/4.3	Providing concrete for plain/reinforced concrete in open foundations complete as per drawing and technical specifications clauses 802,803,1202,1203. Dam W/WALLS	1	20.00	1.40	0.10	2.80	Cu.m			
		4	3.00	1.20	0.10	1.44	Cu.m			
		TOTAL					4.24	Cu.m	4353	18456.72
		4	3.00	1.20	0.90	12.96	Cu.m			
3/4.4	Providing stone masonry work in cement mortar in foundation complete as per drawings and Technical Specification Clauses 702,703,1202,1203. W/WALLS	4	3.00	1.20	0.90	12.96	Cu.m			
		4	3.00	0.85	2.80	28.56	Cu.m			
		TOTAL					41.52	Cu.m	2093	86901.36
		4	3.00	0.95	2.50	47.50	Cu.m			
4/7.3	Providing reinforced cement concrete in substructure complete as per drawings and Technical Specification Clauses 802,804,805,806,1202,1204. Dam Apron	1	20.00	1.40	1.20	33.60	Cu.m			
		1	20.00	0.95	2.50	47.50	Cu.m			
		1	17.60	2.00	0.10	3.52	Cu.m			
		TOTAL					84.62	Cu.m	5818	492319.16
5/5.12	Providing stone pitching with one man size boulders not less than 25cm x 25cm x 30 cm including filling the interstices with spoils and carriages of stone within a distance of 200m completed as directed Apron	1	17.60	2.00	0.25	8.80	Cu.m			
		TOTAL					8.80	Cu.m	704	6195.20
6/9.1 ii	Providing 12mm thick cement plastering including cleaing the surface, curing carriage of sand within 200m complete as per Technical Specification. Dam Apron W/WALLS	1	20.00	2.50		50.00	SQ.M			
		1	20.00	2.59		51.80	SQ.M			
		1	20.00	0.50		10.00	SQ.M			
		1	17.60	2.00		35.20	SQ.M			
		4	3.00	2.80		33.60	SQ.M			
		4	3.00	0.50		6.00	SQ.M			
TOTAL					186.60	SQ.M	157	29296.20		
GRAND TOTAL								642086.24		

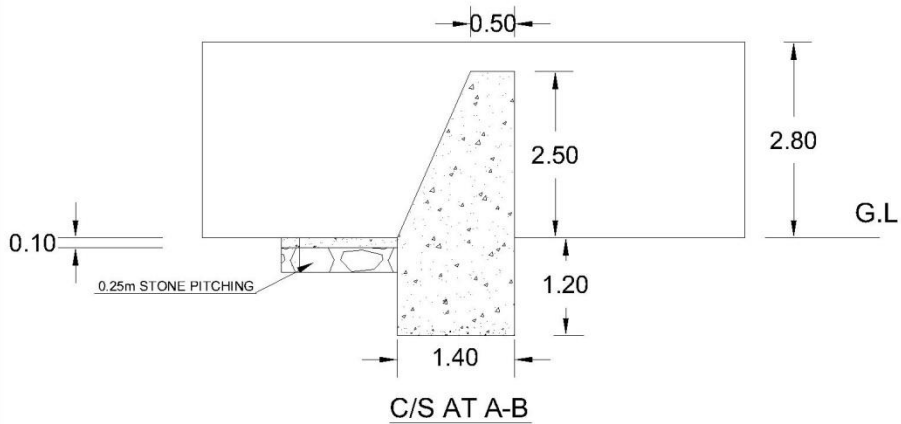
Say: Rs 6,42,090.00

(Rupees Six Lakh Forty Two Thousand and Ninety) only.

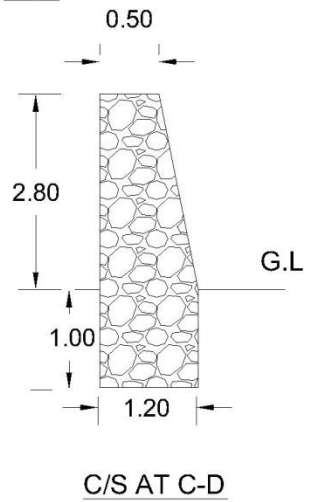
DRAWING FOR PROPOSED CHECK DAM.



PLAN



C/S AT A-B



C/S AT C-D

NOTES :- ALL DIMENSIONS ARE IN METRES UNLESS SPECIFIED.
SCALE :- 1:50.

COUNTERSIGNED :- PREPARED BY :-

ESTIMATE FOR CONSTRUCTION OF CHECK DAM AT MAWTHABAH.(3rd Year)

Rate Based as per Schedule of Rates for Road and Bridges (Other than National Highway Works) for the Year 2012-2013.

Name Of Beneficiaries: **Community**

Geographical Coordinates: **E 91° 11' 01.4"**

N 25° 17' 9.19"

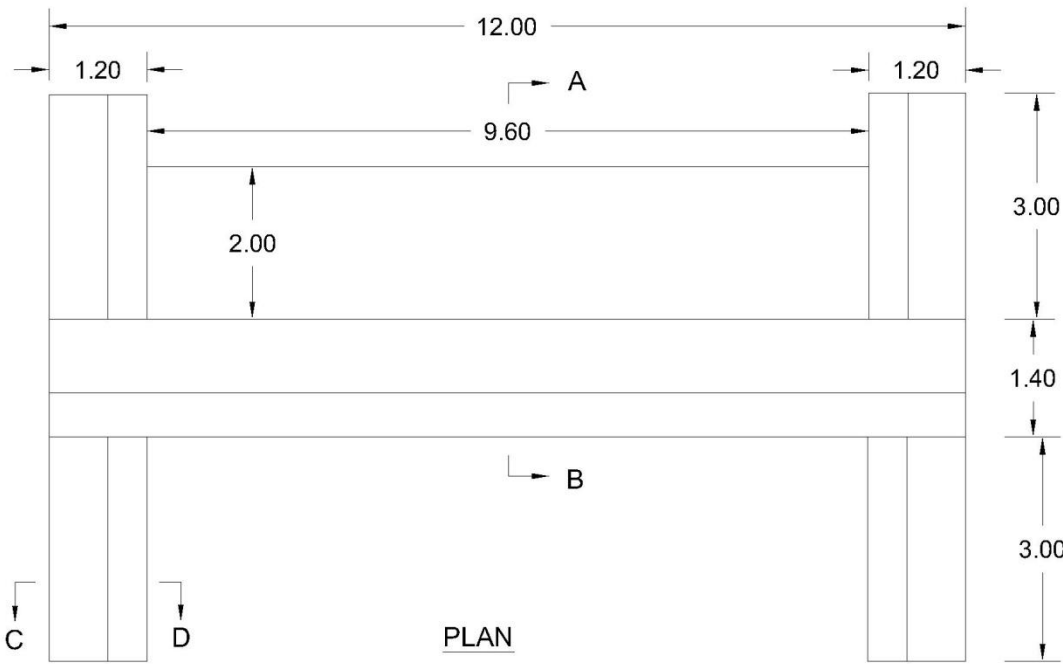
Sl no	PARTICULARS	NO	DIMENSION			QTY	UNIT	RATE	AMOUNT (RS)
			L	B	H				
1/4.1 B(i).	Earthwork in excavation for structures as per drawings and Technical Clauses 305.1 including setting out construction of shoring and bracing, removal of stumps and other deleterious material and disposal upto a lead of 50m dressing of side and bottom and back filling in trenches with excavated suitable materials. Dam Apron Channel on U/S. W/Walls U/S and D/S	1	12.00	1.40	1.20	20.16	Cu.m		
		1	9.60	2.00	0.25	4.80	Cu.m		
		1	6.00	0.50	0.50	1.50	Cu.m		
		4	3.00	1.20	1.00	14.40	Cu.m		
		TOTAL					40.86	Cu.m	157
2/4.3	Providing concrete for plain/reinforced concrete in open foundations complete as per drawing and technical specifications clauses 802,803,1202,1203. Dam W/WALLS	1	12.00	1.40	0.10	1.68	Cu.m		
		4	3.00	1.20	0.10	1.44	Cu.m		
		TOTAL					3.12	Cu.m	4353
3/4.4	Providing stone masonry work in cement mortar in foundation complete as per drawings and Technical Specification Clauses 702,703,1202,1203. W/WALLS	4	3.00	1.20	0.90	12.96	Cu.m		
		4	3.00	0.85	2.80	28.56	Cu.m		
		TOTAL					41.52	Cu.m	2093
4/7.3	Providing reinforced cement concrete in substructure complete as per drawings and Technical Specification Clauses 802,804,805,806,1202,1204. Dam Apron Channel	1	12.00	1.40	1.20	20.16	Cu.m		
		1	12.00	0.95	2.50	28.50	Cu.m		
		1	9.60	2.00	0.10	1.92	Cu.m		
		1	6.00	0.50	0.10	0.30	Cu.m		
		2	6.00	0.30	0.10	0.36	Cu.m		
		TOTAL					51.24	Cu.m	5818
5/5.12	Providing stone pitching with one man size boulders not less than 25cm x 25cm x 30 cm including filling the interstices with spoils and carriages of stone within a distance of 200m completed as directed Apron Channel	1	9.60	2.00	0.25	4.80	Cu.m		
		1	6.00	0.50	0.25	0.75	Cu.m		
		TOTAL					5.55	Cu.m	704
6/9.1 ii	Providing 12mm thick cement plastering including cleaing the surface, curing carriage of sand within 200m complete as per Technical Specification. Dam	1	12.00	2.50		30.00	SQ.M		
	Apron Channel W/WALLS	1	12.00	2.59		31.08	SQ.M		
		1	12.00	0.50		6.00	SQ.M		
		1	9.60	2.00		19.20	SQ.M		
		1	6.00	0.30		1.80	SQ.M		
		2	6.00	0.30		3.60	SQ.M		
		4	3.00	2.80		33.60	SQ.M		
		4	3.00	0.50		6.00	SQ.M		
TOTAL					131.28	SQ.M	157	20610.96	
GRAND TOTAL								429530.22	

Say:

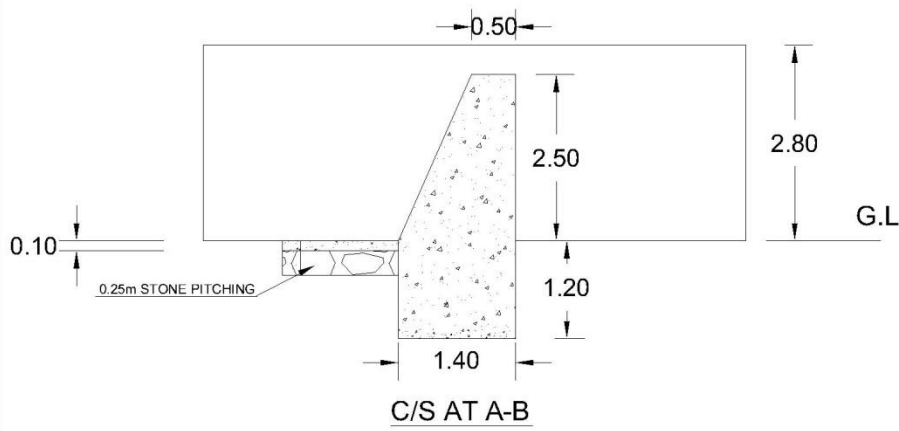
Rs 4,29,530.00

(Rupees Four Lakh Twenty Nine Thousand Five Hundred Thirty) only.

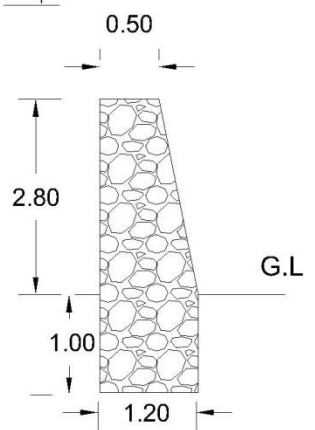
DRAWING FOR PROPOSED CHECK DAM.



PLAN



C/S AT A-B



C/S AT C-D

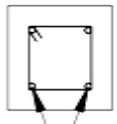
NOTES :- ALL DIMENSIONS ARE IN METRES UNLESS SPECIFIED.
SCALE :- 1:50.

COUNTERSIGNED :- PREPARED BY :-

Detail estimate for the construction of Percolation Tank (Soak Tank) at Mawthabah (3 rd Year)									
(Rates as per Schedule of rates for Buildings for the year 2013-2014)									
Name Of Beneficiaries: Community			Geographical Coordinates: E 91° 11' 7.35"				N 25° 17' 26.13"		
Sl/No	Particulars	Units	Nos	Length	Breadth	Height	Quantity	Rate	Amount
1/1.1	Earthwork in excavation in foundation trenches, including dressing of sides and ramming of the bottom including stacking of serviceable stones, disposal and removal of excavated earth within a lead of 50 m and lift of 1.50m complete as directed.								
(b)	Hard soil or mixed with moorum, gravel, boulder upto one-man size (above 0.03 cum each)								
	Footing		8	0.60	0.60	0.90	2.592		
	Wall		4	3.00	0.30	0.20	0.72		
	Tank		1	3.00	0.30	0.20	0.18		
		Cum					3.49	159.00	555.23
2/3.5	Providing coursed random rubble stone masonry in foundation and plinth with unsized stone (mawthup) bonded with cement mortar of proportion 1:6 (1-cement, 6-sand) including curing complete. (Average size is not less than 20 cm x 20 cm x 25 cm)								
	Wall	Cum	4	3.00	0.30	0.45	1.62	3810.00	6,172.20
3/4.5	Providing 100 mm thick soling with approved quality of stones including carriage, ramming, consolidating and filling the interstices with stone aggregates complete								
	Footing		8	0.60	0.60		2.88		
	Soakpit floor			3.00	3.00		9.00		
		Sqm					11.88	220.00	2,613.60

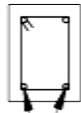
4/2.3	Providing and laying cement concrete in proportion 1:2:4 corresponding to M15 (1 cement : 2 sand : 4 stone aggregates of 20mm and down graded) including curing etc complete excluding shuttering,in foundation and below plinth and in septic tank,inspection pits etc,complete									
	Foundation		8	0.60	0.60	0.45	1.30			
	Column		8	0.25	0.25	3.15	1.58			
	Tie beam		4	3.00	0.20	0.25	0.60			
	Main wall		4	3.00	0.15	2.00	3.60			
	Partition wall		2	3.00	0.15	2.00	1.80			
	Floor			3.00	3.00	0.15	<u>1.35</u>			
		Cum					10.22	7239.00	73,989.82	
5/2.9 (a)	Providing shuttering including centering for flat surface such as slabs,shelves,chajja and for vertical faces such as columns,walls,ends of beams etc with dressed plank not less than 25cm thick firmly fixed etc									
	Foundation		8	2.40		0.45	8.64			
	Column		8	1.00		3.15	25.20			
	Tie beam		4	3.00		0.50	6.00			
	Main wall		4*2	3.00		2.00	48.00			
	Partition wall		2*2	3.00		2.00	<u>24.00</u>			
		Sqm					111.84	389.00	43,505.76	
6/4.1	Providing 12mm thick cement plaster i/c cleaning the surface and curing complete as directed									
	Column		8	1.00		2.30	18.40			
	Tie beam		4	3.00		0.25	3.00			
	Main wall		4*2	3.00		2.00	48.00			
	Partition wall		2*2	3.00		2.00	<u>24.00</u>			
		Sqm					93.40	213.00	19,894.20	
7/6.2	Providing tor steel reinforcement in RCC work including cutting,bending,cranking and tying in position with binding wire,20 gauge,as shown in drawings,complete upto floor two level	Nos	Length	Breadth	Height	Nos of reinforcement	Unit weight in kg/m	Quantity	Rate	Amount

Column sub structure (250x250) 4-12mm dia	8	1.60			4	0.89	45.57		
Development length	8	0.60			4	0.89	17.09		
6 mm Stirrup @ 150mm c/c		(0.84*11*8*0.22)+1					17.26		
Column super structure (250x250) 4-12mm dia	8	2.00			4	0.89	56.96		
Development length	8	0.60			4	0.89	17.09		
6 mm Stirrup @ 150mm c/c		(0.84*13*8*0.22)+1					20.22		
Tie beam (200x250) 2- 12mm dia alt top bottom	4	3.00			4	0.89	42.72		
Development length	4*2	0.72			4	0.89	20.51		
6 mm Stirrup @ 150mm c/c		4*(0.86*20*0.22)+1					16.14		
Main wall (jali) 10mm bothways @ 150mm c/c	4*2	3.00			13	0.62	193.44		
Main wall (jali) 10mm bothways @ 150mm c/c	4*2	2.00			20	0.62	198.40		
Partition wall (jali) 10mm bothways @ 150mm c/c	2*2	3.00			13	0.62	96.72		
Partition wall (jali) 10mm bothways @ 150mm c/c	2*2	2.00			20	0.62	<u>99.20</u>		
					Total in Kg		841.31		
					Total in Qntl		8.41		
Add 3% wastage							<u>0.25</u>		
							8.67	9,938.00	<u>86,117.38</u>
						Total for 1 no			2,32,848.19
						Say			2,32,848.00
(Rupees Two Lakhs Thirty Two Thousand Eight Hundred And Forty Eight)									



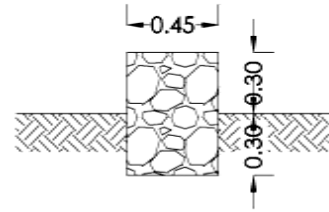
4-12MM MAIN BAR

SECTION OF A COLUMN 0.25 X 0.25



4-12MM MAIN BAR

SECTION OF A BEAM 0.20 X 0.25



SECTION OF R/R WALL

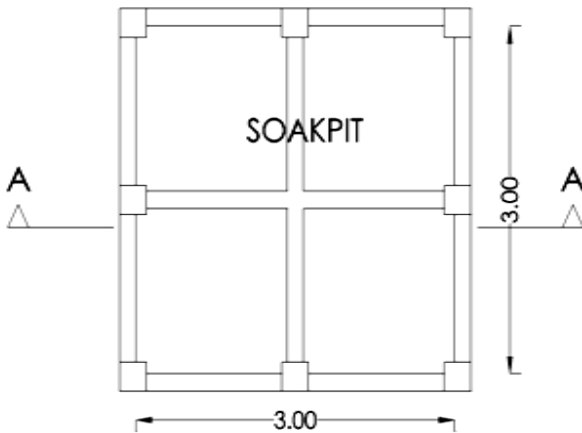


DOUBLE JALI 10MM MAIN BAR BOTHWAYS 100MM C/C

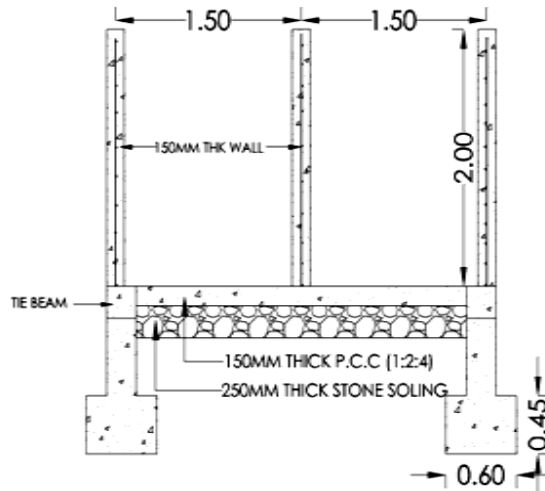
SECTION OF A WALL

NOTE: ALL DIMENSIONS ARE IN METERS EXCEPT OTHERWISE MENTIONED.

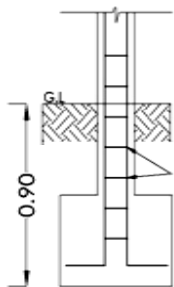
PROJECT :	CONSTRUCTION OF PERCOLATION TANK (SOAK TANK) AT MAWTHABAH.
DWG TITLE :	PLAN, CROSS SECTION & TYPICAL DETAILING OF A PERCOLATION TANK.
DRWN BY :	COUNTERSIGNED BY :



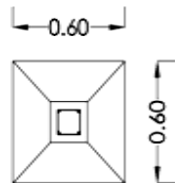
PLAN



SECTION A-A



SECTION OF FOUNDATION



PLAN OF FOUNDATION

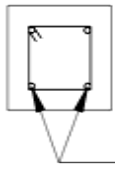
NOTE: ALL DIMENSIONS ARE IN METERS EXCEPT OTHERWISE MENTIONED.

PROJECT :	CONSTRUCTION OF PERCOLATION TANK (SOAK TANK) AT MAWTHABAH.
DWG TITLE :	PLAN, CROSS SECTION & TYPICAL DETAILING OF A PERCOLATION TANK.
DRWN BY :	COUNTERSIGNED BY :

Detail estimate for the construction of Percolation Tank (Soak Tank) at Mawthabah (3 rd Year)									
(Rates as per Schedule of rates for Buildings for the year 2013-2014)									
Name Of Beneficiaries: Community			Geographical Coordinates: E 91° 10' 3.21"				N 25° 18' 05.8"		
Sl/No	Particulars	Units	Nos	Length	Breadth	Height	Quantity	Rate	Amount
1/1.1	Earthwork in excavation in foundation trenches,including dressing of sides and ramming of the bottom including stacking of serviceable stones,disposal and removal of excavated earth within a lead of 50 m and lift of 1.50m complete as directed.								
(b)	Hard soil or mixed with moorum,gravel,boulder upto one-man size(above 0.03 cum each)								
	Footing		8	0.60	0.60	0.90	2.592		
	Wall		4	3.00	0.30	0.20	0.72		
	Tank		1	3.00	0.30	0.20	<u>0.18</u>		
		Cum					3.49	159.00	555.23
2/3.5	Providing coursed random rubble stone masonry in foundation and plinth with unsized stone(mawthup)bonded with cement mortar of proportion 1:6(1-cement,6-sand)including curing complete.(Average size is not less than 20 cm x 20 cm x 25 cm)								
	Wall	Cum	4	3.00	0.30	0.45	1.62	3810.00	6,172.20
3/4.5	Providing 100 mm thick soling with approved quality of stones including carriage,ramming,consolidating and filling the interstices with stone aggregates complete								
	Footing		8	0.60	0.60		2.88		
	Soakpit floor			3.00	3.00		<u>9.00</u>		
		Sqm					11.88	220.00	2,613.60

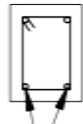
4/2.3	Providing and laying cement concrete in proportion 1:2:4 corresponding to M15 (1 cement : 2 sand : 4 stone aggregates of 20mm and down graded) including curing etc complete excluding shuttering,in foundation and below plinth and in septic tank,inspection pits etc,complete									
	Foundation		8	0.60	0.60	0.45	1.30			
	Column		8	0.25	0.25	3.15	1.58			
	Tie beam		4	3.00	0.20	0.25	0.60			
	Main wall		4	3.00	0.15	2.00	3.60			
	Partition wall		2	3.00	0.15	2.00	1.80			
	Floor			3.00	3.00	0.15	<u>1.35</u>			
		Cum					10.22	7239.00	73,989.82	
5/2.9 (a)	Providing shuttering including centering for flat surface such as slabs,shelves,chajja and for vertical faces such as columns,walls,ends of beams etc with dressed plank not less than 25cm thick firmly fixed etc									
	Foundation		8	2.40		0.45	8.64			
	Column		8	1.00		3.15	25.20			
	Tie beam		4	3.00		0.50	6.00			
	Main wall		4*2	3.00		2.00	48.00			
	Partition wall		2*2	3.00		2.00	<u>24.00</u>			
		Sqm					111.84	389.00	43,505.76	
6/4.1	Providing 12mm thick cement plaster i/c cleaning the surface and curing complete as directed									
	Column		8	1.00		2.30	18.40			
	Tie beam		4	3.00		0.25	3.00			
	Main wall		4*2	3.00		2.00	48.00			
	Partition wall		2*2	3.00		2.00	<u>24.00</u>			
		Sqm					93.40	213.00	19,894.20	
7/6.2	Providing tor steel reinforcement in RCC work including cutting,bending,cranking and tying in position with binding wire,20 gauge,as shown in drawings,complete upto floor two level	Nos	Length	Breadt h	Height	Nos of reinforcement	Unit weig ht in kg/m	Quantit y	Rate	Amount

Column sub structure (250x250) 4-12mm dia	8	1.60			4	0.89	45.57		
Development length	8	0.60			4	0.89	17.09		
6 mm Stirrup @ 150mm c/c			(0.84*11*8*0.22)+1				17.26		
Column super structure (250x250) 4-12mm dia	8	2.00			4	0.89	56.96		
Development length	8	0.60			4	0.89	17.09		
6 mm Stirrup @ 150mm c/c			(0.84*13*8*0.22)+1				20.22		
Tie beam (200x250) 2-12mm dia alt top bottom	4	3.00			4	0.89	42.72		
Development length	4*2	0.72			4	0.89	20.51		
6 mm Stirrup @ 150mm c/c			4*(0.86*20*.22)+1				16.14		
Main wall (jali) 10mm bothways @ 150mm c/c	4*2	3.00			13	0.62	193.44		
Main wall (jali) 10mm bothways @ 150mm c/c	4*2	2.00			20	0.62	198.40		
Partition wall (jali) 10mm bothways @ 150mm c/c	2*2	3.00			13	0.62	96.72		
Partition wall (jali) 10mm bothways @ 150mm c/c	2*2	2.00			20	0.62	<u>99.20</u>		
						Total in Kg	841.31		
						Total in Qntl	8.41		
Add 3% wastage							<u>0.25</u>		
							8.67	9,938.00	<u>86,117.38</u>
							Total for 1 no		2,32,848.19
							Say		2,32,848.00
(Rupees Two Lakhs Thirty Two Thousand Eight Hundred And Forty Eight)									



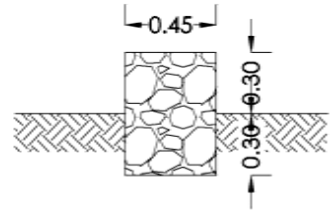
4-12MM MAIN BAR

SECTION OF A COLUMN 0.25 X 0.25



4-12MM MAIN BAR

SECTION OF A BEAM 0.20 X 0.25



SECTION OF R/R WALL

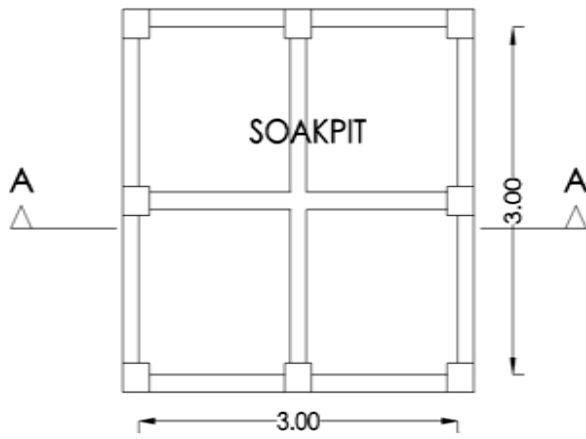


DOUBLE JALI 10MM MAIN BAR BOTHWAYS 100MM C/C

SECTION OF A WALL

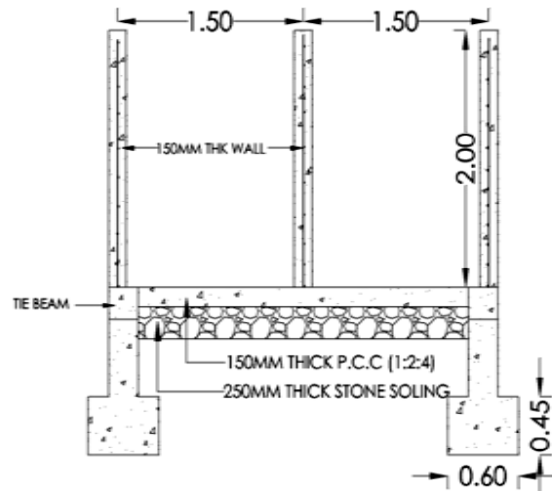
NOTE: ALL DIMENSIONS ARE IN METERS EXCEPT OTHERWISE MENTIONED.

PROJECT :	CONSTRUCTION OF PERCOLATION TANK (SOAK TANK) AT MAWTHABAH.
DWG TITLE :	PLAN, CROSS SECTION & TYPICAL DETAILING OF A PERCOLATION TANK.
DRWN BY :	COUNTERSIGNED BY :

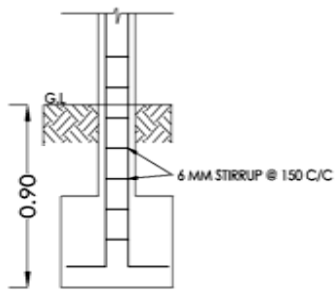


SOAKPIT

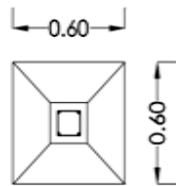
PLAN



SECTION A-A



SECTION OF FOUNDATION



PLAN OF FOUNDATION

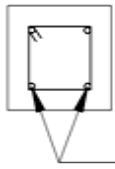
NOTE: ALL DIMENSIONS ARE IN METERS EXCEPT OTHERWISE MENTIONED.

PROJECT :	CONSTRUCTION OF PERCOLATION TANK (SOAK TANK) AT MAWTHABAH.
DWG TITLE :	PLAN, CROSS SECTION & TYPICAL DETAILING OF A PERCOLATION TANK.
DRWN BY :	COUNTERSIGNED BY :

Detail estimate for the construction of Percolation Tank (Soak Tank) at Mawthabah (3 rd Year)									
(Rates as per Schedule of rates for Buildings for the year 2013-2014)									
Name Of Beneficiaries: Community			Geographical Coordinates: E 91° 10' 43.2"				N 25° 18' 21.2"		
Sl/No	Particulars	Units	Nos	Length	Breadth	Height	Quantity	Rate	Amount
1/1.1	Earthwork in excavation in foundation trenches,including dressing of sides and ramming of the bottom including stacking of serviceable stones,disposal and removal of excavated earth within a lead of 50 m and lift of 1.50m complete as directed.								
(b)	Hard soil or mixed with moorum,gravel,boulder upto one-man size(above 0.03 cum each)								
	Footing		8	0.60	0.60	0.90	2.592		
	Wall		4	3.00	0.30	0.20	0.72		
	Tank		1	3.00	0.30	0.20	0.18		
		Cum					3.49	159.00	555.23
2/3.5	Providing coursed random rubble stone masonry in foundation and plinth with unsized stone(mawthup)bonded with cement mortar of proportion 1:6(1-cement,6-sand)including curing complete.(Average size is not less than 20 cm x 20 cm x 25 cm)								
	Wall	Cum	4	3.00	0.30	0.45	1.62	3810.00	6,172.20
3/4.5	Providing 100 mm thick soling with approved quality of stones including carriage,ramming,consolidating and filling the interstices with stone aggregates complete								
	Footing		8	0.60	0.60		2.88		
	Soakpit floor			3.00	3.00		9.00		
		Sqm					11.88	220.00	2,613.60

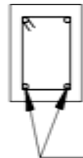
4/2.3	Providing and laying cement concrete in proportion 1:2:4 corresponding to M15 (1 cement : 2 sand : 4 stone aggregates of 20mm and down graded) including curing etc complete excluding shuttering,in foundation and below plinth and in septic tank,inspection pits etc,complete									
	Foundation		8	0.60	0.60	0.45	1.30			
	Column		8	0.25	0.25	3.15	1.58			
	Tie beam		4	3.00	0.20	0.25	0.60			
	Main wall		4	3.00	0.15	2.00	3.60			
	Partition wall		2	3.00	0.15	2.00	1.80			
	Floor			3.00	3.00	0.15	<u>1.35</u>			
		Cum					10.22	7239.00	73,989.82	
5/2.9 (a)	Providing shuttering including centering for flat surface such as slabs,shelves,chajja and for vertical faces such as columns,walls,ends of beams etc with dressed plank not less than 25cm thick firmly fixed etc									
	Foundation		8	2.40		0.45	8.64			
	Column		8	1.00		3.15	25.20			
	Tie beam		4	3.00		0.50	6.00			
	Main wall		4*2	3.00		2.00	48.00			
	Partition wall		2*2	3.00		2.00	<u>24.00</u>			
		Sqm					111.84	389.00	43,505.76	
6/4.1	Providing 12mm thick cement plaster i/c cleaning the surface and curing complete as directed									
	Column		8	1.00		2.30	18.40			
	Tie beam		4	3.00		0.25	3.00			
	Main wall		4*2	3.00		2.00	48.00			
	Partition wall		2*2	3.00		2.00	<u>24.00</u>			
		Sqm					93.40	213.00	19,894.20	
7/6.2	Providing tor steel reinforcement in RCC work including cutting,bending,cranking and tying in position with binding wire,20 gauge,as shown in drawings,complete upto floor two level	Nos	Length	Breadt h	Height	Nos of reinforcement	Unit weight in kg/m	Quantity	Rate	Amount

Column sub structure (250x250) 4-12mm dia	8	1.60			4	0.89	45.57		
Development length	8	0.60			4	0.89	17.09		
6 mm Stirrup @ 150mm c/c			(0.84*11*8*0.22)+1				17.26		
Column super structure (250x250) 4-12mm dia	8	2.00			4	0.89	56.96		
Development length	8	0.60			4	0.89	17.09		
6 mm Stirrup @ 150mm c/c			(0.84*13*8*0.22)+1				20.22		
Tie beam (200x250) 2- 12mm dia alt top bottom	4	3.00			4	0.89	42.72		
Development length	4*2	0.72			4	0.89	20.51		
6 mm Stirrup @ 150mm c/c			4*(0.86*20*.22)+1				16.14		
Main wall (jali) 10mm bothways @ 150mm c/c	4*2	3.00			13	0.62	193.44		
Main wall (jali) 10mm bothways @ 150mm c/c	4*2	2.00			20	0.62	198.40		
Partition wall (jali) 10mm bothways @ 150mm c/c	2*2	3.00			13	0.62	96.72		
Partition wall (jali) 10mm bothways @ 150mm c/c	2*2	2.00			20	0.62	<u>99.20</u>		
					Total in Kg		841.31		
					Total in Qntl		8.41		
Add 3% wastage							<u>0.25</u>		
							8.67	9,938.00	<u>86,117.38</u>
						Total for 1 no			2,32,848.19
						Say			2,32,848.00
(Rupees Two Lakhs Thirty Two Thousand Eight Hundred And Forty Eight)									



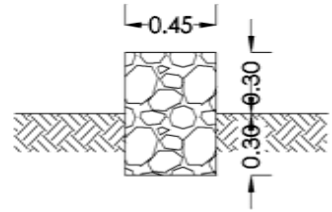
4-12MM MAIN BAR

SECTION OF A COLUMN 0.25 X 0.25



4-12MM MAIN BAR

SECTION OF A BEAM 0.20 X 0.25



SECTION OF R/R WALL

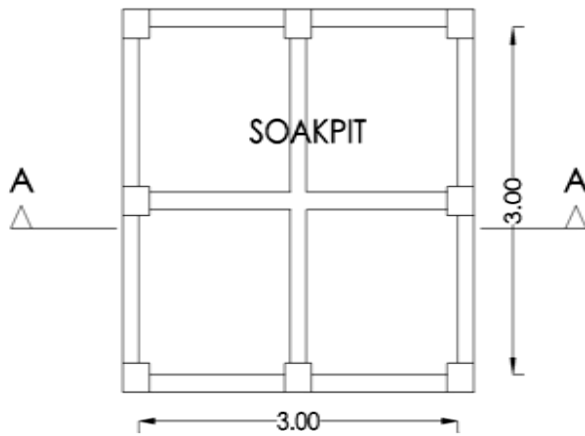


DOUBLE JALI 10MM MAIN BAR BOTHWAYS 100MM C/C

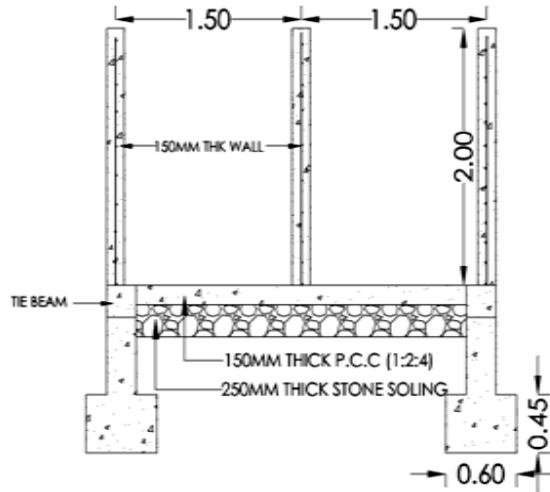
SECTION OF A WALL

NOTE: ALL DIMENSIONS ARE IN METERS EXCEPT OTHERWISE MENTIONED.

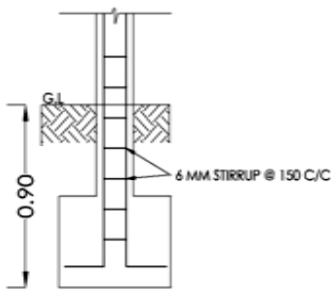
PROJECT :	CONSTRUCTION OF PERCOLATION TANK (SOAK TANK) AT MAWTHABAH.
DWG TITLE :	PLAN, CROSS SECTION & TYPICAL DETAILING OF A PERCOLATION TANK.
DRWN BY :	COUNTERSIGNED BY :



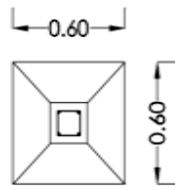
PLAN



SECTION A-A



SECTION OF FOUNDATION



PLAN OF FOUNDATION

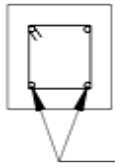
NOTE: ALL DIMENSIONS ARE IN METERS EXCEPT OTHERWISE MENTIONED.

PROJECT :	CONSTRUCTION OF PERCOLATION TANK (SOAK TANK) AT MAWTHABAH.
DWG TITLE :	PLAN, CROSS SECTION & TYPICAL DETAILING OF A PERCOLATION TANK.
DRWN BY :	COUNTERSIGNED BY :

Detail estimate for the construction of Percolation Tank (Soak Tank) at Mawthabah (3 rd Year)									
(Rates as per Schedule of rates for Buildings for the year 2013-2014)									
Name Of Beneficiaries: Community			Geographical Coordinates: E 91° 10' 48.5"				N 25° 18' 34.5"		
Sl/No	Particulars	Units	Nos	Length	Breadth	Height	Quantity	Rate	Amount
1/1.1	Earthwork in excavation in foundation trenches,including dressing of sides and ramming of the bottom including stacking of serviceable stones,disposal and removal of excavated earth within a lead of 50 m and lift of 1.50m complete as directed.								
(b)	Hard soil or mixed with moorum,gravel,boulder upto one-man size(above 0.03 cum each)								
	Footing		8	0.60	0.60	0.90	2.592		
	Wall		4	3.00	0.30	0.20	0.72		
	Tank		1	3.00	0.30	0.20	0.18		
		Cum					3.49	159.00	555.23
2/3.5	Providing coursed random rubble stone masonry in foundation and plinth with unsized stone(mawthup)bonded with cement mortar of proportion 1:6(1-cement,6-sand)including curing complete.(Average size is not less than 20 cm x 20 cm x 25 cm)								
	Wall	Cum	4	3.00	0.30	0.45	1.62	3810.00	6,172.20
3/4.5	Providing 100 mm thick soling with approved quality of stones including carriage,ramming,consolidating and filling the interstices with stone aggregates complete								
	Footing		8	0.60	0.60		2.88		
	Soakpit floor			3.00	3.00		9.00		
		Sqm					11.88	220.00	2,613.60

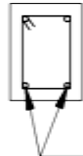
4/2.3	Providing and laying cement concrete in proportion 1:2:4 corresponding to M15 (1 cement : 2 sand : 4 stone aggregates of 20mm and down graded) including curing etc complete excluding shuttering,in foundation and below plinth and in septic tank,inspection pits etc,complete									
	Foundation		8	0.60	0.60	0.45	1.30			
	Column		8	0.25	0.25	3.15	1.58			
	Tie beam		4	3.00	0.20	0.25	0.60			
	Main wall		4	3.00	0.15	2.00	3.60			
	Partition wall		2	3.00	0.15	2.00	1.80			
	Floor			3.00	3.00	0.15	<u>1.35</u>			
		Cum					10.22	7239.00	73,989.82	
5/2.9 (a)	Providing shuttering including centering for flat surface such as slabs,shelves,chajja and for vertical faces such as columns,walls,ends of beams etc with dressed plank not less than 25cm thick firmly fixed etc									
	Foundation		8	2.40		0.45	8.64			
	Column		8	1.00		3.15	25.20			
	Tie beam		4	3.00		0.50	6.00			
	Main wall		4*2	3.00		2.00	48.00			
	Partition wall		2*2	3.00		2.00	<u>24.00</u>			
		Sqm					111.84	389.00	43,505.76	
6/4.1	Providing 12mm thick cement plaster i/c cleaning the surface and curing complete as directed									
	Column		8	1.00		2.30	18.40			
	Tie beam		4	3.00		0.25	3.00			
	Main wall		4*2	3.00		2.00	48.00			
	Partition wall		2*2	3.00		2.00	<u>24.00</u>			
		Sqm					93.40	213.00	19,894.20	
7/6.2	Providing tor steel reinforcement in RCC work including cutting,bending,cranking and tying in position with binding wire,20 gauge,as shown in drawings,complete upto floor two level	Nos	Length	Breadth	Height	Nos of reinforcement	Unit weight in kg/m	Quantity	Rate	Amount

Column sub structure (250x250) 4-12mm dia	8	1.60			4	0.89	45.57		
Development length	8	0.60			4	0.89	17.09		
6 mm Stirrup @ 150mm c/c			(0.84*11*8*0.22)+1				17.26		
Column super structure (250x250) 4-12mm dia	8	2.00			4	0.89	56.96		
Development length	8	0.60			4	0.89	17.09		
6 mm Stirrup @ 150mm c/c			(0.84*13*8*0.22)+1				20.22		
Tie beam (200x250) 2- 12mm dia alt top bottom	4	3.00			4	0.89	42.72		
Development length	4*2	0.72			4	0.89	20.51		
6 mm Stirrup @ 150mm c/c			4*(0.86*20*.22)+1				16.14		
Main wall (jali) 10mm bothways @ 150mm c/c	4*2	3.00			13	0.62	193.44		
Main wall (jali) 10mm bothways @ 150mm c/c	4*2	2.00			20	0.62	198.40		
Partition wall (jali) 10mm bothways @ 150mm c/c	2*2	3.00			13	0.62	96.72		
Partition wall (jali) 10mm bothways @ 150mm c/c	2*2	2.00			20	0.62	<u>99.20</u>		
					Total in Kg		841.31		
					Total in Qntl		8.41		
Add 3% wastage							<u>0.25</u>		
							8.67	9,938.00	<u>86,117.38</u>
						Total for 1 no			2,32,848.19
						Say			2,32,848.00
(Rupees Two Lakhs Thirty Two Thousand Eight Hundred And Forty Eight)									



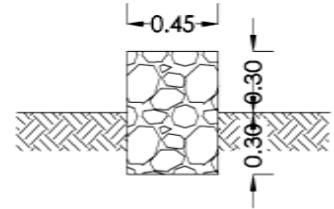
4-12MM MAIN BAR

SECTION OF A COLUMN 0.25 X 0.25



4-12MM MAIN BAR

SECTION OF A BEAM 0.20 X 0.25



SECTION OF R/R WALL

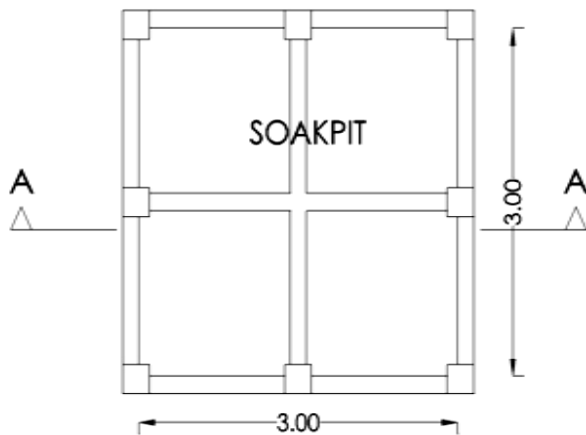


DOUBLE JALI 10MM MAIN BAR BOTHWAYS 100MM C/C

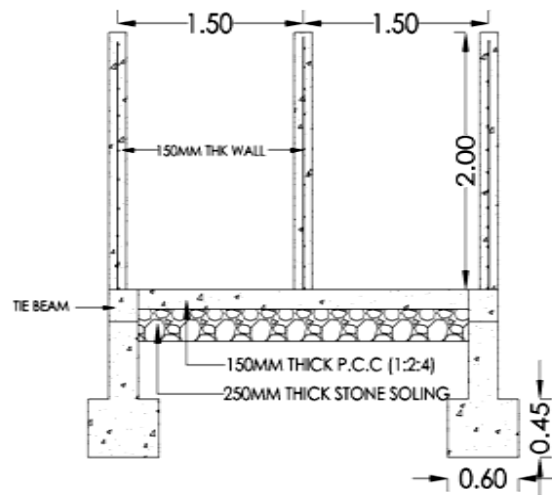
SECTION OF A WALL

NOTE: ALL DIMENSIONS ARE IN METERS EXCEPT OTHERWISE MENTIONED.

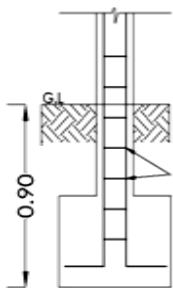
PROJECT :	CONSTRUCTION OF PERCOLATION TANK (SOAK TANK) AT MAWTHABAH.
DWG TITLE :	PLAN, CROSS SECTION & TYPICAL DETAILING OF A PERCOLATION TANK.
DRWN BY :	COUNTERSIGNED BY :



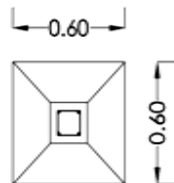
PLAN



SECTION A-A



SECTION OF FOUNDATION



PLAN OF FOUNDATION

NOTE: ALL DIMENSIONS ARE IN METERS EXCEPT OTHERWISE MENTIONED.

PROJECT :	CONSTRUCTION OF PERCOLATION TANK (SOAK TANK) AT MAWTHABAH.
DWG TITLE :	PLAN, CROSS SECTION & TYPICAL DETAILING OF A PERCOLATION TANK.
DRWN BY :	COUNTERSIGNED BY :

ESTIMATE FOR CONSTRUCTION OF DUG OUT POND.(3rd Year)

(Rate Based as per MPWD scheduled or rates for Roads and Bridges (other than National Highway works), for the year 2012-2013.

Name Of Beneficiaries: Shri Telesphor Langrin

Geographical Coordinates: E 91° 15' 35.6"

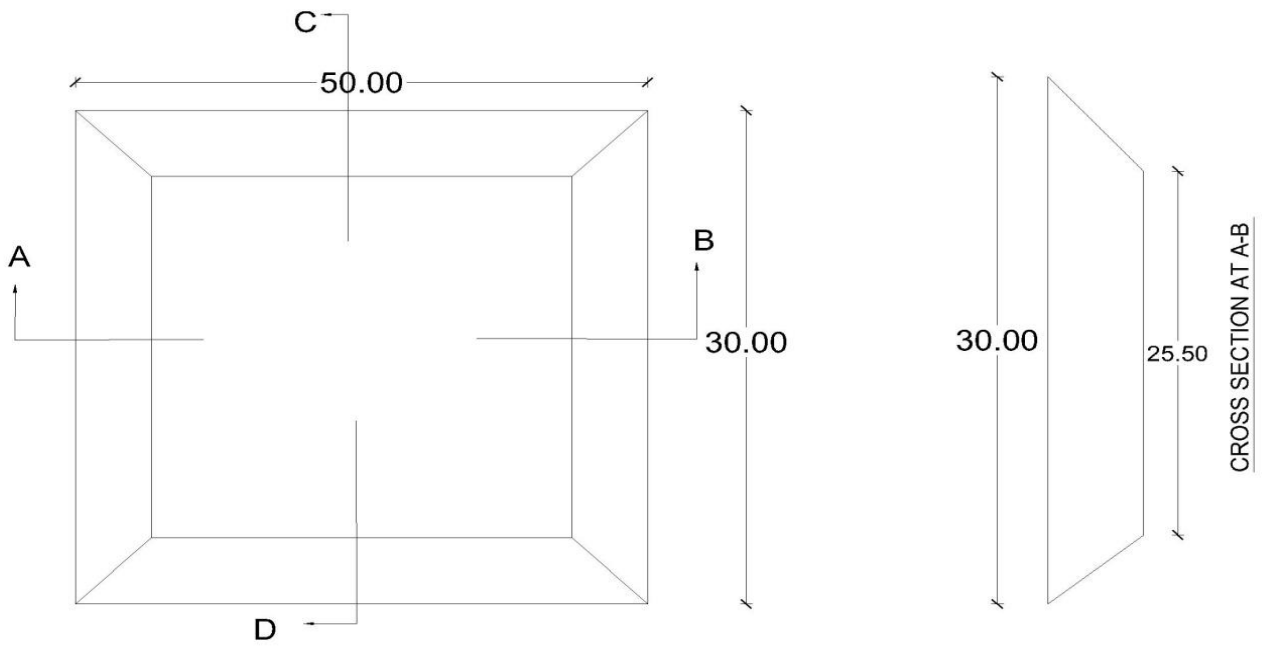
N 25° 22' 06"

Sl no	PARTICULARS	N O	DIMENSION			QTY	UNI T	RAT E (Rs)	AMOUNT (RS)
			L	B	H				
1/2.1 A	Excavation in soil in hilly areas including cutting and trimming of side slopes and disposing of excavated earth with all lift upto 1.5m and a lead upto 20m as per drawing and Technical Specifications Clauses 1603.1. a) Ordinary soil		50.0	30.0	0.3				
		1	0	0	1	457.50	cu.m		
		4	47.7	27.7	0.3	1616.58	cu.m		
			5	5	1				
		1	45.5	25.5	0.3	353.88	cu.m		
			TOTAL			2427.95	cu.m	98	237939.35
2/2.7	Furnishings and laying of the live sods of perenial turf forming grass on embankment slope , verges or other location shown on the drawing or as directed by the Engineer including preperation of ground, stacking the sods and watering as per clause 309. a) Ordinary soil		50.0						
		1	0	2.00		100.00	sqm		
		1	30.0	2.00		60.00	sqm		
			TOTAL			160.00	sqm	48	7680.00
GRAND TOTAL									245619.35

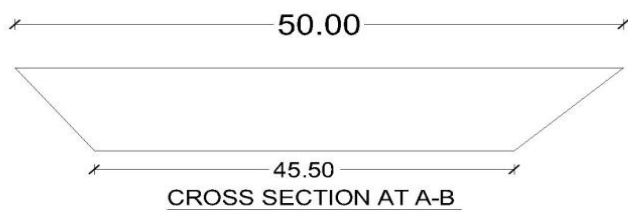
SAY :- Rs. 2,45,620.00

(Rupees Two Lakh Forty Five Thousand Six Hundred Twenty) only.

DRAWING OF PROPOSED DUG OUT POND.



PLAN



NOTES : - ALL DIMENSIONS ARE IN METRES UNLESS SPECIFIED.
SCALE :- 1:50.

COUNTERSIGNED :-

PREPARED BY :-

ESTIMATE FOR CONSTRUCTION OF CHECK DAM AT WAHKAJI(3rd Year)

Rate Based as per Schedule of Rates for Road and Bridges (Other than National Highway Works) for the Year 2012-2013.

Name Of Beneficiaries: Community

Geographical Coordinates: E 91° 15' 6.19"

N 25° 21' 8.55"

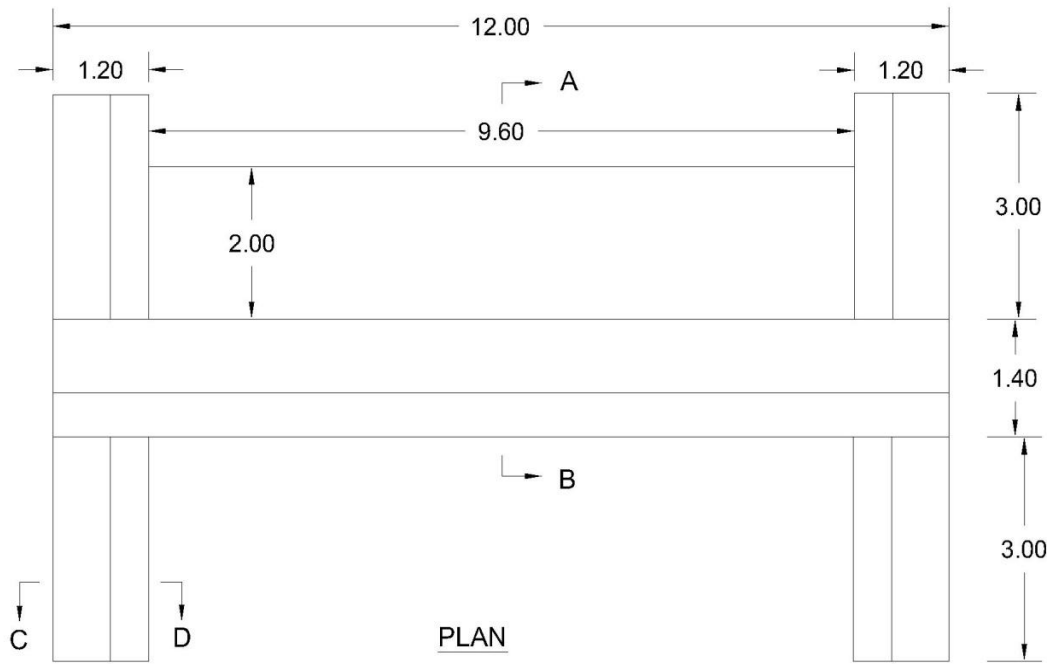
Sl no	PARTICULARS	NO	DIMENSION			QTY	UNI T	RAT E	AMOUNT (RS)
			L	B	H				
1/4.1 B(i).	Earthwork in excavation for structures as per drawings and Technical Clauses 305.1 including setting out construction of shoring and bracing, removal of stumps and other deleterious material and disposal upto a lead of 50m dressing of side and bottom and back filling in trenches with excavated suitable materials. Dam Apron Channel on U/S. W/Walls U/S and D/S	1	12.00	1.40	1.20	20.16	Cu.m		
		1	9.60	2.00	0.25	4.80	Cu.m		
		1	6.00	0.50	0.50	1.50	Cu.m		
		4	3.00	1.20	1.00	14.40	Cu.m		
		TOTAL					40.86	Cu.m	157
2/4.3	Providing concrete for plain/reinforced concrete in open foundations complete as per drawing and technical specifications clauses 802,803,1202,1203. Dam W/WALLS	1	12.00	1.40	0.10	1.68	Cu.m		
		4	3.00	1.20	0.10	1.44	Cu.m		
		TOTAL					3.12	Cu.m	4353
3/4.4	Providing stone masonry work in cement mortar in foundation complete as per drawings and Technical Specification Clauses 702,703,1202,1203. W/WALLS	4	3.00	1.20	0.90	12.96	Cu.m		
		4	3.00	0.85	2.80	28.56	Cu.m		
		TOTAL					41.52	Cu.m	2093
4/7.3	Providing reinforced cement concrete in substructure complete as per drawings and Technical Specification Clauses 802,804,805,806,1202,1204. Dam Apron Channel	1	12.00	1.40	1.20	20.16	Cu.m		
		1	12.00	0.95	2.50	28.50	Cu.m		
		1	9.60	2.00	0.10	1.92	Cu.m		
		1	6.00	0.50	0.10	0.30	Cu.m		
		2	6.00	0.30	0.10	0.36	Cu.m		
		TOTAL					51.24	Cu.m	5818
5/5.1 2	Providing stone pitching with one man size boulders not less than 25cm x 25cm x 30 cm including filling the interstices with spoils and carriages of stone within a distance of 200m completed as directed Apron Channel	1	9.60	2.00	0.25	4.80	Cu.m		
		1	6.00	0.50	0.25	0.75	Cu.m		
		TOTAL					5.55	Cu.m	704
6/9.1 ii	Providing 12mm thick cement plastering including cleaing the surface, curing carriage of sand within 200m complete as per Technical Specification. Dam	1	12.00	2.50		30.00	SQ.M		
		1	12.00	2.59		31.08	SQ.M		
	Apron Channel W/WALLS	1	12.00	0.50		6.00	SQ.M		
		1	9.60	2.00		19.20	SQ.M		
		1	6.00	0.30		1.80	SQ.M		
		2	6.00	0.30		3.60	SQ.M		
		4	3.00	2.80		33.60	SQ.M		
		4	3.00	0.50		6.00	SQ.M		
TOTAL					131.28	SQ.M	157	20610.96	
GRAND TOTAL								429530.22	

Say:

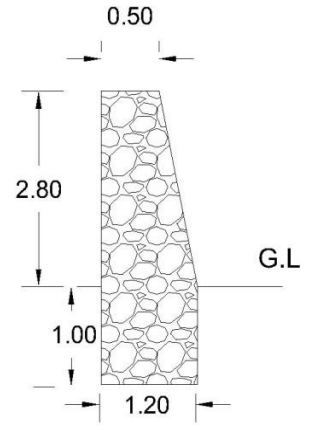
Rs 4,29,530.00

(Rupees Four Lakh Twenty Nine Thousand Five Hundred Thirty) only.

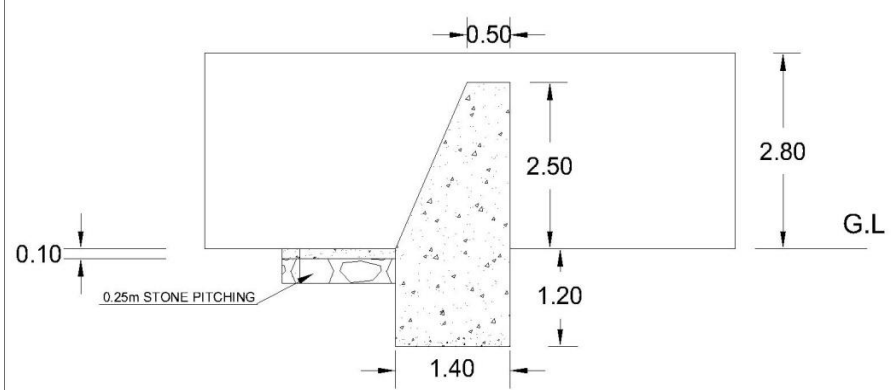
DRAWING FOR PROPOSED CHECK DAM.



PLAN



C/S AT C-D



C/S AT A-B

NOTES :- ALL DIMENSIONS ARE IN METRES UNLESS SPECIFIED.

SCALE :- 1:50.

COUNTERSIGNED :- PREPARED BY :-

ESTIMATE FOR THE CONSTRUCTION OF CHECK DAM AT MAWTHABAH (3rd Year)

(Rates as per Schedule of rates for roads and bridge works for the year 2012-2013)

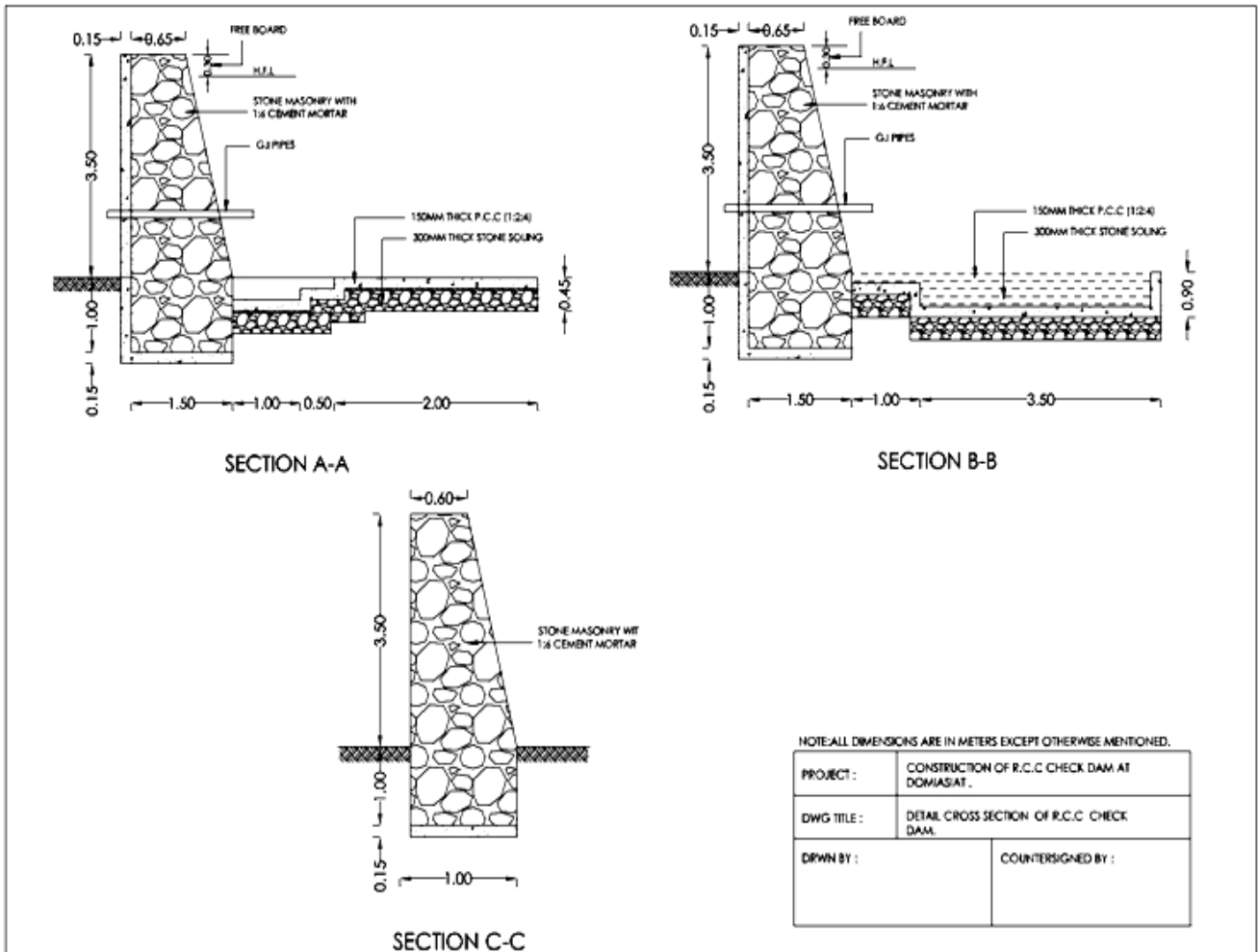
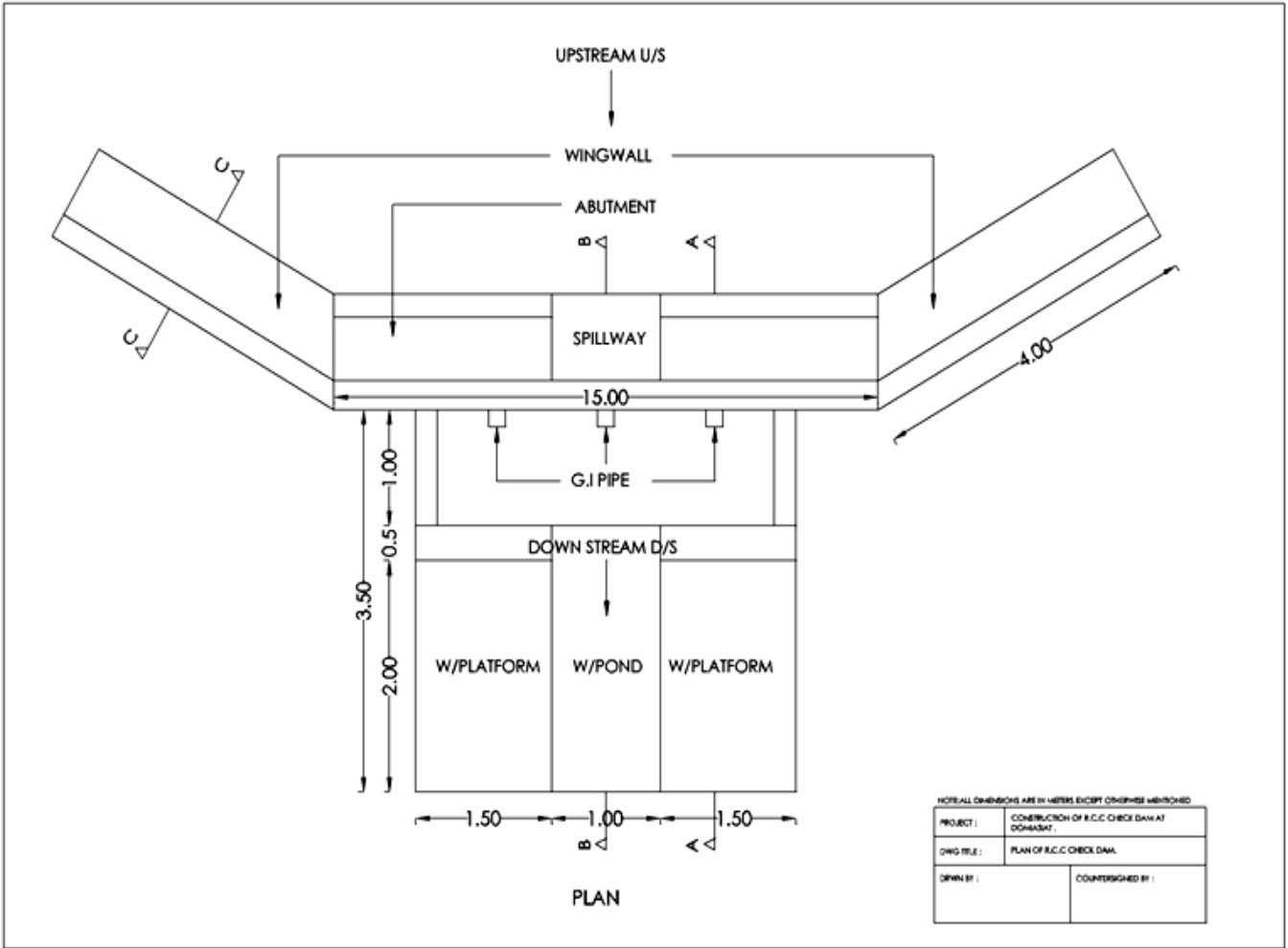
Beneficiaries: Community

Geographical Coordinates: E 91° 09' 49.20"

N 25° 19' 11.45"

Sl/ No	MORD Specification	Particulars	Units	Nos	Length	Breadth	Height	Quantity	Rate	Amount
1/6.1	300	Earthwork in excavation for structure by manual means as per drawing and technical specification Clause 305.1 including setting out, construction of shoring and bracing, removal of stumps and other deleterious material and disposal upto a lead of 50m including dressing the sides and bottom and back filling in trenches with excavated suitable material								
	A	Ordinary soil								
		Upto 3.0m depth without dewatering								
		Abutment		1	15.00	1.65	1.15	28.46		
		W/wall		2	4.00	1.00	1.15	9.20		
		W/platform		2	1.00	1.50	0.75	2.25		
		W/platform		2	1.50	0.50	0.60	0.90		
		W/platform		2	2.00	1.50	0.45	2.70		
		W/pond		1	3.50	1.00	0.90	<u>3.15</u>		
			Cum					46.66	214.00	9,985.78
2/7.8	1200	Back filling behind abutment, wing wall and return wall complete as per drawing and technical specification Clause 1204.3.8								
	(a)	Granular material								
		W/platform		2	2.00	1.50	0.30	1.80		
		W/pond		1	3.50	1.00	0.30	<u>1.05</u>		
			Cum					2.85	756.00	2,154.60
3/7.2	800& 1200	Plain cement concrete in sub-structure complete as per drawings and technical specification Clause 802,804,806,807,1202, 1204								
	A	PCC Grade M15(utop 5.0m ht)								
(i)		Nominal mix 1:2.5:5								
		Abutment bed		1	15.00	1.65	0.15	3.71		
		Abutment wall U/S		1	15.00	0.15	3.15	7.09		
		W/wall bed		2	4.00	1.00	0.15	1.20		
		W/platform		2	1.00	1.50	0.15	0.45		
		W/platform		2	2.00	1.50	0.15	0.90		
		W/platform		2	1.50	0.50	0.15	0.23		
		W/pond		1	3.50	1.00	0.15	0.53		
		W/pond (sides)		1	1.00	0.15	0.50	0.08		
		Deduct spillway		1	2.50	0.15	0.30	<u>-0.11</u>		
			Cum					14.06	4910.00	69046.88

4/7.1	700& 1200	Stone masonry work in cement mortar for sub-structure as per drawing and technical specification clauses 702,704,1202,1204.								
©		Random Rubble Masonry								
(iii)		In cement mortar 1:6								
		Abutment		1	15.00	1.50	1.00	22.50		
		Abutment		1	15.00	$1.5+0.65/2=1.08$	4.50	72.90		
		W/wall		2	4.00	1.00	1.00	8.00		
		W/wall		2	4.00	$1+0.6/2=0.8$	4.50	28.80		
		Deduct spillway		1	2.50	1.50	0.30	<u>-1.13</u>		
			Cum					131.08	2587.00	339091.03
5/2.9(a)		Providing shuttering including centering for flat surface such as slabs,shelves,chajja and for vertical faces such as columns,walls,ends of beams etc with dressed plank not less than 25cm thick firmly fixed etc								
		Abutment wall U/S		1	15.00		5.50	82.50		
		W/pond (sides)		2	2.00		0.65	2.60		
		Do		2		1.50	0.65	<u>1.95</u>		
			Sqm					87.05	389.00	33862.45
6/9.1	600	Providing 12mm thick cement plastering including cleaning the surface, curing and carriage of all materials within 200 m complete as per Technical Specification.(No. plastering is to be done I abutments,wing walls,well piers and retaining walls)								
(iii)		Proportion 1:4								
		Abutment		1	15.00		4.50	67.50		
		Abutment		1	15.00		4.80	72.00		
		Abutment		1	15.00	0.80		12.00		
		Spillway (sides)		2		0.65	0.30	0.39		
		W/wall		2	4.00		2.00	16.00		
		W/wall		2	4.00	0.60		4.80		
		W/platform		2	1.00	1.50		3.00		
		W/platform		2	2.00	1.50		6.00		
		W/platform		2	1.50	0.50		1.50		
		W/pond		1	3.50	1.00		3.50		
		W/pond		2	3.50		0.45	3.15		
		W/pond (sides)		2		1.00	0.45	0.90		
		Deduct spillway		1	2.50		0.30	<u>0.75</u>		
			Sqm					191.49	137.00	<u>26234.13</u>
									Total	480374.86
									Say	480375.00
(Rupees Four Lakh Eighty Thousand Three Hundred Seventy Five Only)										



ESTIMATE FOR THE CONSTRUCTION OF CHECK DAM AT NEWPHANWER(Tangshot-Dibai) (3rd Year)
(Rates as per Schedule of rates for roads and bridge works for the year 2012-2013)

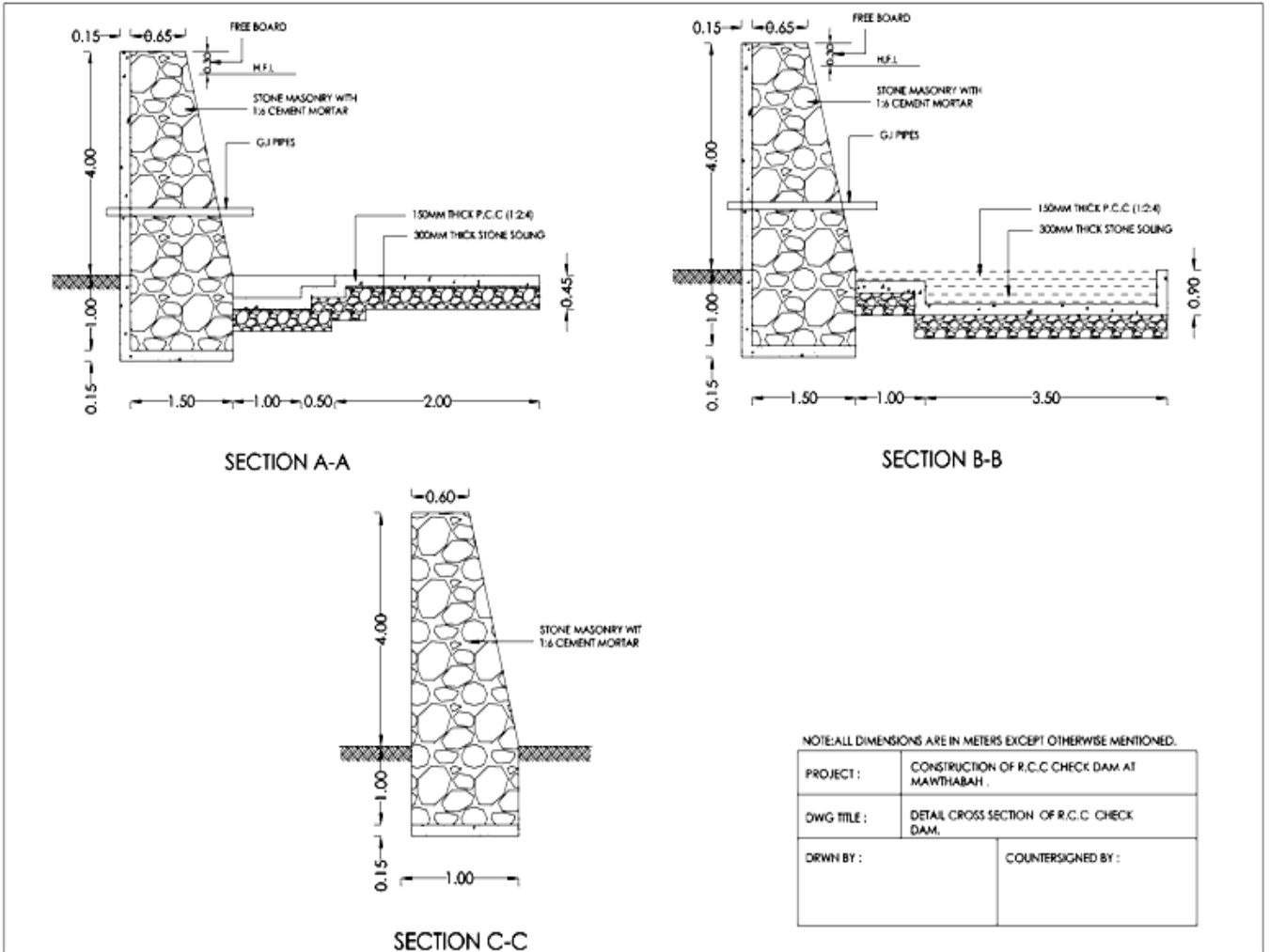
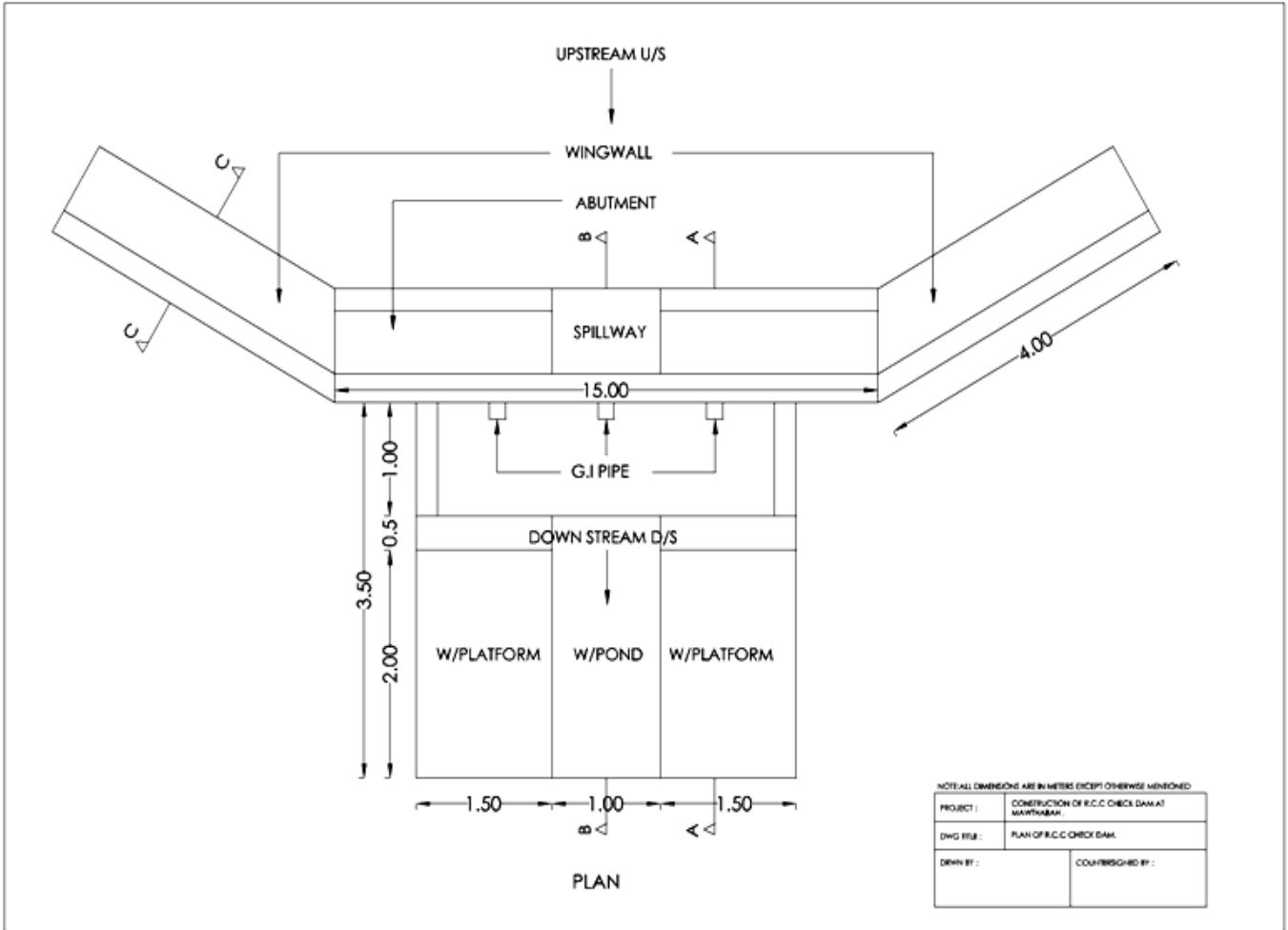
Name Of Beneficiaries: Community

Geographical Coordinates: E 91° 13' 28.5"

N 25° 17' 27.2"

Sl/ No	MORD Specification	Particulars	Units	Nos	Length	Breadth	Height	Quantity	Rate	Amount
1/6.1	300	Earthwork in excavation for structure by manual means as per drawing and technical specification Clause 305.1 including setting out, construction of shoring and bracing, removal of stumps and other deleterious material and disposal upto a lead of 50m including dressing the sides and bottom and back filling in trenches with excavated suitable material								
	A	Ordinary soil								
		Upto 3.0m depth without dewatering								
		Abutment		1	15.00	1.65	1.15	28.46		
		W/wall		2	4.00	1.00	1.15	9.20		
		W/platform		2	1.00	1.50	0.75	2.25		
		W/platform		2	1.50	0.50	0.60	0.90		
		W/platform		2	2.00	1.50	0.45	2.70		
		W/pond		1	3.50	1.00	0.90	<u>3.15</u>		
			Cum					46.66	214.00	9,985.78
2/7.8	1200	Back filling behind abutment, wing wall and return wall complete as per drawing and technical specification Clause 1204.3.8								
	(a)	Granular material								
		W/platform		2	2.00	1.50	0.30	1.80		
		W/pond		1	3.50	1.00	0.30	<u>1.05</u>		
			Cum					2.85	756.00	2,154.60
3/7.2	800& 1200	Plain cement concrete in sub-structure complete as per drawings and technical specification Clause 802,804,806,807,1202, 1204								
	A	PCC Grade M15(upto 5.0m ht)								
	(i)	Nominal mix 1:2.5:5								
		Abutment bed		1	15.00	1.65	0.15	3.71		
		Abutment wall U/S		1	15.00	0.15	3.15	7.09		
		W/wall bed		2	4.00	1.00	0.15	1.20		
		W/platform		2	1.00	1.50	0.15	0.45		
		W/platform		2	2.00	1.50	0.15	0.90		
		W/platform		2	1.50	0.50	0.15	0.23		
		W/pond		1	3.50	1.00	0.15	0.53		
		W/pond (sides)		1	1.00	0.15	0.50	0.08		
		Deduct spillway		1	2.50	0.15	0.30	<u>-0.11</u>		
			Cum					14.06	4910.00	69046.88

4/7.1	700& 1200	Stone masonry work in cement mortar for sub-structure as per drawing and technical specification clauses 702,704,1202,1204.								
©		Random Rubble Masonry								
(iii)		In cement mortar 1:6								
		Abutment		1	15.00	1.50	1.00	22.50		
		Abutment		1	15.00	$1.5+0.65/2=1.08$	4.50	72.90		
		W/wall		2	4.00	1.00	1.00	8.00		
		W/wall		2	4.00	$1+0.6/2=0.8$	4.50	28.80		
		Deduct spillway		1	2.50	1.50	0.30	<u>-1.13</u>		
			Cum					131.08	2587.00	339091.03
5/2.9(a)		Providing shuttering including centering for flat surface such as slabs,shelves,chajja and for vertical faces such as columns,walls,ends of beams etc with dressed plank not less than 25cm thick firmly fixed etc								
		Abutment wall U/S		1	15.00		5.50	82.50		
		W/pond (sides)		2	2.00		0.65	2.60		
		Do		2		1.50	0.65	<u>1.95</u>		
			Sqm					87.05	389.00	33862.45
6/9.1	600	Providing 12mm thick cement plastering including cleaning the surface, curing and carriage of all materials within 200 m complete as per Technical Specification.(No. plastering is to be done I abutments,wing walls,well piers and retaining walls)								
(iii)		Proportion 1:4								
		Abutment		1	15.00		4.50	67.50		
		Abutment		1	15.00		4.80	72.00		
		Abutment		1	15.00	0.80		12.00		
		Spillway (sides)		2		0.65	0.30	0.39		
		W/wall		2	4.00		2.00	16.00		
		W/wall		2	4.00	0.60		4.80		
		W/platform		2	1.00	1.50		3.00		
		W/platform		2	2.00	1.50		6.00		
		W/platform		2	1.50	0.50		1.50		
		W/pond		1	3.50	1.00		3.50		
		W/pond		2	3.50		0.45	3.15		
		W/pond (sides)		2		1.00	0.45	0.90		
		Deduct spillway		1	2.50		0.30	<u>0.75</u>		
			Sqm					191.49	137.00	<u>26234.13</u>
									Total	480374.86
									Say	480375.00
(Four Lakh Eighty Thousand Three Hundred Seventy Five Only)										



Detail estimate for the construction of Protection wall at Wahkaji (3rd Year)

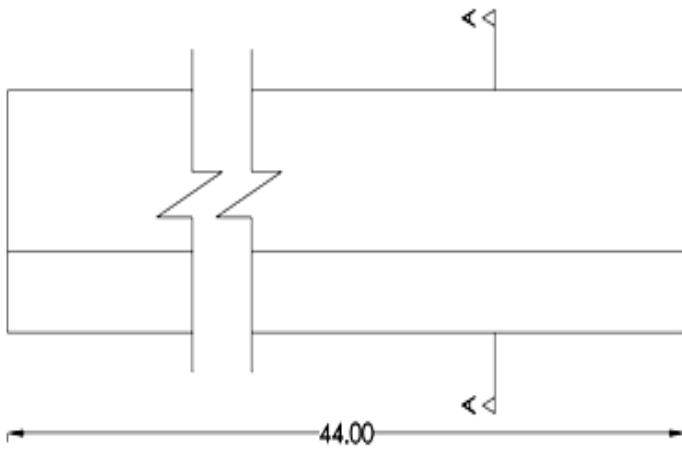
(Rates as per Schedule of rates for roads and bridge works for the year 2012-2013)

Name Of Beneficiaries: Community

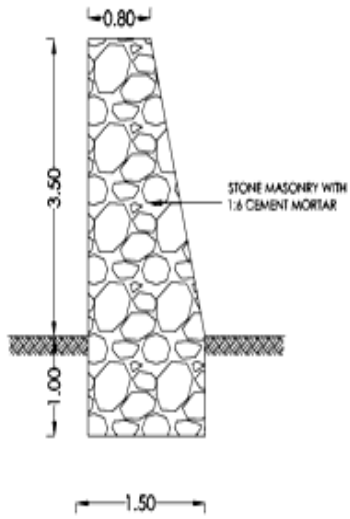
Geographical Coordinates: E 91° 15' 6.48"

N 25° 22' 9.06"

Sl/No	MORD Specification	Particulars	Units	Nos	Length	Breadth	Height	Quantity	Rate	Amount
1/4.1(a)	300	Earthwork in excavation for structures as per drawing and Technical Specification Clause 305.1 including setting out construction of shoring and bracing, removal of stumps and other deleterious materials and disposal upto a lead of 50 m dressing of side and bottom and back filling in trenches with excavated suitable material.								
		Ordinary Soil								
(i)		Upto 3 m depth								
		Protection wall	Cum		44.00	1.50	1.00	66.00	118.00	7788
2/4.4	700& 1200	Stone masonry work in foundation complete as per drawing and Technical Specification Clauses 702,704,1202,1203.								
(B)(ii)		Random Rubble Masonry								
		In cement mortar 1:6								
		Protection wall			44.00	1.50	1.00	66.00		
		Do			44.00	1.5+0.8/2=1.15	3.50	177.10		
			Cum					243.10	2029.00	4,93,249.90
								Total		5,01,037.90
								Say		5,01,038.00
		(Rupees Five Lakh One Thousand Thirty Eight Only)								



PLAN



SECTION A-A

NOTE: ALL DIMENSIONS ARE IN METERS EXCEPT OTHERWISE MENTIONED.

PROJECT :	CONSTRUCTION OF PROTECTION WALL AT WAHKAJI .	
DWG TITLE :	PLAN & CROSS SECTION OF A PROTECTION WALL.	
DRWN BY :	COUNTERSIGNED BY :	

ESTIMATE FOR THE CONSTRUCTION OF CHECK DAM AT NONGMALANG (3rd Year)
(Rates as per Schedule of rates for roads and bridge works for the year 2012-2013)

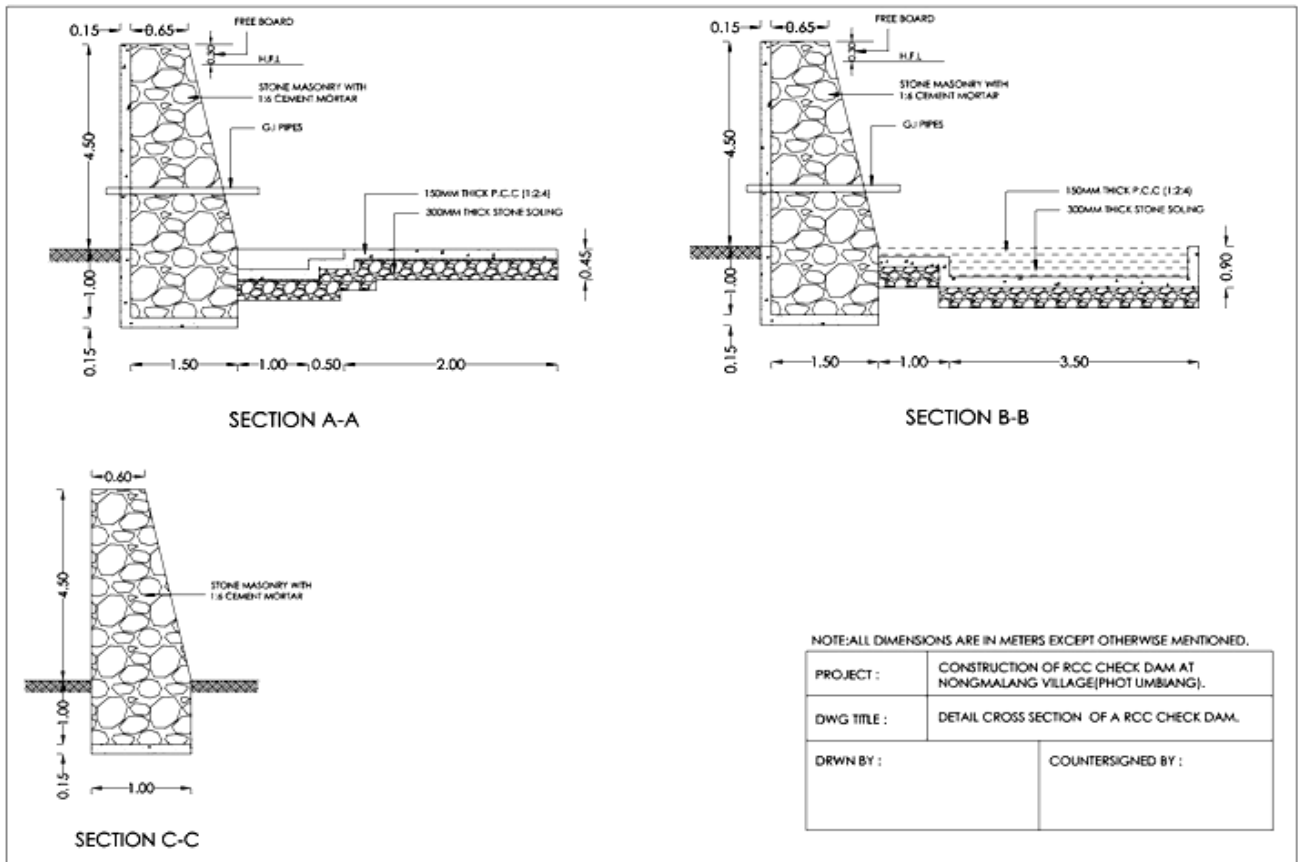
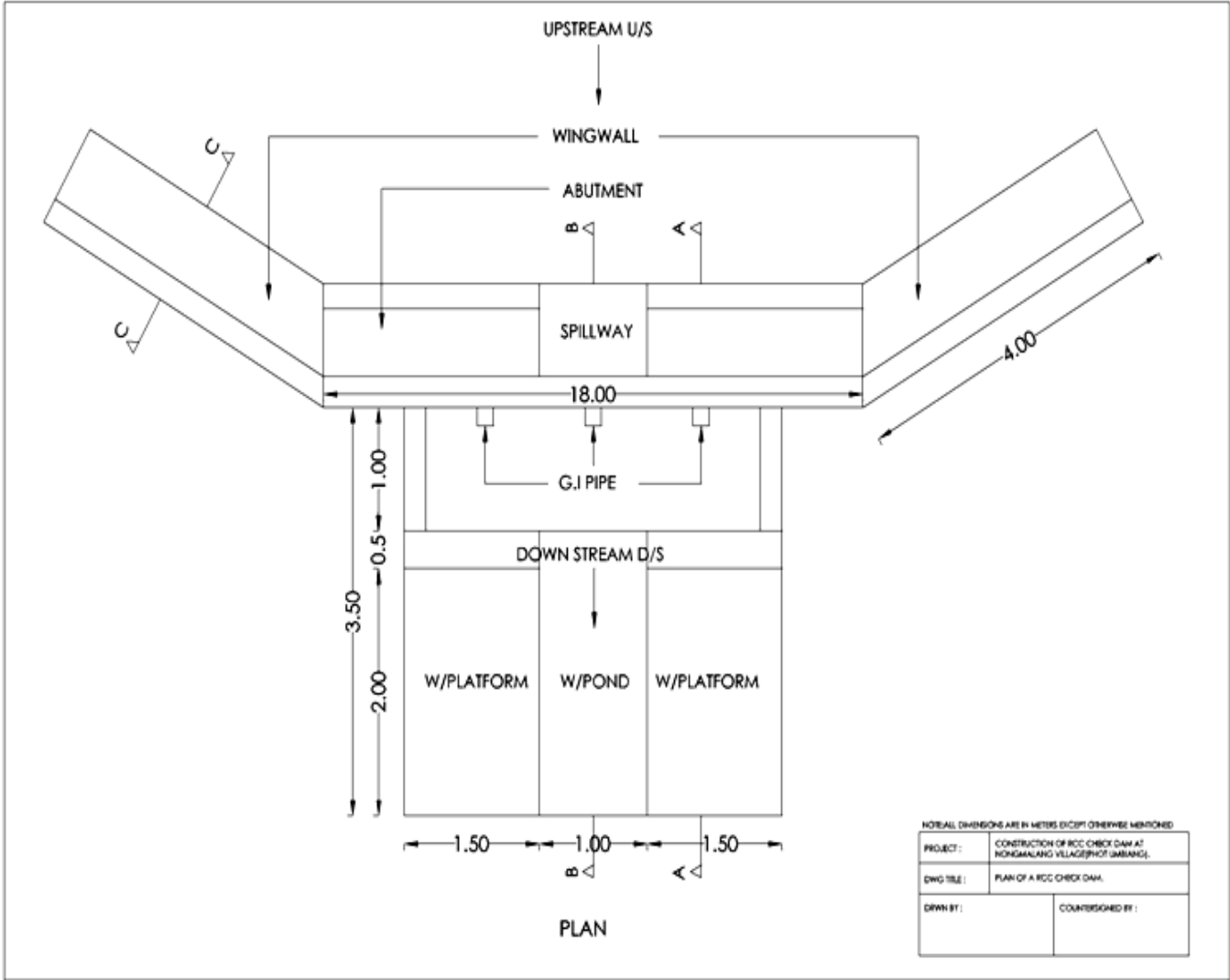
Name Of Beneficiaries: Community

Geographical Coordinates: E 91° 11' 3.16"

N 25° 17' 3.18"

Sl/No	MORD Specification	Particulars	Units	Nos	Length	Breadth	Height	Quantity	Rate	Amount
1/6.1	300	Earthwork in excavation for structure by manual means as per drawing and technical specification Clause 305.1 including setting out, construction of shoring and bracing, removal of stumps and other deleterious material and disposal upto a lead of 50m including dressing the sides and bottom and back filling in trenches with excavated suitable material								
	A	Ordinary soil								
		Upto 3.0m depth without dewatering								
		Abutment		1	18.00	1.65	1.15	34.16		
		W/wall		2	4.00	1.00	1.15	9.20		
		W/platform		2	1.00	1.50	0.75	2.25		
		W/platform		2	1.50	0.50	0.60	0.90		
		W/platform		2	2.00	1.50	0.45	2.70		
		W/pond		1	3.50	1.00	0.90	<u>3.15</u>		
			Cum					52.36	214.00	11,203.97
2/7.8	1200	Back filling behind abutment, wing wall and return wall complete as per drawing and technical specification Clause 1204.3.8								
	(a)	Granular material								
		W/platform		2	2.00	1.50	0.30	1.80		
		W/pond		1	3.50	1.00	0.30	<u>1.05</u>		
			Cum					2.85	756.00	2,154.60
3/7.2	800& 1200	Plain cement concrete in sub-structure complete as per drawings and technical specification Clause 802,804,806,807,1202, 1204								
	A	PCC Grade M15(uotp 5.0m ht)								
	(i)	Nominal mix 1:2.5:5								
		Abutment bed		1	18.00	1.65	0.15	4.46		
		Abutment wall U/S		1	18.00	0.15	3.15	8.51		
		W/wall bed		2	4.00	1.00	0.15	1.20		
		W/platform		2	1.00	1.50	0.15	0.45		
		W/platform		2	2.00	1.50	0.15	0.90		
		W/platform		2	1.50	0.50	0.15	0.23		
		W/pond		1	3.50	1.00	0.15	0.53		
		W/pond (sides)		1	1.00	0.15	0.50	0.08		
		Deduct spillway		1	2.50	0.15	0.30	<u>-0.11</u>		
			Cum					16.22	4910.00	79652.48

4/7. 1	700& 1200	Stone masonry work in cement mortar for sub-structure as per drawing and technical specification clauses 702,704,1202,1204.								
©		Random Rubble Masonry								
(iii)		In cement mortar 1:6								
		Abutment		1	18.00	1.50	1.00	27.00		
		Abutment		1	18.00	$1.5+0.65/2=1.08$	4.50	87.48		
		W/wall		2	4.00	1.00	1.00	8.00		
		W/wall		2	4.00	$1+0.6/2=0.8$	4.50	28.80		
		Deduct spillway		1	2.50	1.50	0.30	<u>-1.13</u>		
			Cum					150.16	2587.00	388450.99
5/2. 9 (a)		Providing shuttering including centering for flat surface such as slabs,shelves,chajja and for vertical faces such as columns,walls,ends of beams etc with dressed plank not less than 25cm thick firmly fixed etc								
		Abutment wall U/S		1	18.00		5.50	99.00		
		W/pond (sides)		2	2.00		0.65	2.60		
		Do		2		1.50	0.65	<u>1.95</u>		
			Sqm					103.55	389.00	40280.95
6/9. 1	600	Providing 12mm thick cement plastering including cleaning the surface, curing and carriage of all materials within 200 m complete as per Technical Specification.(No. plastering is to be done I abutments,wing walls,well piers and retaining walls)								
(iii)		Proportion 1:4								
		Abutment		1	18.00		4.50	81.00		
		Abutment		1	18.00		4.80	86.40		
		Abutment		1	18.00	0.80		14.40		
		Spillway (sides)		2		0.65	0.30	0.39		
		W/wall		2	4.00		2.00	16.00		
		W/wall		2	4.00	0.60		4.80		
		W/platform		2	1.00	1.50		3.00		
		W/platform		2	2.00	1.50		6.00		
		W/platform		2	1.50	0.50		1.50		
		W/pond		1	3.50	1.00		3.50		
		W/pond		2	3.50		0.45	3.15		
		W/pond (sides)		2		1.00	0.45	0.90		
		Deduct spillway		1	2.50		0.30	<u>0.75</u>		
			Sqm					221.79	137.00	<u>30385.23</u>
									Total	552128.21
									Say	552128.00
(Rupees Five Lakh Fifty Two Thousand One Hundred Twenty Eight Only)										



ESTIMATE FOR CONSTRUCTION OF WATER HARVESTING STRUCTURE CUM WASHING PLACE AT WAHKAJI (3rd Year)

Rate Based as per Schedule of Rates for Road and Bridges (Other than National Highway Works) for the Year 2012-2013.

Beneficiaries: Shri Heslandar L Sangriang

Geographical Coordinates: E 91° 15' 40.25"

N 25° 22' 2.29"

Sl no	PARTICULARS	NO	DIMENSION			QTY	UNIT	RATE	AMOUNT
			L	B	H				
1/4.1 B(i).	Earthwork in excavation for structures as per drawings and Technical Clauses 305.1 including setting out construction of shoring and bracing, removal of stumps and other deleterious material and disposal upto a lead of 50m dressing of side and bottom and back filling in trenches with excavated suitable materials. Dam W/Walls U/S .	1	25.00	1.40	1.20	42.00	Cu.m		
		2	3.00	1.20	1.00	7.20	Cu.m		
		TOTAL					49.20	Cu.m	157
2/4.3	Providing concrete for plain/reinforced concrete in open foundations complete as per drawing and technical specifications clauses 802,803,1202,1203. Dam W/WALLS	1	25.00	1.40	0.10	3.50	Cu.m		
		2	3.00	1.20	0.10	0.72	Cu.m		
		TOTAL					4.22	Cu.m	4353
3/4.4	Providing stone masonry work in cement mortar in foundation complete as per drawings and Technical Specification Clauses 702,703,1202,1203. W/WALLS	2	3.00	1.20	0.90	6.48	Cu.m		
		2	3.00	0.85	3.10	15.81	Cu.m		
							22.29	Cu.m	2093
4/7.3	Providing reinforced cement concrete in substructure complete as per drawings and Technical Specification Clauses 802,804,805,806,1202,1204. Dam	1	25.00	1.40	1.20	42.00	Cu.m		
		1	25.00	1.00	2.80	70.00	Cu.m		
		TOTAL					112.00	Cu.m	5818
5/9.1 ii	Providing 12mm thick cement plastering including cleaing the surface, curing carriage of sand within 200m complete as per Technical Specification. Dam W/WALLS	1	25.00	2.80		70.00	SQ.M		
		1	25.00	2.89		72.25	SQ.M		
		1	25.00	0.60		15.00	SQ.M		
		2	3.00	3.10		18.60	SQ.M		
		2	3.00	0.50		3.00	SQ.M		
		TOTAL					178.85	SQ.M	157

GRAND TOTAL

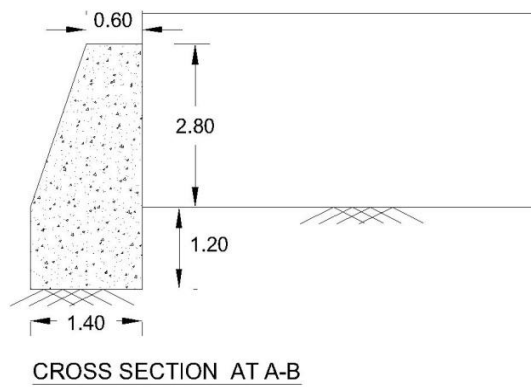
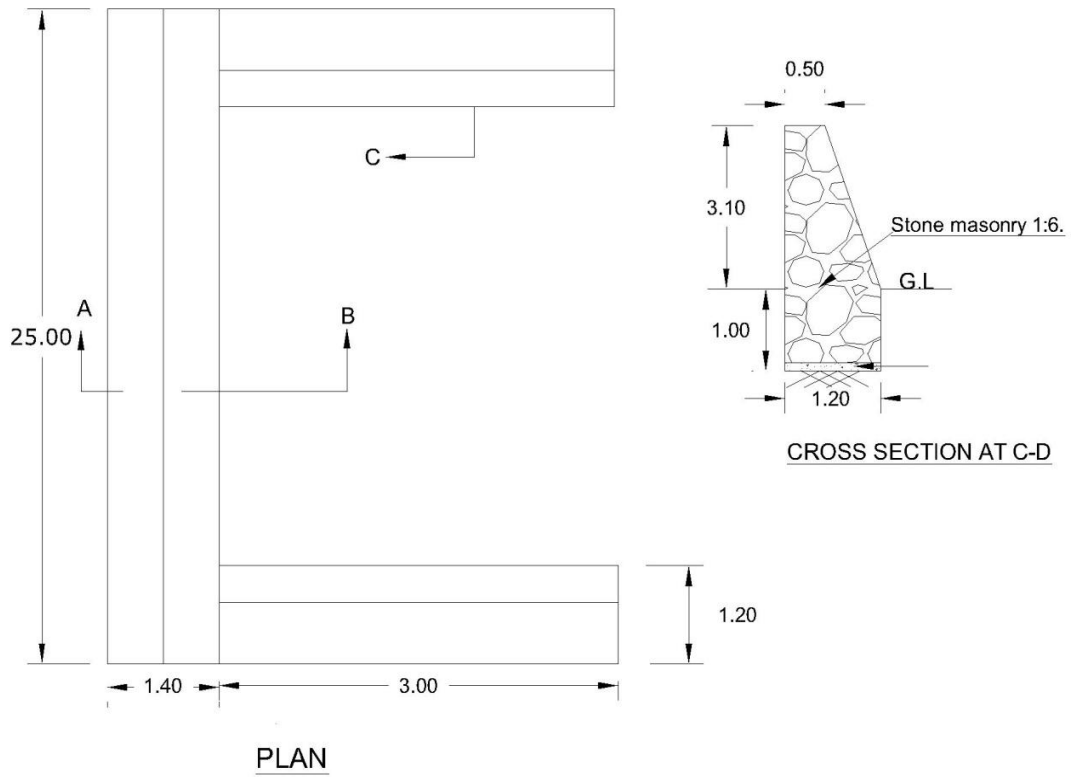
752442.48

Say

Rs 7,52,450.00

(Rupees Seven Lakh Fifty Two Thousand Fifty) only.

PROPOSED WATER HARVESTING STRUCTURE.



NOTES :-
ALL DIMENSIONS ARE IN METRES UNLESS SPECIFIED.
SCALE :- 1:50.

COUNTERSIGNED:-

PREPARED BY :-

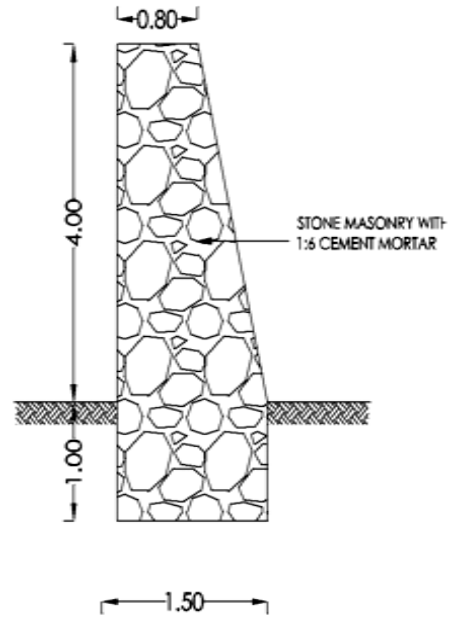
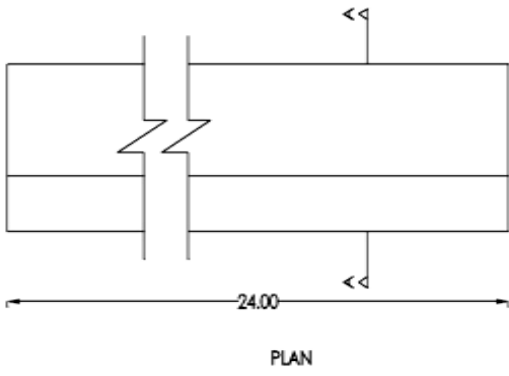
**Detail estimate for the construction of Protection wall at Domiasiat.(4th Year)
(Rates as per Schedule of rates for roads and bridge works for the year 2012-2013)**

Name Of Beneficiaries: Community

Geographical Coordinates: E 91° 13' 37.9"

N 25° 20' 5.09"

Sl/No	MORD Specification	Particulars	Units	Nos	Length	Breadth	Height	Quantity	Rate	Amount
1/4.1(a)	300	Earthwork in excavation for structures as per drawing and Technical Specification Clause 305.1 including setting out construction of shoring and bracing,removal of stumps and other deleterious materials and disposal upto a lead of 50 m dressing of side and bottom and back filling in trenches with excavated suitable material.								
		Ordinary Soil								
(i)		Upto 3 m depth								
		Protection wall	Cum		37.00	1.50	1.00	55.50	118.00	6549
2/4.4	700&1200	Stone masonry work in foundation complete as per drawing and Technical Specification Clauses 702,704,1202,1203.								
(B)(ii)		Random Rubble Masonry								
		In cement mortar 1:6								
		Protection wall			37.00	1.50	1.00	55.50		
		Do			37.00	1.5+0.8/2=1.15	4.00	<u>170.20</u>		
			Cum					225.70	2029.00	<u>4,57,945.30</u>
								Total		4,64,494.30
									Say	4,64,494.00
(Rupees Four Lakh Sixty Four Thousand Four Hundred Ninety Four Only)										



SECTION A-A

NOTE: ALL DIMENSIONS ARE IN METERS EXCEPT OTHERWISE MENTIONED.

PROJECT :	CONSTRUCTION OF PROTECTION WALL AT DOMIASIAT .	
DWG TITLE :	PLAN & CROSS SECTION OF A PROTECTION WALL	
DRWN BY :		COUNTERSIGNED BY :

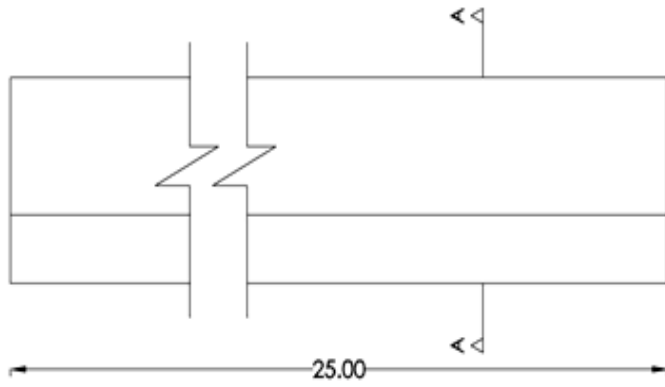
Detail estimate for the construction of Protection wall at Langpa(4th Year)
(Rates as per Schedule of rates for roads and bridge works for the year 2012-2013)

Name Of Beneficiaries: Community

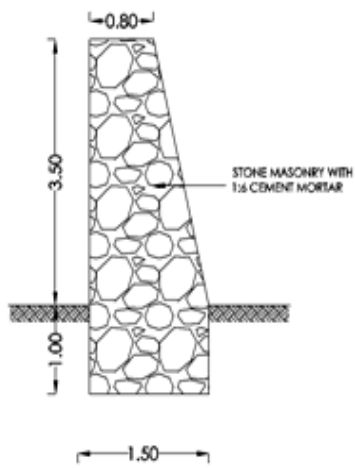
Geographical Coordinates: E 91° 13' 31.4"

N 25° 16' 22.7"

Sl/No	MORD Specification	Particulars	Units	Nos	Length	Breadth	Height	Quantity	Rate	Amount
1/4.1(a)	300	Earthwork in excavation for structures as per drawing and Technical Specification Clause 305.1 including setting out construction of shoring and bracing,removal of stumps and other deleterious materials and disposal upto a lead of 50 m dressing of side and bottom and back filling in trenches with excavated suitable material.								
		Ordinary Soil								
(i)		Upto 3 m depth								
		Protection wall	Cum		25.00	1.50	1.00	37.50	118.00	4425
2/4.4	700& 1200	Stone masonry work in foundation complete as per drawing and Technical Specification Clauses 702,704,1202,1203.								
(B)		Random Rubble Masonry								
(ii)		In cement mortar 1:6								
		Protection wall			25.00	1.50	1.00	37.50		
		Do			25.00	1.5+0.8/2=1.15	3.50	<u>100.63</u>		
			Cum					138.13	2029.00	<u>2,80,255.63</u>
								Total		2,84,680.63
								Say		2,84,681.00
		(Rupees Two Lakh Eighty Four Thousand Six Hundred Eighty One Only)								



PLAN



SECTION A-A

NOTE: ALL DIMENSIONS ARE IN METERS EXCEPT OTHERWISE MENTIONED.

PROJECT :	CONSTRUCTION OF PROTECTION WALL AT WAHKAJI .
DWG TITLE :	PLAN & CROSS SECTION OF A PROTECTION WALL.
DRWN BY :	COUNTERSIGNED BY :

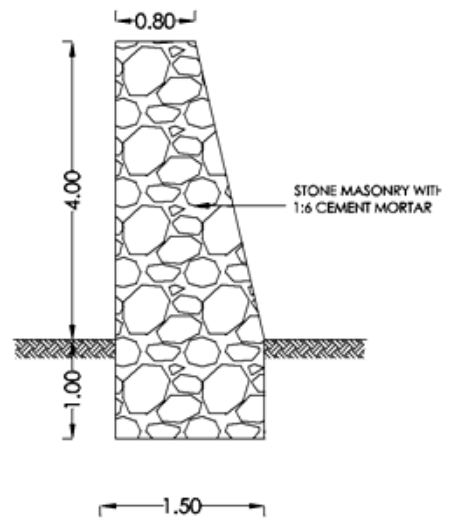
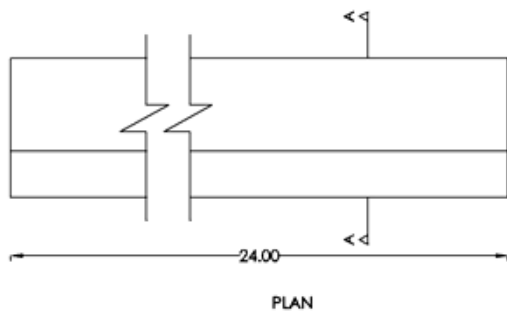
Detail estimate for the construction of Protection wall at Newphanwer.(4th Year)
(Rates as per Schedule of rates for roads and bridge works for the year 2012-2013)

Name Of Beneficiaries: Community

Geographical Coordinates: E 91° 13' 36.7"

N 25° 17' 00.8"

Sl/No	MORD Specification	Particulars	Units	No	Length	Breadth	Height	Quantity	Rate	Amount
1/4.1(a)	300	Earthwork in excavation for structures as per drawing and Technical Specification Clause 305.1 including setting out construction of shoring and bracing,removal of stumps and other deleterious materials and disposal upto a lead of 50 m dressing of side and bottom and back filling in trenches with excavated suitable material.								
		Ordinary Soil								
(i)		Upto 3 m depth								
		Protection wall	Cum		24.00	1.50	1.00	36.00	118.00	4248
2/4.4	700& 1200	Stone masonry work in foundation complete as per drawing and Technical Specification Clauses 702,704,1202,1203 .								
(B)		Random Rubble Masonry								
(ii)		In cement mortar 1:6								
		Protection wall			24.00	1.50	1.00	36.00		
		Do			24.00	1.5+0.8/2=1.15	4.00	110.40		
			Cum					146.40	2029.00	2,97,045.60
								Total		3,01,293.60
									Say	3,01,294.00
		(Rupees Three Lakh One Thousand Two Hundred Ninety Four Only)								



SECTION A-A

NOTE: ALL DIMENSIONS ARE IN METERS EXCEPT OTHERWISE MENTIONED.

PROJECT :	CONSTRUCTION OF PROTECTION WALL AT DOMIASIAT .
DWG TITLE :	PLAN & CROSS SECTION OF A PROTECTION WALL.
DRWN BY :	COUNTERSIGNED BY :

ESTIMATE FOR CONSTRUCTION OF CHECK DAM PHUD RANGKHLIEH.(4th Year)

Rate Based as per Schedule of Rates for Road and Bridges (Other than National Highway Works) for the Year 2012-2013.

Name Of Beneficiaries: Community

Geographical Coordinates: E 91° 13' 35.0"

N 25° 16' 22.7"

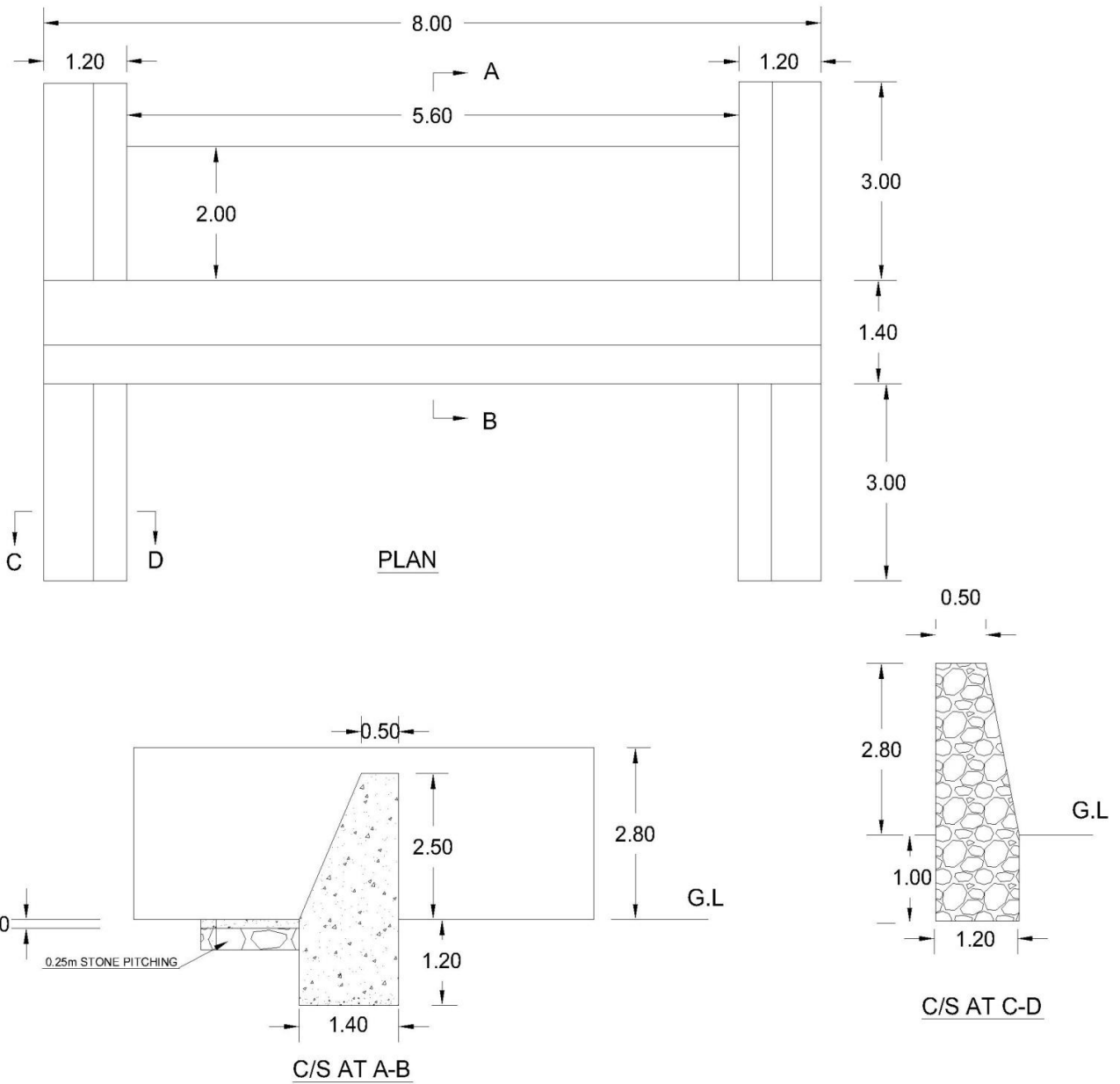
Sl no	PARTICULARS	NO	DIMENSION			QTY	UNIT	RATE	AMOUNT (RS)
			L	B	H				
1/4.1 B(i).	Earthwork in excavation for structures as per drawings and Technical Clauses 305.1 including setting out construction of shoring and bracing, removal of stumps and other deleterious material and disposal upto a lead of 50m dressing of side and bottom and back filling in trenches with excavated suitable materials. Dam Apron Channel on U/S. W/Walls U/S and D/S	1	8.00	1.40	1.20	13.44	Cu.m		
		1	5.60	2.00	0.25	2.80	Cu.m		
		1	6.00	0.50	0.50	1.50	Cu.m		
		4	3.00	1.20	1.00	14.40	Cu.m		
		TOTAL						32.14	Cu.m
2/4.3	Providing concrete for plain/reinforced concrete in open foundations complete as per drawing and technical specifications clauses 802,803,1202,1203. Dam W/WALLS	1	8.00	1.40	0.10	1.12	Cu.m		
		4	3.00	1.20	0.10	1.44	Cu.m		
		TOTAL						2.56	Cu.m
3/4.4	Providing stone masonry work in cement mortar in foundation complete as per drawings and Technical Specification Clauses 702,703,1202,1203. W/WALLS	4	3.00	1.20	0.90	12.96	Cu.m		
		4	3.00	0.85	2.80	28.56	Cu.m		
		TOTAL						41.52	Cu.m
4/7.3	Providing reinforced cement concrete in substructure complete as per drawings and Technical Specification Clauses 802,804,805,806,1202,1204. Dam Apron Channel	1	8.00	1.40	1.20	13.44	Cu.m		
		1	8.00	0.95	2.50	19.00	Cu.m		
		1	5.60	2.00	0.10	1.12	Cu.m		
		1	6.00	0.50	0.10	0.30	Cu.m		
		2	6.00	0.30	0.10	0.36	Cu.m		
		TOTAL						34.22	Cu.m
5/5.12	Providing stone pitching with one man size boulders not less than 25cm x 25cm x 30 cm including filling the interstices with spoils and carriages of stone within a distance of 200m completed as directed Apron Channel	1	5.60	2.00	0.25	2.80	Cu.m		
		1	6.00	0.50	0.25	0.75	Cu.m		
		TOTAL						3.55	Cu.m
6/9.1 ii	Providing 12mm thick cement plastering including cleaing the surface, curing carriage of sand within 200m complete as per Technical Specification. Dam	1	8.00	2.50		20.00	SQ.M		
	Apron Channel W/WALLS	1	8.00	2.59		20.72	SQ.M		
		1	8.00	0.50		4.00	SQ.M		
		1	5.60	2.00		11.20	SQ.M		
		1	6.00	0.30		1.80	SQ.M		
		2	6.00	0.30		3.60	SQ.M		
		4	3.00	2.80		33.60	SQ.M		
		4	3.00	0.50		6.00	SQ.M		
TOTAL						100.92	SQ.M	157	15844.44
GRAND TOTAL									320526.62

Say:

Rs 3,20,530.00

(Rupees Three Lakh Twenty Thousand Five Hundred Thirty) only.

DRAWING FOR PROPOSED CHECK DAM.



NOTES :- ALL DIMENSIONS ARE IN METRES UNLESS SPECIFIED.
SCALE :- 1:50.

COUNTERSIGNED :- PREPARED BY :-

ESTIMATE FOR CONSTRUCTION OF DUG OUT POND AT MAWTHABAH .(4th Year)

(Rate Based as per MPWD scheduled or rates for Roads and Bridges (other than National Highway works), for the year 2012-2013.

Beneficiaries: Shri Yondarling L.Sangriang

Geographical Coordinates: E 91° 11' 19.6"

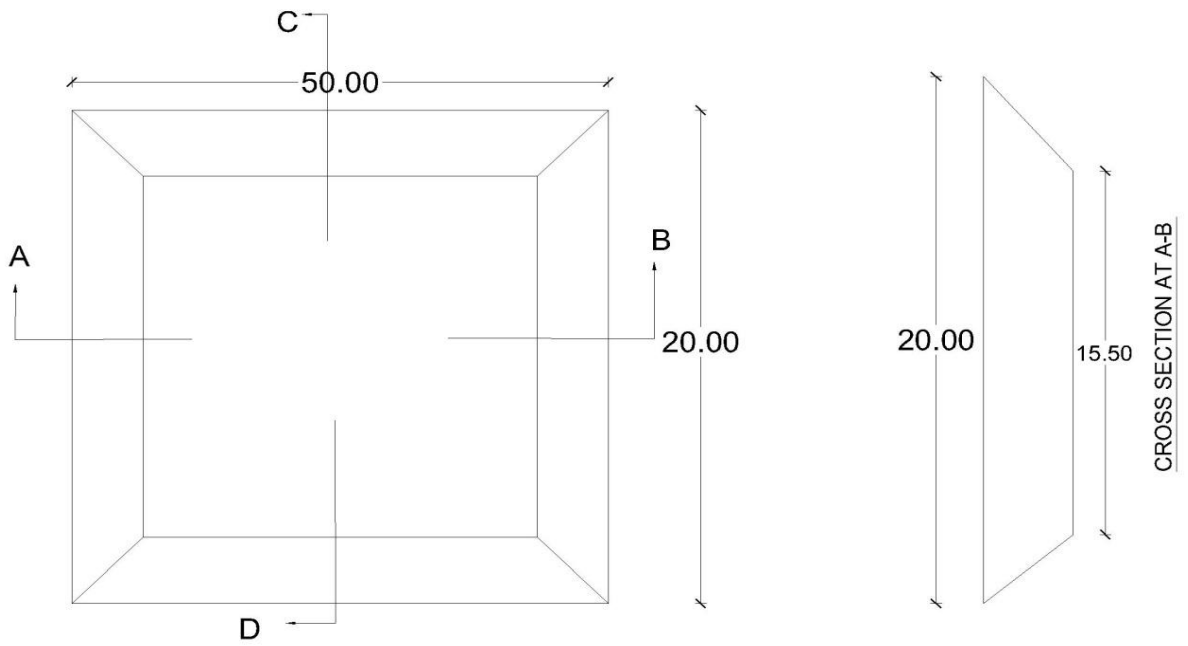
N 25° 18' 06.5"

Sl no	PARTICULARS	NO	DIMENSION			QTY	UNIT	RATE (Rs)	AMOUNT (RS)
			L	B	H				
1/2.1 A	Excavation in soil in hilly areas including cutting and trimming of side slopes and disposing of excavated earth with all lift upto 1.5m and a lead upto 20m as per drawing and Technical Specifications Clauses 1603.1. a) Ordinary soil	1	40.00	15.00	0.31	183.00	cu.m		
		4	37.75	12.75	0.31	587.20	cu.m		
		1	35.50	10.50	0.31	113.69	cu.m		
		TOTAL					883.89	cu.m	98
2/2.7	Furnishings and laying of the live sods of perenial turf forming grass on embankment slope , verges or other location shown on the drawing or as directed by the Engineer including preperation of ground, stacking the sods and watering as per clause 309. a) Ordinary soil	1	40.00	2.00		80.00	sqm		
		1	15.00	2.00		30.00	sqm		
		TOTAL					110.00	sqm	48
GRAND TOTAL								91901.22	

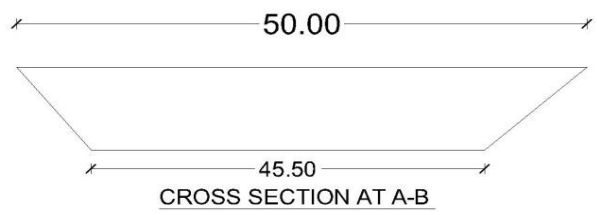
SAY :- Rs. 91,900.00

(Rupees Ninety One Thousand Nine Hundred) only.

DRAWING OF PROPOSED DUG OUT POND.



PLAN



NOTES : - ALL DIMENSIONS ARE IN METRES UNLESS SPECIFIED.
SCALE :- 1:50.

COUNTERSIGNED :-

PREPARED BY :-

ESTIMATE FOR CONSTRUCTION OF DUG OUT POND AT MAWTHABAH .(4th Year)

(Rate Based as per MPWD scheduled or rates for Roads and Bridges (other than National Highway works), for the year 2012-2013.

Beneficiaries: Shri Dwesland Nonglang

Geographical Coordinates: E 91° 11' 17.3"

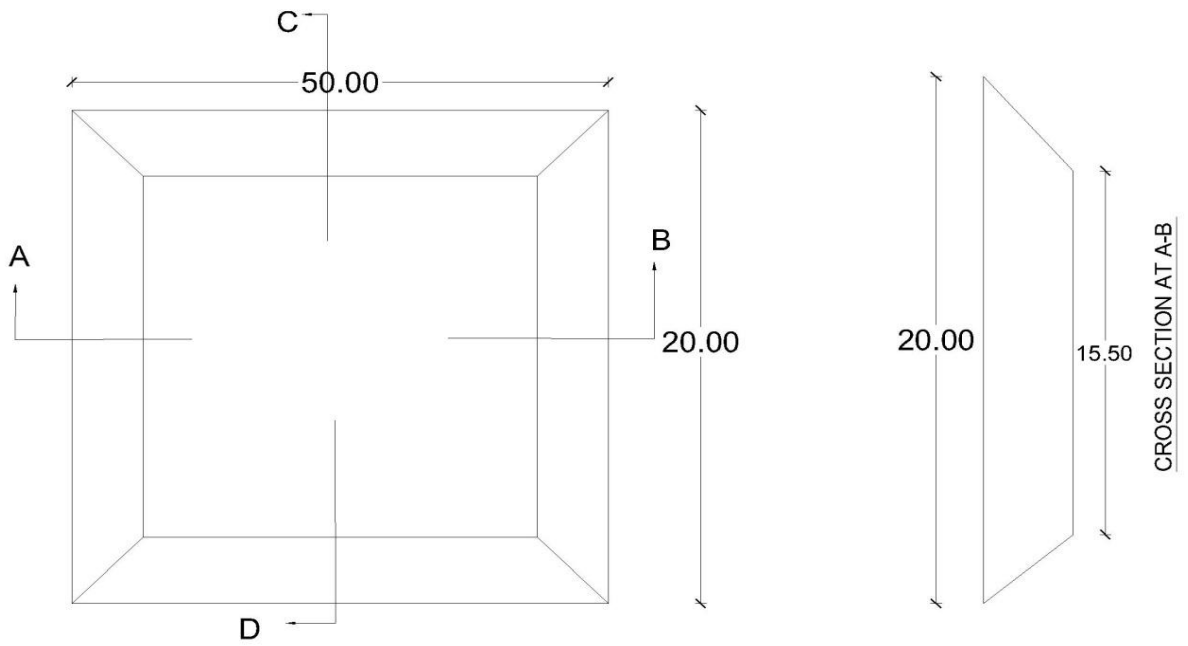
N 25° 18' 05.6"

S l no	PARTICULARS	NO	DIMENSION			QTY	UNIT	RATE (Rs)	AMOUNT (RS)
			L	B	H				
1/2.1 A	Excavation in soil in hilly areas including cutting and trimming of side slopes and disposing of excavated earth with all lift upto 1.5m and a lead upto 20m as per drawing and Technical Specifications Clauses 1603.1. a) Ordinary soil	1	50.00	20.00	0.31	305.00	cu.m		
		4	47.75	17.75	0.31	1034.03	cu.m		
		1	45.50	15.50	0.31	215.10	cu.m		
		TOTAL					1554.13	cu.m	98
2/2.7	Furnishings and laying of the live sods of perenial turf forming grass on embankment slope , verges or other location shown on the drawing or as directed by the Engineer including preperation of ground, stacking the sods and watering as per clause 309. a) Ordinary soil	1	50.00	2.00		100.00	sqm		
		1	20.00	2.00		40.00	sqm		
		TOTAL					140.00	sqm	48
GRAND TOTAL									159024.50

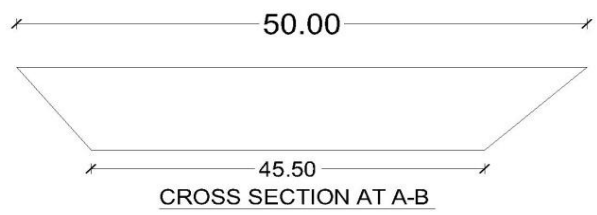
SAY :- Rs. 1,59,030.00

(Rupees One Lakh Fifty Nine Thousand and Thirty) only.

DRAWING OF PROPOSED DUG OUT POND.



PLAN



NOTES : - ALL DIMENSIONS ARE IN METRES UNLESS SPECIFIED.
SCALE :- 1:50.

COUNTERSIGNED :-

PREPARED BY :-

**MODEL ESTIMATE FOR CONTOUR BUNDING.
(INTEGRATED WATERSHED MANAGEMENT PROGRAMME)**

Rate Based as per MPWD scheduled or rates for Road and Bridges (other than National Highway)
for the year 2012-2013.

A. CONTOUR BUNDS :-

Top Width = 0.50 m
Bottom Width = 0.80 m
Height = 0.50 m
Spacing = 20 m
Total Length = 5x100m=500m

1 / 2.1 Excavation in soil in hilly areas including cutting and trimming of side slopes and disposing of excavated earth with all lift upto 1.5m and a lead upto 20m as per drawing and Technical Specification Clauses 1603.1.

A. By manual means..

$$500\text{m} \times \frac{0.80+0.50}{2} \times 0.50 = 162.50 \text{ m}^3$$

@ Rs. 98.00/m³ = Rs. 15925
= Rs. 15925

Say :- Rs. 15900 / Ha.

Rupees Fifteen Thousand Nine hundred only

**MODEL ESTIMATE FOR PERIPHERAL BUNDING.
(INTEGRATED WATERSHED MANAGEMENT PROGRAMME)**

Rate Based as per MPWD scheduled or rates for Road and Bridges (other than National Highway)
for the year 2012-2013.

B. PERIPHERAL BUNDS :-

Top Width = 0.45 m
Bottom Width = 1.00 m
Height = 0.50 m

1 / 2.1 Excavation in soil in hilly areas including cutting and trimming of side slopes and disposing of excavated earth with all lift upto 1.5m and a lead upto 20m as per drawing and Technical Specification Clauses 1603.1.

A. By manual means.

$$1.00 \times \frac{1.00 + 0.45}{2} \times 0.50 = 0.36 \text{ m}^3$$

@ Rs. 98.00/m³ = Rs. 35.28

2/2.7 Furnishing and laying of the live sods of perennial turf forming grass on embankment slope , verges or other location shown on the drawing or as directed by the Engineer including preparation of ground , stacking the sods and watering as per Clauses 309.

$$0.50 \times \frac{1.00 + 0.45}{2} = 0.362 \text{ m}^2$$

@ Rs. 48.00 m² = Rs. 17.40
= Rs. 52.68

Say :- Rs. 53.00/Rm.

Rupees Fifty Three only per Running metre.

COST NORM FOR CROP DEMONSTRATION.
(INTEGRATED WATERSHED MANAGEMENT PROGRAMME)

Sl No.	Items of Works	Amount.
1.	Soil working and cost of sowing -5Mandays @Rs.100/Mdays	Rs. 500.00
2.	Cost of seed for 4 varieties @RS.300/Variety/Kg	Rs. 1200.00
3.	Organic manure	Rs. 500.00
4.	Watering including implements (pipe etc)	Rs. 1500.00
5.	Plant protection including hand sprayers.	Rs. 800.00
6.	Mulching (winter crop to conserve moisture)/ weeding / inter-cultural operation	<u>Rs. 500.00</u>
TOTAL :		Rs. 5000.00
		Rupees Five Thousand only.

**COST NORMS FOR IMPROVEMENT OF EXISTING PADDY FIELD
(INTEGRATED WATERSHED MANAGEMENT PROGRAMME)**

Rate Based as per MPWD scheduled or rates for Road and Bridges (other than National Highway)
for the year 2012-2013.

A . SHOULDER BUND

1 / 2.1 Excavation in soil in hilly areas including cutting and trimming of side slopes and disposing of excavated earth with all lift upto 1.5m and a lead upto 20m as per drawing and Technical Specification Clauses 1603.1.

A. By manual means.

$$10 \text{ nos } \times 50 \times \frac{0.40 + 0.70}{2} \times 0.60 = 165 \text{ m}^3$$

@ Rs.98.00/- per m³

Total: Rs. 16170.00
Rs. 16170.00

Rupees Sixteen Thousand OneHundred Seventy only

**MODEL NORMS PER HECTARE FOR IMPROVEMENT OF DEGRADED FOREST
(INTEGRATED WATERSHED MANAGEMENT PROGRAMME)**

	A. <u>Creation</u>	
	I. Site clearance	
	3 mandays @ Rs.100/- per mandau.....	Rs. 300.00
	II. Pit digging (pit size 0.30m x 0.30m x 0.30m)	
	100 Nos. @ Rs.4/- each	Rs. 400.00
	III. Cost of planting materials	
	100 Nos. @ Rs.8/- each	Rs. 800.00
	IV. Cost of planting 100 Nos.	
	@ Rs. 2/- each	Rs. 200.00
V.	Round Weeding around the plant four times	
	5 mandays @ Rs.100/- per manday	Rs. 500.00
	VI. Fire protection measures	
	4 mandays @ Rs.100/- per manday	<u>Rs. 400.00</u>
	Total	Rs. 2600.00
	B. <u>Maintenance</u>	
	I. Refilling vacancy (10%)	
	Rs. 140.00
	II. Round Weeding around the plant four times	
	5 mandays @ Rs.100/- per manday	
	Rs. 500.00
	III. Fire protection measures	
	4 mandays @ Rs.100/- per manday	<u>Rs. 400.00</u>
	Total	Rs. 1040.00
	 Grand Total (A+B) = Rs.2600.00 + Rs.1040.00	 Rs. 3640.00

**MODEL NORMS PER HECTARE FOR AFFORESTATION WITH PINE/ NON-PINE
(INTEGRATED WATERSHED MANAGEMENT PROGRAMME)**

Spacing 6m x 5.5m
Plant Density – 300 Nos.

A.	<u>Preliminary works</u>		
I.	Jungle clearance etc.		
	5 mandays @ Rs.100/- per manday	-	Rs. 500.00
	II. Pit digging (pit size 0.30m x 0.30m x 0.30m)		
	300 Nos. @ Rs.4/- each	-	<u>Rs. 1200.00</u>
	Total	-	Rs. 1700.00
	B. <u>First year Planting</u>		
	I. Cost of planting materials		
	300 Nos. @ Rs.8/- each	-	Rs. 2400.00
	II. Cost of planting 300 Nos. @ Rs. 2/- each	-	Rs. 600.00
III.	Weeding two times 20 mandays		
	@ Rs.100/- per manday	-	Rs. 2000.00
	IV. Fire protection measures		
	5 mandays @ Rs.100/- per manday	-	<u>Rs. 500.00</u>
	Total	-	Rs. 5500.00
	C. <u>Second year Planting</u>		
I.	Vacancy refilling (10%)	-	Rs. 420.00
	II. Weeding two times 20 mandays		
	@ Rs.100/- per manday	-	Rs. 2000.00
	III. Fire protection measures		
	5 mandays @ Rs.100/- per manday	-	<u>Rs. 500.00</u>
	Total	-	Rs. 2920.00
	Grand Total A+B+C = Rs.1700.00 + Rs.5500.00 + Rs.2920.00 =		Rs.10120.00
			(Rupees Ten thousand one hundred twenty) only.

**MODEL NORMS PER HECTARE OF STRIP PLANTATION TWO ROWS ALONG THE
BOUNDARY WITH FAST GROWING SPECIES
(INTEGRATED WATERSHED MANAGEMENT PROGRAMME)**

Spacing 6m from plant to plant
2.5m from row to row

B. Preliminary works

J. Site clearance

2 mandays @ Rs.100/- per manday - Rs. 200.00

II. Pit digging (pit size 0.30m x 0.30m x 0.30m)

134 Nos. @ Rs.4/- each - Rs. 536.00

Total - Rs. 736.00

B. First year Planting

I. Cost of planting materials

134 Nos. @ Rs.8/- each - Rs.1072.00

II. Cost of planting 134 Nos. @ Rs. 2/- each - Rs. 268.00

III. Round Weeding around the plant two times

6 mandays @ Rs.100/- per manday - Rs. 600.00

IV. Fire protection measures

4 mandays @ Rs.100/- per manday - Rs. 400.00

Total - Rs.2340.00

C. Second year Planting

I. Refilling vacancy (10%) - Rs. 190.00

II. Round Weeding around the plant two times

6 mandays @ Rs.100/- per manday - Rs. 600.00

III. Fire protection measures

4 mandays @ Rs.100/- per manday - Rs. 400.00

Total - Rs.1190.00

Grand Total A+B+C = Rs.736.00 + Rs.2340.00 + Rs.1190.00 = Rs.4266.00

(Rupees Four thousand two hundred sixty six) only.

MODEL NORMS PER HECTARE FOR AGRO – HORTICULTURE WITH CITRUS FRUIT
(INTEGRATED WATERSHED MANAGEMENT PROGRAMME)

Spacing : - 8m x 6.3m
Plant Density - 200 Nos.

A. Creation

K.	Site clearance 3 mandays @ Rs.100/- per manday	- Rs. 300.00
II.	Pit digging (pit size 0.45m x 0.45m x 0.45m) 200 Nos. @ Rs.5/- each	- Rs. 1000.00
III.	Cost of planting materials 200 Nos. @ Rs.10/- each	- Rs. 2000.00
IV.	Cost of planting 200 Nos. @ Rs. 3/- each	- Rs. 600.00
V.	Weeding two times 20 mandays @ Rs.100/- per manday	- <u>Rs. 2000.00</u>
	Total	- Rs. 5900.00

B. Maintenance

I.	Refilling vacancy (10%)	- Rs. 360.00
III.	Weeding two times 20 mandays @ Rs.100/- per manday	- Rs.2000.00
III	Plant protection measures including cost of chemical	- <u>Rs. 340.00</u>
	Total	- Rs. 2700.00
	Grand Total A+B = Rs.5900.00 + Rs.2700.00	= Rs. 8600.00

(Rupees Eight Thousand Six Hundred) only.

ANNEXURE IV
MoA, NOC, WC, COMMITTEE DETAILS

DORBAR SHNONG DOMIASIAT

LANGRIN SYIEMSHIP
SOUTH WEST KHASI HILLS DISTRICT

Ref. No.....

Dated.....

NDC

Nga u Sordar Shnong Domiasiat Langrin Syiemship
syngkat bad da ka jingiarailang bad ka Executive
Committee Shnong ngam don Kano Kano ka jingpyrshah
ha kaba iader bad ka jingwanrah bad pyntrei jong
ka office jong ka Border Area Soil and water Con-
servation Range Ranikor ia ka Scheme I WMP
hapoh la ka ^{jong ka} Shnong.

Kyrmen lyngba bat Kane ka Dept Kan wanrah
ia ka jingmyntoi hapoh la ka jong ka Shnong
ha ka rep ka riang bad umbam umdih-

Nga pynshisha ia Kane da kaba nga soi
ia la ka Kyrteing syngkat bad ka Seal.

Dated Domiasiat

th 22/9/13


Sordar Shnong
Domiasiat

**OFFICE OF THE DORBAR SHNONG
SHNONG LANGPA; LANGRIN SYIEMSHIP
West Khasi Hills**


Ref. No.

Date:

NO-OBJECTION CERTIFICATE

Nga u Sordar bad ka executive Dorbar
shnong Langpa, syim don kano kano ka
jip ujor pyrbah hator ka jipwan jip la'
Scheme na ka Soil Department - ban
pyntrei hapch ka shnong jip nji. Ngi pdiang
ngwibha bad nji don rah ka jip lait - Ichlich
ban ia trei nyrbah - bad ka department -
ka ha kano kano ka por.

Dalid Langpa }
The 23/9/2013 {


23/9/2013
Kornir
Langpa; Shnong
Langrin Syiemship

DORBAR SHNONG MAWTHABAH

LANGRIN SYIEMSHIP
SOUTH WEST KHASI HILLS DISTRICT

Ref. No.....

Dated.....

NOC

Nga u Dorbar shnong Mawthabah Langrim
syiem ship south west Khasi Hills Dist ryngkat bad da
ka jing ia mynyur lang bad ka Executive committee
ngam don ka no ka no ka jing pyrshah ka ka
ba iadei bad ka jing wan Zah bad pyntui ia ka
project ne scheme I. W. M. P. ka poh shnong na ka
bynta ka soi ka por bad ka ish ka jot

Bad nga kymemba kyngba ka ne ka
scheme kan lang jing myntoi ka poh shnong
poh thaw.

Nga pyntuisha ia ka ne da ka ba nga
soi kynteng harum.

Dated mawthabah

The 21/11/13

[Signature]
Dorbar Shnong
Mawthabah

DORBAR SHNONG NEWPHANWER

Langrin Syiemship

West Khasi Hills District

Ref. No. _____

Date: _____

VO- OBJECTION CERTIFICATE

Nga u sordar shnong badka executive

Dorbar Shnong Newphanwer, ngmin dor kano kano
ka jing u jor pyrsnah hator ka jing wan jong ki
haka Soil Department- ban pyntrei hator
shnong jong ngi, ngi pdiang syew bus
had ngi dan ruh ka jing nit- khleel ban
ia treis syngkat had ka department-
ha ka kano kano ka par.

Dated - Newphanwer

Thu -

Toral syngkat

DORBAR
Syngbat Shnong
of Newphanwer

Dated Newphanwer
the 23/9/13

DORBAR SHNONG NONGBAHJYNRIN

LANGRIN SYIEMSHIP
SOUTH WEST KHASI HILLS DISTRICT

Ref. No.

No-objection certificate

Dated

Nga u sordar shnong Nongbah-jynrin Langrin Syiem-ship ~~shp~~ vnykhat bad ka jingiasnyewthuk lang bad ka Executive Committee jong ka dobar shnong ngardon ka no kano ka jingyot pyshah ha ka jingadei bad ka jingwan sah bad pyntrei ia ka Scheme Iwmp napoh ka office jong ka Border Area soil and water conservation Range Kanikor napoh shnong.

Kyrimen lyngba ka jingwanah ia kane ka Scheme kan long ka jingmyntoi Lapho shnong ha ka liang, ka ish ka kot, sumbam. un-dih bad kiwei kiwei.

Nga pyntreisha ia kane da kaba nga Soi Kysteng hamun vnykhat bad ka seal.

Dated Nongbahjynrin
The 22/9/2013

L. Songriang
Sordar Shnong
Nongbahjynrin

DORBAR SHNONG NONGMALANG
LANGRIN SYIEMSHIP
SOUTH WEST KHASI HILLS DISTRICT

Ref. No.....

NOC

Dated.....

Nga u sordar Nongmalang shnong Nongmalang ka

ba hap hapok jong u Syiem Langrin syiemship da ka jing
ka sngewthuh jingmut bad ka Executive Committee Con
Committee jong ka shnong ngam don kano kano ka
jingpyshah ka ka ba ia dei bad ka jing wamrah
pyshah ka ka ia dei bad ka jing wamrah bad,
pyntrei jong ka Border Area soil and water conversation
Range Ranikor ia ka I.W.M.P scheme hapok
shnong na ka bynta ka jing bha jingmiat bad
ka noi ka par hapok shnong poh thaw.

Nga pyntreisha ia kame da kaba Sei
kyiteng haum

Dated Nongmalang

The 22/9/2013

J. L. Nongmalang
Sordar Shnong
Nongmalang

OFFICE OF DORBAR SHNONG PHUDUMIAP
LANGRIN SYIEMSHIP
SOUTH WEST KHASI HILLS DISTRICT

Ref. No

Date:

NOC

Nga u Secretary Shnong phudumiap tayrin
Spiew Ship, mykat bad ka jing Syewthuh jing mit
laug bad ki para ekhot jing ka executive Dorbar Shnong
ngins dou kano kano ka jing Rujor Pyrshah tiaka
ba iadei bad ka jing Wanrah bad pyntrei jing
ka Border area soil and water Conservation
Dpt ia ka scheme I W M P hapoh Shnong
kyrmen ba kane ka scheme kane wan
rah na karoi kapor hapoh Shnong poh Thaw
Nga pyushisha iaka ne da kaba
ngee soi la ka kyrtey karmen.

Dated phudumiap
The 21st, 9, 2013

Nyahkif
Secretary
Shnong Phudumiap.

OFFICE OF DORBAR SHNONG WAHKAJI
LANGRIN SYIEM SHIP
SOUTH WEST KHASI HILLS DISTRICT 5

Memo No: _____

Dated: _____


N.O.C
Nga u Sordar shnong Wahkaji Langrin Syiem
Ship South West Khasi Hills Dist- syngkat bad
da ka jingiamyrjue lang bad ka Executive
Committee ngam dor kano kano ka jing
pyrshah ha ka ba ia dei bad ka
jinguan sah bad pyntrei iaka project ne
scheme I.W.M.P hapoh shnong na ka
kynta ka roi ka par bad ka ish
ka kot.

Bad nga kysmen ba syngba
kane ka scheme kan long jingmyntoi
hapoh shnong poh thaw.

Nga pyntshaha ia kane ka kaba
nga soi kysteng harum.

Dated wahkaji

25/9/13


Sordar
Shnong Wahkaji
Langrin Syiemship.

OFFICE OF THE
DORBAR SHNONG DOMIASIAT

Langrin Syiemship, South West Khasi Hills District
Meghalaya

NO.....

Dated Domiasiat, the

Ha,
li Range Officer
Border Area Soil & Water Conservation
Ranikor Range.

Subject;- Jingkyopad ban ai jingiarap.

Sir,
Kat hum katei ka subject ba la
kdeew haneng ngi kyopad ia phi lyngba
ka Department Soil & Water Conservation
ba phiin sngewbha ban ai jingiarap
lem ia ka shnong jeng ngi lem bad hi
nongshongshnong ka haba iadei bad ka
rep ka riang, ka si jingri bad hiewei
hi jingdonkiam hapok shnong.

Ka jingsbun jongphi ngin iai
pyoto jiwon.

Khublei Shibun.



OFFICE OF THE DORBAR SHNONG
SHNONG LANGPA; LANGRIN SYIEMSHIP
West Khasi Hills

Ref. No.

Date:

To,
The Divisional Soil & water Conservation officer Nongstoin
West Khasi Hills District

(Through the Range officer BASC Range Ranikor South West
Khasi Hills Dist.

Subject: jingkyrpad ban ai watershed hapoh shuang Langpa.
Kathun katei ka subject ba la kdes ha neug, ngi
sugyobha ban kyrpad ha khud ka buron barben
eh jong phi ka phiin sugyobha ban ai bad pyuthei
ia ka water shed scheme hapoh shuang Langpa.
Na ka byuta ka jong iarap tem jong phi ngin iaipyro
janom.

Dated - Langpa }
The 12-10-2012 }

Khublei Shibum

[Signature]

OFFICE OF THE SORDAR SHNONG MAWTHABAH
LANGRIN SYIEMSHIP
SOUTH WEST KHASI HILLS
P.O. MAWKYRWAT PIN-793114.

Ref.No. _____

Date: 20/11/2013

Ha
U Rangoo Officer
Border Area Soil And Water Conservation
Rangoo Ranitoo

Subject: Ka jingkyppad kam san jingdarap

Sir. Kat kum Kolu' ka Subject kala Kdau
kanyep ngi Sngw'kha kam kyppad ia ka
Office jangphi ta phiu Sngw'kha kam ai
jingdarap ha ki kam rep, kamriog, ki jingpi, etc.
hapesa ka shuong jang ngi.
Naka kanyla ka jingdarap ta shou
jangphi ngin iei pyto jannou.
Kheblei' shoum.


Secretary
Shnong Mawthabah
Langrin Syiem Shp.

DORBAR SHINONG NEWPHANWER

Langrin Syiemship

West Khasi Hills District

Ref. No. _____

Date: _____

To

The Divisional soil and water conservation officer Nongstaini
West Khasi Hills

Through the Ranger officer

BASC Range Kanikor

South West Khasi Hills

Subject - prayer for implementation of watershed scheme.

Sir,

with reference to the subject cited above we have the honour to request your honour to kindly implement a watershed scheme with in village Newphanwer.

for which act of your kindness we will
greatfull

Dated - Newphanwer
The 18 - Oct 2012

Thanking you
your faithfully

Phyrthey
Secretary
Newphanwer
Village

2. Shri Toral Khytori

DORBAR SHNONG NONGBAH JYNRIN
LANGRIN SYIEMSHIP.
WEST KHASI HILLS DISTRICT.

Ref.No.....

Date: 20/8/2013.

Sir,
U Ranger Officer
Border Area Soil & Water Conservation
Ranikos Range.

Subject :- Ka Jingkyopad jingiarap.

Sir,
Kat num katai ka subject bala
kdeu haneng ngi sengerobha ban kyopad
ia phi lyngba ka Department Soil & Water
Conservation ba phiin sengerobha ban ai
jingiarap ia ka shnong bad hi nongshong,
shnong jong ngi ha hi ham rep hamriang,
li jingri, bad ter ter hapoh u pud shnong
jong ngi.

Na ka bynta ka jingkyopad bad
ka jingsbun jong phi ngin iai pyto
juman.

Khukli thibun.

H. L. Sanyal
Ranger Officer

OFFICE OF THE
DORBAR SHNONG NONGMALANG
LANGRIN SYIEMSHIP
SOUTH WEST KHASI HILLS DISTRICT
B.P.O. WAHKAJI ::: P.O. NONGSTOIN- 793119

Date :

Ha

in Range Officer
Border Area Soil & water Conservation
Ranital Range

Subject: Jijlyopud bur Ri jiyjorop

Subj.

Leatkaun leater ka Subject hany nyi
lyopud rit iaka burun jiyphi bu phin kywsha
bur ai jiyjorop ia ka shony jiygyi nykhat bad
li Nyshon shony ha leaba iadei bad li kam
rep, kam rlang, ri jiygyi bad liwei pad
hapot ka shony jiygyi

Daka kynta ka jiyjorop jiyphi nyin
ia jiyto

Lehuklei Shubun

J. E. Spae
J. Nongmalang
Sord. Shony
Nongmalang
Langrin Syiemship

OFFICE OF THE
DORBAR SHNONG PHUDUMIAP

LANGRIN SYEMSHIP

South West Khasi Hills District

Ref. No.

Dated

To,
The Divisional Soil & water conservation officer Nongstoin
West Khasi Hills Dist.

Through the Ranger officer
BASC Range Karikor
South West Khasi Hills

Subject: Prayer for Implementation of watershed scheme.

Sir, with reference to the subject cited above we have the
honour to request your honour to kindly implement of water
shed scheme with in village Phudumiap,

For which act of your kindness we will greatfull.

Dated - Phudumiap }
The 14 - (Oct) - 2012 }

Thanking you
your faithfully

Oshlay

Production Unit

Office of the
DURBAR SHNONG WAHKAJI



Langrin Syiemship
South West Khasi Hills District

Pin - 793119

Ref. No. _____

Date: 12-10-2012.

To

The Divisional soil + water
conservation officer, Nongstoin
West-Khasi Hills.

Through the Range Officer
Basic Range Raniker
South West-Khasi Hills.

Subject - Petition for implementation of Water Shed Scheme.

Sir,

With reference to the Subject Stated ~~is~~ above
we have the honour to request your favourable
to kindly implement the Water Shed scheme in the
village of Wahkaji, South West-Khasi Hills. The
village of Wahkaji included more than hundred
(100) houses with the population of about -
seven hundred (700).

For your kind favour, we remain grateful.

yours faithfully

[Signature]

Secretary
Durbar Wahkaji

Mr. N. Thongni
Wahkaji

Mr. E. Lyndoh
Elyoh

Mr. H. Snaitang
Hsnaitang

5. The Governing Body of the Society (Watershed Committee)

Sl. No	Name	Address	Designation
1.	Shri Hesdingland Lyngdoh, Sangriang	Mawthabak	Chairman.
2.	Shri M.C. Lyndem.	Range Officer, Borden Area Soil & Water Conservation Range Ranikor.	Secretary.
3.	Shri Prophet Syman.	Phudumiap	Member.
4.	Shri Mombaten Jakkit	Phudumiap	—do—
5.	Shri O. Sohlang	Langpa	—do—
6.	Shri Pailestan Myrthong	New phanwen	—do—
7.	Shri Weslandy Myrthong	Mawthabak	—do—
8.	Shri Jespar. Nongphlang	Nongmalang	—do—
9.	Shri Lastone Lyngdoh Sangriang	Nongbah Jymrin	—do—
10	Shri Stickshon Syman.	Domiasial	—do—
11	Shri Edira Lyngdoh.	Wahkaji	—do—
12	Smt Lesbidan Lyngdoh Langrin	Wahkaji	—do—
13	Smt Rebeca Lyngdoh Sangriang	Mawthabak	—do—

ENGINEERING STRUCTURE OF PHUD PHRA –PHUD TANGSHOT WATERSHED

SI No.	Longitude	Latitude	Description	Location
1	E 91° 15' 6.19"	N 25° 21' 8.55"	Check Dam	Photktieh
2	E 91° 14' 6.35"	N 25° 21' 7.23"	Check Dam	Photlawbah
3	E 91° 13' 28.6"	N 25° 20' 29.9"	Check Dam	Photurthlong
4	E 91° 13' 22.8"	N 25° 20' 31.4"	Check Dam	Photurthlong
5	E 91° 09' 49.20"	N 25° 19' 11.45"	Check Dam	Phud Umbiong
6	E 91° 12' 36.6"	N 25° 19' 30.3"	Check Dam	Phot Kylleng
7	E 91° 12' 02.8"	N 25° 19' 49.3"	Check Dam	Phot Mawkho
8	E 91° 11' 01.4"	N 25° 17' 9.19"	Check Dam	Phot Laru
9	E 91° 11' 3.16"	N 25° 17' 3.18"	Check Dam	Phot Umlaru
10	E 91° 13' 33.5"	N 25° 16' 47.8"	Check Dam(Shri Toral Nongbri)	Phud Soh Synrut
11	E 91° 13' 27.5"	N 25° 16' 43.6"	Check Dam(Shri Phrangstarwell Thongni)	Phud Sad Nongtraï
12	E 91° 13' 26.5"	N 25° 16' 52.3"	Check Dam(Smt Benerenda Thongni)	Phud Dirang
13	E 91° 13' 30.6"	N 25° 16' 52.6"	Check Dam	Phud Thri
14	E 91° 14' 00.1"	N 25° 17' 57.4"	Check Dam(Shri H Wahlang)	Ursniang
15	E 91° 13' 42.9"	N 25° 17' 21.1"	Check Dam(Shri Benhul K Dew saw)	Phud lewtung
16	E 91° 13' 28.5"	N 25° 17' 27.2"	Check Dam	Tangshot Dibai
17	E 91° 13' 35.0"	N 25° 16' 22.7"	Check Dam	Rangkhlieh
18	E 91° 13' 58.8"	N 25° 17' 48.1"	Check Dam(Shri Phyrnaistar K Saw)	Mawthunglama
19	E 91° 13' 15.2"	N 25° 16' 17.1"	Check Dam	Langkyra
20	E 91° 15' 36.14"	N 25° 22' 3.35"	Water Harvesting	Wahkaji(Ethelrida L Langrin)
21	E 91° 15' 40.25"	N 25° 22' 2.29"	Water Harvesting	Wahkaji(Heslandar Sangriang)
22	E 91° 15' 43.19"	N 25° 22' 59.46"	Water Harvesting	Wahkaji(Olivia Langrin)
23	E 91° 13' 42.1"	N 25° 17' 20.2"	Water Harvesting	Umkriang
24	E 91° 15' 6.47"	N 25° 21' 8.02"	Dug Out Pond	Wahkaji(Presbyterian Church)
25	E 91° 15' 35.6"	N 25° 22' 06"	Dug Out Pond	Wahkaji(Telesphor Langrin)
26	E 91° 11' 19.6"	N 25° 18' 06.5"	Dug Out Pond	Phot Laru (Yondarling Sangriang)
27	E 91° 11' 17.3"	N 25° 18' 05.6"	Dug Out Pond	Phot Laru (Dwesland Nonglang)
28	E 91° 10' 0.26"	N 25° 19' 3.59"	Water Tank	Phot Rit
29	E 91° 11' 09.3"	N 25° 18' 0.34"	Water Tank	Mawthabah
30	E 91° 13' 37.2"	N 25° 17' 02.9"	Water Tank	New Phanwer(Pdengshnong)
31	E 91° 13' 34.7"	N 25° 16' 22.0"	Water Tank	Langpa
32	E 91° 13' 30.0"	N 25° 16' 20.6"	Water Tank	Langpa
33	E 91° 13' 24.3"	N 25° 16' 20.1"	Water Tank	Phudumiap
34	E 91° 09' 51.66"	N 25° 19' 1.69"	Protection Wall(40 rm)	Nongmalang
35	E 91° 13'28.4"	N 25° 20'32.9"	Protection Wall(24 rm)	Domiasiat
36	E 91° 13'28.1"	N 25° 20'12.5"	Protection Wall(45 rm)	Domiasiat
37	E 91° 13'37.9"	N 25° 20'5.09"	Protection Wall(37 rm)	Domiasiat
38	E 91° 15'28.2"	N 25° 22'12.8"	Protection Wall(40 rm)	Wahkaji
39	E 91° 15'47.18"	N 25° 21'56.50"	Protection Wall(37 rm)	Wahkaji
40	E 91° 15'6.48"	N 25° 22'9.06"	Protection Wall(44 rm)	Wahkaji(Mission)
41	E 91° 15'6.40"	N 25° 21'7.38"	Protection Wall(43 rm)	Phot Risa
42	E 91° 15'6.28"	N 25° 21'8.55"	Protection Wall(25 rm)	Photktieh
43	E 91° 15'29.54"	N 25° 22'3.2"	Protection Wall(36 rm)	Wahkaji
44	E 91° 15'38.4"	N 25° 22'03.2"	Protection Wall(35 rm)	Wahkaji(Heslandar)
45	E 91° 12'1.42"	N 25° 19'16.5"	Protection Wall(40 rm)	Nongbah Jynrin
46	E 91° 12' 35.6"	N 25° 19' 30.3"	Protection Wall(43 rm)	Nongbah Jynrin
47	E 91° 12' 29.4"	N 25° 19' 24.2"	Protection Wall(35 rm)	Nongbah Jynrin
48	E 91° 11' 05.6"	N 25° 18' 04.0"	Protection Wall(50 rm)	Mawthabah
49	E 91° 13' 36.1"	N 25° 17' 0.7"	Protection Wall(public)	New Phanwer(LP School)
50	E 91° 13' 36.7"	N 25° 17' 00.8"	Protection Wall(public)	New Phanwer(Near Durbar hall)
51	E 91° 13' 31.4"	N 25° 16' 22.7"	Protection Wall(public)	Langpa(near LP school)
52	E 91° 13' 32.0"	N 25° 16' 22.9"	Protection Wall(public)	Langpa(near football ground)
53	E 91° 13' 15.2"	N 25° 16' 21.0"	Protection Wall	Phudumiap

54	E 91° 15'6.41"	N 25° 21'7.38"	Drinking Well	Phot Namlang
55	E 91° 13' 31.4"	N 25° 16' 55.9"	Drinking Well	Phud Thri
56	E 91° 11' 7.35"	N 25° 17' 26.13"	Percolation Tank	Mawthabah
57	E 91° 10'3.21"	N 25° 18'05.8"	Percolation Tank	Mawthabah
58	E 91° 10'43.2'	N 25° 18'21.2"	Percolation Tank	Mawthabah
59	E 91° 10'48.5"	N 25° 18'34.5"	Percolation Tank	Mawthabah
60	E 91° 15.432'	N 25° 22.127'	Rain Water Harvesting	Wahkaji
61	E 91° 15.561'	N 25° 22.031'	Rain Water Harvesting	Wahkaji
62	E 91° 15'21.57"	N 25° 22'20.52"	Rain Water Harvesting	Wahkaji
63	E 91° 15'24.83"	N 25° 22'16.78"	Rain Water Harvesting	Wahkaji
64	E 91° 15.128'	N 25° 22.247'	Rain Water Harvesting	Wahkaji
65	E 91° 15.014'	N 25° 21.034'	Rain Water Harvesting	Wahkaji
66	E 91° 11.081'	N 25° 18.072'	Rain Water Harvesting	Mawthabah
67	E 91° 11.234'	N 25° 18.078'	Rain Water Harvesting	Mawthabah
68	E 91° 13.145'	N 25° 20.314'	Rain Water Harvesting	Domiasiat
69	E 91° 13' 22.4"	N 25° 20' 21.2"	Rain Water Harvesting	Domiasiat
70	E 91° 12.278'	N 25° 19.248'	Rain Water Harvesting	Nongbah Jynrin
71	E 91° 12.182'	N 25° 19.176'	Rain Water Harvesting	Nongbah Jynrin
72	E 91° 09'56.02"	N 25° 19'16.10"	Rain Water Harvesting	Nongmalang
73	E 91° 09'51.82"	N 25° 19'29.39"	Rain Water Harvesting	Nongmalang

