## Uttarakhand Decentralized Watershed Development II Project

**SOIL & WATER CONSERVATION MANUAL** 

Watershed Management Directorate Uttarakhand, Dehradun

#### 1. Introduction:

In Uttarakhand State under Uttarakhand Decentralized Watershed Development Project Phase-II, several soil and water conservation activities will be undertaken. These activities will propose and executed by the gram panchayats. In order to equip the community as well as MDT members with the basic knowledge about these mechanical measures, this manual for soil conservation works has been prepared. This manual contains the basic know how about the commonly used engineering measures and also the designs, drawings and sample estimates of various structures which are suitable for most of the sites (though their actual designs depend upon so many factors like size and shape of the catchments, type of the soil, gradient etc).

#### 1.1 Purpose:

Purpose of this manual is to provide the basic information about the various mechanical measures of soil and water conservation, maintain uniformity in the designs of various structures, and make the process of preparation as well as technical scrutiny of estimates easy and to speed it up.

#### 1.2 Target Group:

This technical manual is primarily meant for different stakeholders like MDT members, field staff of all levels and the community involved in the execution of soil and water conservation works under Uttarakhand Decentralized Watershed Development Project Phase-II.

#### 1.3 About The Project:

The Uttarakhand Decentralized Watershed Development II Project (Gramya-II) has been promoted by the Government of Uttarakhand and supported and funded by the World Bank. The primary approach in this Project is to implement its objectives through Gram Panchayats under overall monitoring of the Watershed Management

Directorate. The main themes proposed in the Project which converge as its main components are: -

- Social Mobilization and Participatory Watershed Planning
- Watershed Treatment and Rain-fed Area Development
- Enhancing livelihood opportunity
- Knowledge Management and Project Coordination

#### Sub-components/ Activities related to Soil and Water Conservation:

The component Watershed Treatment and Rain-fed Area Development deals with the watershed treatment of the micro watersheds. Under this component soil & water conservation is one of the main activities which are useful for augmentation of soil & water and also for source sustainability with the ecological rehabilitation of the degraded micro watersheds. The following mechanical measures/ activities would be adopted in the Uttarakhand Decentralized Watershed Development II Project under the component of Watershed Treatment and Rain-fed Area Development.

#### A) Check Dams

- (i) Brush Wood Check Dams
- (ii) Dry Stone/ Loose Rock Check Dams
- (iii) Crate Wire Check Dams

#### B) Spurs/ Groynes

- (i) Vegetative Hedge/Spur
- (ii) Crate Wire spur

#### 2. Check Dams:

These structures are used in gullies to facilitate the establishment of vegetation or to provide protection at points that cannot be adequately protected in any other way. The erosive velocities of runoff are reduced by flattening out the steep uniform gradient of the gully by constructing a series of checks (commonly known as check

dams) from top to bottom which transform the longitudinal gradient into a series of steps with low risers and long flat treads.

The material to be used for check dams will depend upon whatever is available locally and no check damming should be attempted unless suitable stone, brick, timber or brushwood is to be had near the spot.

Depending upon the material used these gully control structures are of the following types:

- (i) Brush Wood Check Dams
- (ii) Log Dams
- (iii) Dry Stone/ Loose Rock Check Dams
- (iv) Crate Wire Check Dams

#### 2.1 Brushwood check dams:

Brushwood check dams are constructed with the help of locally available wooden poles and brushwood. Wooden poles are driven into the ground in a single or double row across the nalla and brushwood is packed on the upstream face of the check dam.

#### Suitability:

This type of check dams are provided in small and medium gullies where wooden poles are locally available and the side slope of the gully is less than 45degrees. Depending upon the size of the gully and area of catchments, poles of about 7.5 cm dia. are driven into the ground in a single row or a double row across the nalla at right angle to flow and accordingly these are called single row or double row brushwood check dams. Single row brushwood check dams are used in small gully heads not deeper than 1.00 mtr. Whereas in case of medium gullies (up to about 2 m deep and 6.00 m wide) double row brushwood dams are most suitable. The posts used should preferably be of species *Lannea coromandelica*, Sisso and Ficus which will strike roots.

#### **Design Specifications:**

#### (a) Single row brushwood check dam:

In case of a single row check dams wooden poles are driven 90 cms deep into the ground and the centre to centre spacing between two consecutive poles should be 60 cms. The height of the poles in the middle of the nalla bed should be 30 to 60 cms less than those of the poles on the banks so that a deep concave curve is formed at the top to dispose of excess water. The brushwood is packed against the u/s face of the poles and on the downstream side brushwood matting is laid out which acts as an apron for the dam and protects the downstream from erosion. The wooden stakes may be treated with coal tar/creosote oil to protect them from attack by white ants. For a brushwood check dam, an average height of about 0.3-0.7 m is usually considered to be satisfactory.

#### (b) Double row brushwood check dam:

In case of a double row brush wood check dam, poles are placed about 90 cms apart in two parallel rows and the embedment of these poles into the nallah bed should be 90 to 120 cms. The distance between two rows should not exceed 90 cms. and the poles are tied up with GI wire. The straw and brushwood is laid across the gully between two rows of wooden posts and a brushwood apron held by galvanized iron bar is necessary to prevent scouring. A brush wood apron held by galvanized iron wire is necessary to prevent scouring.

# SINGLE ROW BRUSHWOOD CHECK DAM Figure I DOUBLE ROW BRUSHWOOD CHECK DAM Figure II

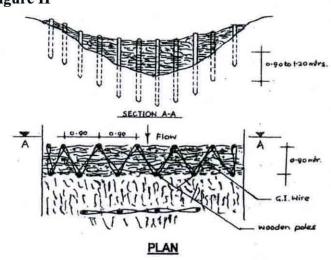


Fig. i & ii- Details of single row and double row brush wood check dams.

#### 2.2 Log/Wood Check Dams:

The use of these types of check dams should be restricted only to the places where no other material such as stones, brick etc. is available and the wooden logs are available in abundance. The use of wooden logs for the construction of check dams is explained diagrammatically in figure (iii). White ants are the greatest enemy of this type of structures and accordingly the required measures should be taken before hand.

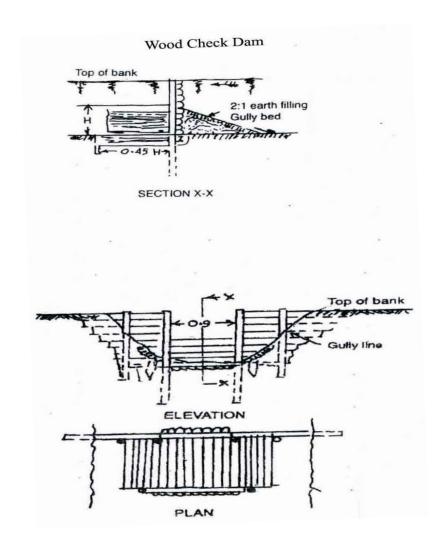


Figure iii- Log/Wood Check Dams

#### 2.3 Dry stone/loose rock check dams:

These types of check dams are used for checking runoff velocity in steep and broad gullies where good size of stones is available in abundance. Dry stone/loose rock check dams have longer life and usually require less maintenance as compared to brushwood check dam.

#### Suitability:

These are generally constructed at upper reaches of drainage lines/gullies in the newly formed or branches of main nallas less than 100 m in length, where plenty of boulder stones are locally available.

#### **Design Specifications:**

Dry stone/ loose boulder check dams are usually constructed up to about 1.25 m height and about 2.5 m length. The foundation of the check dams should be dug out from 0.3 m - 0.5 m and the keying into stable portion of banks is also kept from 0.3 m - 0.6 m. Top width of the check dam is kept from 0.5 m with the sides sloping at 0.5 H : 1 V.

#### 2.4 Wire crate check dams:

Wire crate/gabion check dams are used for retention of debris in the main nallas and are constructed by filling of stones in wire mesh cage. The size of the wire mesh is generally kept 15cm x 15 cm and the wire used for these cages is galvanized iron wire of 8 - 7 gauge (4 - 4.5 mm). These structures are widely adopted for the treatment of drainage lines because they are flexible (bend without breaking), porous (water can seep through them) and are economical as compared to masonry structures.

#### Suitability:

Gabion check dams are used in the main drainage channels receiving relatively large quantities of runoff and debris. These structures are constructed up to a height of about 1-3 m.

#### **Design Specifications:**

Since such check dams do not attempt to pond back water therefore complete stopping of seepage is not important; however the stability of the structure against overturning and being washed away by flowing water must be ensured. The foundation of these check dams should be dug out from 0.3 m -

0.5 m and the keying into stable portion of banks is also kept from 0.3 m - 0.6 m. Top of the check dam is kept 1 m wide and its height can vary from 1-3 m. Wire mesh of size 15 cm x 15 cm to 20 cm x 20 cm depending upon the size of stones is used. The wire used for the mesh is hot dipped zinc coated GI wire of thickness 8-7 gauge (4-4.5 mm).

#### 2.5 Spacing of check dams:

The key point of importance while planning the location of check dams in a particular gully/nalla is the spacing between two consecutive structures. Because too few bunds/structures are practically useless in preventing the further scouring of a nalla bed whereas too closely placed bunds/structures will lead to increase in number of structures thereby will make the treatment of gully very expensive.

Hence the distance between two plugs or structures could be such that at no point the flowing water should acquire an erosive velocity. This can be achieved if the bunds or check dams are so placed that the bottom of the upper structure and the top of the lower structure are kept almost on the same level. However, this would involve exorbitant cost in steep hilly nallas. Hence in order to reduce number of checks and thereby cost, a small gradient called 'compensation gradient' which would limit the flow velocities within permissible limits, is usually allowed between the two consecutive check dams (Fig.iv). A grade up to 0.5 % in silt and clayey soils and up to 3% for drainage lines with step slopes and boulders is usually allowed.

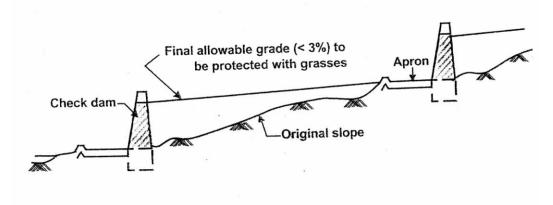


Figure - iv

The horizontal distance between the check dams can be determined by using the following equation:

$$L = \{ 100/(M-N) \} H$$

Where,

L = Horizontal distance between check dams,

M = Original gully gradient,

N = Proposed gully gradient, and

H = Check dam height up to the weir

Alternatively, the spacing of check dams can be determined by the following formula:

Spacing =  $H/K \tan\theta \cos\theta$ 

Where, H = Height of check dam from bed to crest level,

K = Constant; K = 0.3 for  $tan\theta$  less than 0.20 and 0.5 for  $tan\theta$  more than 0.20 and

 $\theta$  = Angle of channel bed with the horizontal.

Following table gives spacing of check dams for different land slopes and dam height:

Land slope (%)	Spac	Spacing of check dams for height (m)						
- , ,	0.45	0.75	1.00					
1	152	253	337					
2	75	125	167					
3	50	83	111					
4	38	63	83					
5	30	50	67					
6	25	42	56					
7	21	36	48					
8	19	31	42					
9	17	28	37					
10	15	25	34					
11	14	23	30					
12	13	21	28					
13	12	19	26					
14	11	18	24					
15	10	17	22					
16	9	16	21					
17	9	15	20					
18	8	14	19					
19	8	13	18					
20	8	13	17					
21	4	7	10					
22	4	7	9					
23	4	7	9					
24	4	6	9					

#### 2.6 Criteria for site selection:

- The place where plugging is proposed must produce some direct or indirect benefit to the villagers or farmers.
- Slope of the nalla bed should be less than 30 degrees.
- Plug should not be proposed at the curve of the nalla.
- Width of the nalla should be minimum possible where the structure is to be proposed.

#### 2.7 Precautions to be taken while implementation:

- Designs and estimates with economic implications of the budget in terms
  of labour and material requirement should be shared with the user group.
- Alignment of the nalla bund or check dam should be perpendicular to the direction of flow of water.
- The place where the banks are unstable, wing walls or side pitching on the banks should be taken up.
- There should be sufficient provision for the excess water to flow over the structure without scouring and oversreading into the nearby areas.
- The implementation should conform exactly to the designed specifications.

#### 3. Spurs

These structures are constructed transverse to the river flow in order to serve the following purposes:

- (i) They protect the river banks by keeping the flow away.
- (ii) They create still pond along a particular bank with an aim to silt up the area in the vicinity.
- (iii) They train the river flow along a desired course by attracting, deflecting or repelling the flow.
- (iv) They contract the wide river channel for improving navigation depth.

#### 3.1 Classification

Spurs may be classified as follows;

(a) Permeable (b) Impermeable

When a river is to be confined to a definite channel impermeable type of spur is most suitable. For excessively silt- laden rivers permeable spurs are suitable. Permeable spurs such as gabion and vegetative spurs are most effective, less expensive and can be made from locally available material. Their stability is better than solid ones due to lesser scour around them.

#### 3.2 General Arrangement:

Spurs may be used singly or in series or in combination with other training works depending upon the problem in hand.

If training or protection is to be given over a long river reach, spurs are used in series and a spacing of 2 to 2.5 times the projected length of spur is a general practice. A larger spacing of 3 to 4 times the length of the spur can be adopted for convex bank.

#### 3.3 Alignment:

Spurs may be aligned either perpendicular to the bank or inclined, pointing upstream or downstream.

When a spur points upstream, it is called a repelling spur. The reason being, this type has a property of repelling the river flow away from the bank [Fig. (i)].

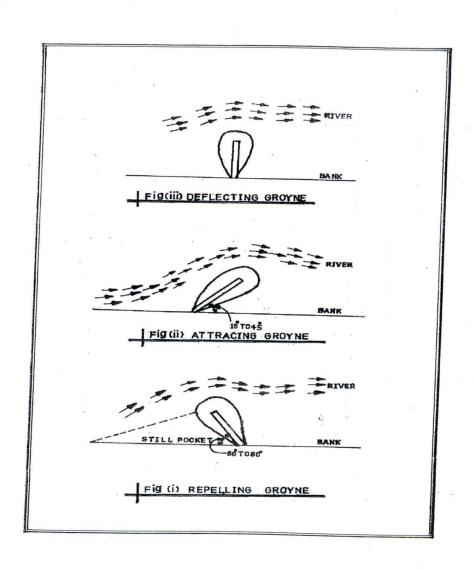
On the contrary, when a spur points downstream it is called an attracting spur as it attracts the river towards the bank from which it takes off [Fig. (ii)].

When a spur of short length is taken perpendicular to the flow, it only deflects the flow locally. Hence it is called deflecting spur [Fig. (iii)]. These spurs are recommended for quick sedimentation.

#### 3.4 Recommended Practices:

• The projected length of spur should not exceed 1/3<sup>rd</sup> of the width of the river as it causes constriction of river flow.

- Spur failure often occurs due to scouring action at the spur nose. Hence suitable protection in the form of an apron is essential.
- Where the torrent width is sufficient, attracting spurs with an angle of 15-45 degrees (from down stream) may be used for flow diversion purpose.
- If the spur length is long, its angle should be kept low and vice-versa. Normally the spur length may not exceed 10-15 m for greater stability.



#### 4. Retaining / Breast Walls:

A retaining wall is a structure used for maintaining the ground surfaces at different elevations on either side of it. The material retained or supported by a retaining wall is called backfill which may have its top surface horizontal or inclined. The position of the backfill lying above the horizontal plane at the elevation of the top of the wall is called surcharge, and its inclination to the horizontal is called the surcharge angle.

Depending upon the mode of resisting the earth pressure and according to the shape, the retaining walls can be classified into the following types:

- Gravity retaining walls
- Cantilever retaining walls (T-shaped or L-shaped)
- Counter fort retaining walls

Various common types of retaining walls are shown in fig. (v)

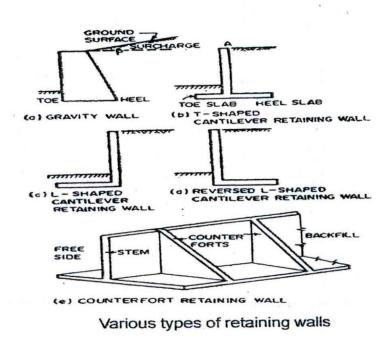


Figure - v

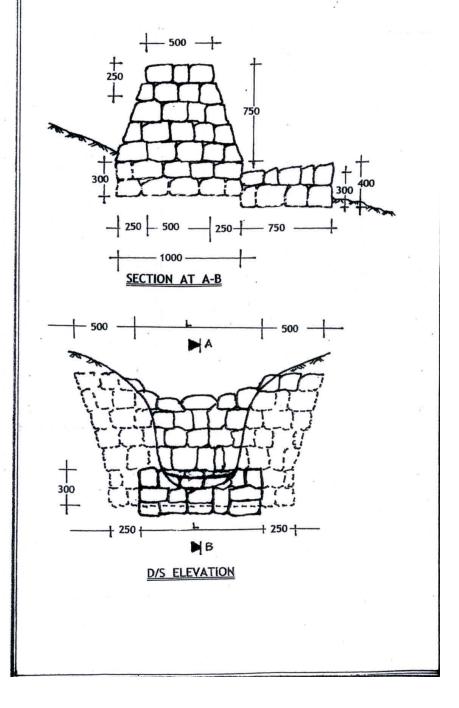
# STANDARD ESTIMATE FORMATES

**OF** 

# DRY STONE / LOOSE ROCK CHECK DAMS

### DRY STONE CHECK DAM (HT.=0.75 MTR.)

#### ALL DIMENSIONS ARE IN MM



Name of work:		_
WWMC	 G.P	
MWS/ Village :	During	
1 Labour: 2 Material Cost: 3 Others:		
Grand Total:		
Amount in words ( Rupees		_)
1 Lead:		
2 Mode of carriage of material		
3 Agency:- Department Labour.		
Certified that: 1. Leads and carriage shown in the estimates.	ates are true to the best of my knowledge.	
2. Cost of material provided in the estimat	te is as per the lowest cost prevailing in the market.	
Signature:		
Village Incharge	Member of WWMC	

#### **Dry Stone Check Dam**

Ht. 0.75 mtrs. Leng

S.NO.	PARTICULARS	NOS.	MEASUREMENT		
			Length	Width	Depth/Ht.
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres, stacking the excavated soil not more than 3 metres clear from the edge of excavation and then returning the stacked soil in 15 cm. layers, where required into plinth, sides of foundation etc., consolidating each deposited layer by ramming and watering and then disposing off all surplus excavated earth as directed with in a lead of 20 metres:				
	i. Foundation ii Apron	1	1.50 1.00	1.00 0.75	0.30 0.30
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.	2	0.50	1.00	0.90
3	Dry hand packed boulder stone filling in:  i. Foundation ii Apron	1 1	1.50 1.00	1.00 0.75	0.30 0.30+0.40 2
4	Construction of check dam/ check wall in dry rough stone masonary i/c rough dressing in:				
	Super Structue	1	2.00+1.50 2	<u>0.50+1.00</u> 2	0.75

**Dry Stone Check Dam** 

Ht. 0.75 mtrs. Length 1.00 mtrs.

S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres, and desposal surpluse excavated earth upto a lead of 20 metres.				
	Total Qty. Pick Work @ 50% Jumper Work @ 50%	0.67 0.33 0.34	CUM CUM CUM	53.50 98.00	17.66 33.32
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metres in anchorage.	0.90	CUM	30.65	27.59
3	Dry hand packed boulder stone filling in Foundation & Apron.	0.71	CUM	49.05	34.83
4	Construction of check dam/ check wall in dry rough stone masonary i/c rough dressing in Super Structure.	0.98	CUM	87.25	85.51
5	Breaking of Boulder Stones @ 25 % of the qty. of stone masonary in Super Structure.	0.24	CUM	85.00	20.40
6	Carriage of Boulder Stones along the Nala/Khad O/D Rmt. Ave. by M/L or Mules.				
	ABSTRACT OF N	//ATE	RIAL C	OST	
1	Cost & Carriage o f Boulder Stones. 741.				

**Dry Stone Check Dam** 

Ht. 0.75 mtrs. Length 1.25 mtrs.

S.NO.	PARTICULARS	NOS.	М	EASURE	MENT	UNIT	QTY.
			Length	Width	Depth/Ht.		
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres, stacking the excavated soil not more than 3 metres clear from the edge of excavation and then returning the stacked soil in 15 cm. layers, where required into plinth, sides of foundation etc., consolidating each deposited layer by ramming and watering and then disposing off all surplus excavated earth as directed with in a lead of 20 metres:		Lengui	Width	Depui/III.		
	i. Foundation ii Apron	1	1.75 1.25	1.00 0.75	0.30 0.30	CUM CUM <b>Total</b>	0.53 0.28 <b>0.81</b>
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.	2	0.50	1.00	0.90	CUM	0.90
3	Dry hand packed boulder stone filling in:  i. Foundation ii Apron	1 1	1.75 1.25	1.00 0.75	0.30 0.30+0.40 2	CUM CUM <b>Total</b>	0.53 0.33 <b>0.86</b>
4	Construction of check dam/ check wall in dry rough stone masonary i/c rough dressing in:  Super Structue	1	<u>2.25</u> +1.75 2	<u>0.50+1.00</u> 2	0.75	CUM	1.12

**Dry Stone Check Dam** 

Ht. 0.75 mtrs. Length 1.25 mtrs.

S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres, and desposal surpluse excavated earth upto a lead of 20 metres.				
	Total Qty. Pick Work @ 50% Jumper Work @ 50%		CUM CUM CUM	53.50 98.00	21.40 39.20
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metres in anchorage.	0.9	СПМ	30.65	27.59
3	Dry hand packed boulder stone filling in Foundation & Apron.	0.85	CUM	49.05	41.69
4	Construction of check dam/ check wall in dry rough stone masonary i/c rough dressing in Super Structure.	1.12	CUM	87.25	97.72
5	Breaking of Boulder Stones @ 25 % of the qty. of stone masonary in Super Structure.	0.28	CUM	85.00	23.80
6	Carriage of Boulder Stones along the Nala/Khad O/D Rmt. Ave. by M/L or Mules.				
	ABSTRACT OF N	ЛАТЕ	RIAL C	OST	
1	Cost & Carriage of Boulder Stones. 741.				

#### **Dry Stone Check Dam**

Ht. 0.75 mtrs. Length 1.50 mtrs.

S.NO.	PARTICULARS	NOS.	М	EASURE	UNIT	QTY.	
			Length	Width	Depth/Ht.		
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres, stacking the excavated soil not more than 3 metres clear from the edge of excavation and then returning the stacked soil in 15 cm. layers, where required into plinth, sides of foundation etc., consolidating each deposited layer by ramming and watering and then disposing off all surplus excavated earth as directed with in a lead of 20 metres:						
	i. Foundation ii Apron	1	2.00 1.50	1.00 0.75	0.30 0.30	CUM CUM <b>Total</b>	0.60 0.34 <b>0.94</b>
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.	2	0.50	1.00	0.90	CUM	0.90
3	Dry hand packed boulder stone filling in:  i. Foundation ii Apron	1 1	2.00 1.50	1.00 0.75	0.30 0.30+0.40 2	CUM CUM <b>Total</b>	0.60 0.39 <b>0.99</b>
4	Construction of check dam/ check wall in dry rough stone masonary i/c rough dressing in:  Super Structue	1	<u>2.50+1.75</u> 2	<u>0.50+1.00</u> 2	0.75	CUM	1.26

**Dry Stone Check Dam** 

Ht. 0.75 mtrs. Length 1.50 mtrs.

S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres, and desposal surpluse excavated earth upto a lead of 20 metres.				
	Total Qty. Pick Work @ 50% Jumper Work @ 50%	0.94 0.47 0.47	CUM CUM CUM	53.50 98.00	25.15 46.06
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metres in anchorage.	0.90	СПМ	30.65	27.59
3	Dry hand packed boulder stone filling in Foundation & Apron.	0.99	CUM	49.05	48.56
4	Construction of check dam/ check wall in dry rough stone masonary i/c rough dressing in Super Structure.	1.26	CUM	87.25	109.94
5	Breaking of Boulder Stones @ 25 % of the qty. of stone masonary in Super Structure.	0.32	CUM	85.00	27.20
6	Carriage of Boulder Stones along the Nala/Khad O/D Rmt. Ave. by M/L or Mules.				
	ABSTRACT OF N	//ATE	RIAL C	OST	
1	Cost & Carriage of Boulder Stones. 741.				

**Dry Stone Check Dam** 

Ht. 0.75 mtrs. Length 1.75 mtrs.

S.NO.	PARTICULARS	NOS.	М	EASURE	MENT	UNIT	QTY.
			Length	Width	Depth/Ht.		
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres, stacking the excavated soil not more than 3 metres clear from the edge of excavation and then returning the stacked soil in 15 cm. layers, where required into plinth, sides of foundation etc., consolidating each deposited layer by ramming and watering and then disposing off all surplus excavated earth as directed with in a lead of 20 metres:		3				
	i. Foundation ii Apron	1	2.25 1.75	1.00 0.75	0.30 0.30	CUM CUM <b>Total</b>	0.68 0.39 <b>1.14</b>
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.	2	0.50	1.00	0.90	CUM	0.90
3	Dry hand packed boulder stone filling in:  i. Foundation ii Apron	1	2.25 1.75	1.00 0.75	0.30 0.30+0.40 2	CUM CUM <b>Total</b>	0.68 0.46
4	Construction of check dam/ check wall in dry rough stone masonary i/c rough dressing in: Super Structue	1	<u>2.75+2.25</u> 2	<u>0.50+1.00</u> 2	0.75	CUM	1.4

**Dry Stone Check Dam** 

Ht. 0.75 mtrs. Length 2.00 mtrs.

S.NO.	PARTICULARS	NOS.	М	EASURE	MENT	UNIT	QTY.
			Length	Width	Depth/Ht.		
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres, stacking the excavated soil not more than 3 metres clear from the edge of excavation and then returning the stacked soil in 15 cm. layers, where required into plinth, sides of foundation etc., consolidating each deposited layer by ramming and watering and then disposing off all surplus excavated earth as directed with in a lead of 20 metres:						
	i. Foundation ii Apron	1	2.50 2.00	1.00 0.75	0.30 0.30	CUM CUM <b>Total</b>	0.75 0.45 <b>1.20</b>
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.	2	0.50	1.00	0.90	CUM	0.90
3	Dry hand packed boulder stone filling in:  i. Foundation ii Apron	1 1	2.50 2.00	1.00 0.75	0.30 0.30+0.40 2	CUM CUM <b>Total</b>	0.75 0.53
4	Construction of check dam/ check wall in dry rough stone masonary i/c rough dressing in:  Super Structue	1	<u>2.50+3.00</u> 2	<u>0.50+1.00</u> 2	0.75	CUM	1.55

**Dry Stone Check Dam** 

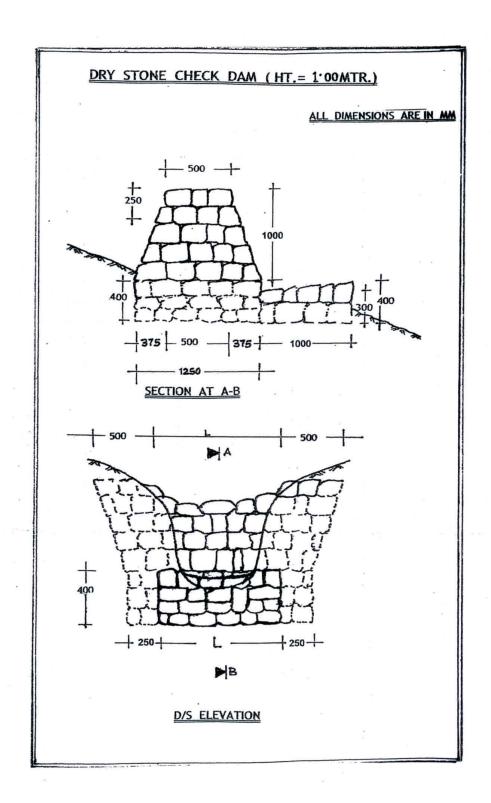
Ht. 0.75 mtrs. Length 1.75 mtrs.

S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres, and desposal surpluse excavated earth upto a lead of 20 metres.				
	Total Qty. Pick Work @ 50% Jumper Work @ 50%		CUM CUM CUM	53.50 98.00	28.36 52.92
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metres in anchorage.	0.90	CUM	30.65	27.59
3	Dry hand packed boulder stone filling in Foundation & Apron.	1.14	CUM	49.05	55.92
4	Construction of check dam/ check wall in dry rough stone masonary i/c rough dressing in Super Structure.	1.4	CUM	87.25	122.15
5	Breaking of Boulder Stones @ 25 % of the qty. of stone masonary in Super Structure.	0.35	CUM	85.00	29.75
6	Carriage of Boulder Stones along the Nala/Khad O/D Rmt. Ave. by M/L or Mules.				
	ABSTRACT OF N	ЛАТЕ	RIAL C	OST	
1	Cost & Carriage of Boulder Stones. 741.				

**Dry Stone Check Dam** 

Ht. 0.75 mtrs. Length 2.00 mtrs.

S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres, and desposal surpluse excavated earth upto a lead of 20 metres.				
	Total Qty. Pick Work @ 50% Jumper Work @ 50%	1.20 0.60 0.60	CUM CUM CUM	53.50 98.00	32.10 58.80
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metres in anchorage.	0.90	СПМ	30.65	27.59
3	Dry hand packed boulder stone filling in Foundation & Apron.	1.28	CUM	49.05	62.78
4	Construction of check dam/ check wall in dry rough stone masonary i/c rough dressing in Super Structure.	1.55	CUM	87.25	135.24
5	Breaking of Boulder Stones @ 25 % of the qty. of stone masonary in Super Structure.	0.38	CUM	85.00	32.30
6	Carriage of Boulder Stones along the Nala/Khad O/D Rmt. Ave. by M/L or Mules.				
	ABSTRACT OF N	/ATE	RIAL C	OST	
1	Cost & Carriage of Boulder Stones. 741.				



**Dry Stone Check Dam** 

Ht. 1.00 mtrs. Length 1.00 mtrs.

S.NO.	PARTICULARS	NOS.	М	EASURE	UNIT	QTY.	
			Length	Width	Depth/Ht.		
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres, stacking the excavated soil not more than 3 metres clear from the edge of excavation and then returning the stacked soil in 15 cm. layers, where required into plinth, sides of foundation etc., consolidating each deposited layer by ramming and watering and then disposing off all surplus excavated earth as directed with in a lead of 20 metres:			Width			
	i. Foundation ii Apron	1	1.50 1.00	1.25 1.00	0.40 0.30	CUM CUM <b>Total</b>	0.75 0.30 <b>1.05</b>
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.	2	0.50	1.25	1.20	CUM	1.50
3	Dry hand packed boulder stone filling in:  i. Foundation ii Apron	1 1	1.50 1.00	1.25 1.00	0.40 0.30+0.40 2	CUM CUM <b>Total</b>	0.75 0.35 <b>1.10</b>
4	Construction of check dam/ check wall in dry rough stone masonary i/c rough dressing in:  Super Structue	1	2.00+1.50 2	<u>0.50+1.25</u> 2	1.00	CUM	1.53

**Dry Stone Check Dam** 

Ht. 1.00 mtrs. Length 1.00 mtrs.

S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres, and desposal surpluse excavated earth upto a lead of 20 metres.				
	Total Qty. Pick Work @ 50% Jumper Work @ 50%		CUM CUM CUM	53.50 98.00	27.82 51.94
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metres in anchorage.	1.50	CUM	30.65	45.98
3	Dry hand packed boulder stone filling in Foundation & Apron.	1.10	CUM	49.05	53.96
4	Construction of check dam/ check wall in dry rough stone masonary i/c rough dressing in Super Structure.	1.53	CUM	87.25	133.49
5	Breaking of Boulder Stones @ 25 % of the qty. of stone masonary in Super Structure.	0.38	CUM	85.00	32.30
6	Carriage of Boulder Stones along the Nala/Khad O/DRmt. Ave. by M/L or Mules.				
	ABSTRACT OF N	ЛАТЕ	RIAL C	OST	
1	Cost & Carriage of Boulder Stones. 741.				

**Dry Stone Check Dam** 

Ht. 1.00 mtrs. Length 1.25mtrs.

S.NO.	PARTICULARS	NOS.	М	EASURE	UNIT	QTY.	
			Length	Width	Depth/Ht.		
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres, stacking the excavated soil not more than 3 metres clear from the edge of excavation and then returning the stacked soil in 15 cm. layers, where required into plinth, sides of foundation etc., consolidating each deposited layer by ramming and watering and then disposing off all surplus excavated earth as directed with in a lead of 20 metres:						
	i. Foundation ii Apron	1 1	1.75 1.25	1.25 1.00	0.40 0.30	CUM CUM <b>Total</b>	0.88 0.38 <b>1.25</b>
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.	2	0.50	1.25	1.20	CUM	1.50
3	Dry hand packed boulder stone filling in:  i. Foundation ii Apron	1 1	1.75 1.25	1.25 1.00	0.40 0.30+0.40 2	CUM CUM <b>Total</b>	0.88 0.44 <b>1.32</b>
4	Construction of check dam/ check wall in dry rough stone masonary i/c rough dressing in:  Super Structue	1	<u>2.50+1.75</u> 2	<u>0.50+1.25</u> 2	0.75	CUM	1.85

**Dry Stone Check Dam** 

Ht. 1.00 mtrs. Length 1.25 mtrs.

S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres, and desposal surpluse excavated earth upto a lead of 20 metres.				
	Total Qty. Pick Work @ 50% Jumper Work @ 50%		CUM CUM CUM	53.50 98.00	33.17 60.76
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metres in anchorage.	1.50	СПМ	30.65	45.98
3	Dry hand packed boulder stone filling in Foundation & Apron.	1.31	CUM	49.05	64.26
4	Construction of check dam/ check wall in dry rough stone masonary i/c rough dressing in Super Structure.	1.85	CUM	87.25	161.41
5	Breaking of Boulder Stones @ 25 % of the qty. of stone masonary in Super Structure.	0.46	CUM	85.00	39.10
6	Carriage of Boulder Stones along the Nala/Khad O/DRmt. Ave. by M/L or Mules.				
	ABSTRACT OF N	ЛАТЕ	RIAL C	OST	
1	Cost & Carriage of Boulder Stones. 741.				

**Dry Stone Check Dam** 

Ht. 1.00 mtrs. Length 1.50mtrs.

S.NO.	PARTICULARS	NOS.	М	EASURE	UNIT	QTY.	
			Length	Width	Depth/Ht.		
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres, stacking the excavated soil not more than 3 metres clear from the edge of excavation and then returning the stacked soil in 15 cm. layers, where required into plinth, sides of foundation etc., consolidating each deposited layer by ramming and watering and then disposing off all surplus excavated earth as directed with in a lead of 20 metres:						
	i. Foundation ii Apron	1 1	2.00 1.50	1.25 1.00	0.40 0.30	CUM CUM <b>Total</b>	1.00 0.45 <b>1.45</b>
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.	2	0.50	1.25	1.20	CUM	1.50
3	Dry hand packed boulder stone filling in:  i. Foundation ii Apron	1 1	2.00 1.50	1.25 1.00	0.40 0.30+0.40 2	CUM CUM <b>Total</b>	1.00 0.53 <b>1.53</b>
4	Construction of check dam/ check wall in dry rough stone masonary i/c rough dressing in:  Super Structue	1	<u>2.50+2.00</u> 2	<u>0.50+1.25</u> 2	0.75	CUM	1.96

**Dry Stone Check Dam** 

Ht. 1.00 mtrs. Length 1.50mtrs.

S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres, and desposal surpluse excavated earth upto a lead of 20 metres.				
	Total Qty. Pick Work @ 50% Jumper Work @ 50%	1.45 0.72	CUM CUM CUM	53.50 98.00	38.52 0.00
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metres in anchorage.	1.50	CUM	30.65	45.98
3	Dry hand packed boulder stone filling in Foundation & Apron.	1.53	CUM	49.05	75.05
4	Construction of check dam/ check wall in dry rough stone masonary i/c rough dressing in Super Structure.	1.96	CUM	87.25	171.01
5	Breaking of Boulder Stones @ 25 % of the qty. of stone masonary in Super Structure.	0.49	CUM	85.00	41.65
6	Carriage of Boulder Stones along the Nala/Khad O/DRmt. Ave. by M/L or Mules.				
	ABSTRACT OF N	ЛАТЕ	RIAL C	OST	
1	Cost & Carriage of Boulder Stones. 741.				

**Dry Stone Check Dam** 

Ht. 1.00 mtrs. Length 1.75mtrs.

S.NO.	PARTICULARS	NOS.	М	EASURE	UNIT	QTY.	
			Length	Width	Depth/Ht.		
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres, stacking the excavated soil not more than 3 metres clear from the edge of excavation and then returning the stacked soil in 15 cm. layers, where required into plinth, sides of foundation etc., consolidating each deposited layer by ramming and watering and then disposing off all surplus excavated earth as directed with in a lead of 20 metres:		Longer	vidui			
	i. Foundation ii Apron	1 1	2.25 1.75	1.25 1.00	0.40 0.30	CUM CUM <b>Total</b>	1.13 0.53 <b>1.65</b>
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.	2	0.50	1.25	1.20	CUM	1.50
3	Dry hand packed boulder stone filling in:  i. Foundation ii Apron	1 1	2.25 1.75	1.25 1.00	0.40 0.30+0.40 2	CUM CUM <b>Total</b>	1.13 0.61 <b>1.74</b>
4	Construction of check dam/ check wall in dry rough stone masonary i/c rough dressing in:  Super Structue	1	<u>2.75+2.25</u> 2	<u>0.50+1.25</u> 2	1.00	CUM	2.18

**Dry Stone Check Dam** 

Ht. 1.00 mtrs. Length 1.75mtrs.

S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres, and desposal surpluse excavated earth upto a lead of 20 metres.				
	Total Qty. Pick Work @ 50% Jumper Work @ 50%	1.64 0.82 0.82	CUM CUM CUM	53.50 98.00	43.87 80.36
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metres in anchorage.	1.50	CUM	30.65	45.98
3	Dry hand packed boulder stone filling in Foundation & Apron.	1.73	CUM	49.05	84.86
4	Construction of check dam/ check wall in dry rough stone masonary i/c rough dressing in Super Structure.	2.18	CUM	87.25	190.21
5	Breaking of Boulder Stones @ 25 % of the qty. of stone masonary in Super Structure.	0.54	CUM	85.00	45.90
6	Carriage of Boulder Stones along the Nala/Khad O/DRmt. Ave. by M/L or Mules.				
	ABSTRACT OF N	ЛАТЕ	RIAL C	OST	
1	Cost & Carriage of Boulder Stones. 741.				

**Dry Stone Check Dam** 

Ht. 1.00 mtrs. Length 2.00mtrs.

S.NO.	PARTICULARS	NOS.	MEASUREMENT			UNIT	QTY.
			Length	Width	Depth/Ht.		
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres, stacking the excavated soil not more than 3 metres clear from the edge of excavation and then returning the stacked soil in 15 cm. layers, where required into plinth, sides of foundation etc., consolidating each deposited layer by ramming and watering and then disposing off all surplus excavated earth as directed with in a lead of 20 metres:						
	i. Foundation ii Apron	1 1	2.50 2.00	1.25 1.00	0.40 0.30	CUM CUM <b>Total</b>	1.25 0.60 <b>1.85</b>
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.	2	0.50	1.25	1.20	CUM	1.50
3	Dry hand packed boulder stone filling in:  i. Foundation ii Apron	1 1	2.50 2.00	1.25 1.00	0.40 0.30+0.40 2	CUM CUM <b>Total</b>	1.25 0.70 <b>1.95</b>
4	Construction of check dam/ check wall in dry rough stone masonary i/c rough dressing in:  Super Structue	1	3.00+2.50 2	<u>0.50=1.25</u> 2	1.00	CUM	2.40

**Dry Stone Check Dam** 

Ht. 1.00 mtrs. Length 2.00mtrs.

S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres, and desposal surpluse excavated earth upto a lead of 20 metres.				
	Total Qty. Pick Work @ 50% Jumper Work @ 50%		CUM CUM CUM	53.50 98.00	49.22 91.14
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metres in anchorage.	1.50	CUM	30.65	45.98
3	Dry hand packed boulder stone filling in Foundation & Apron.	1.95	CUM	49.05	95.65
4	Construction of check dam/ check wall in dry rough stone masonary i/c rough dressing in Super Structure.	2.40	CUM	87.25	209.40
5	Breaking of Boulder Stones @ 25 % of the qty. of stone masonary in Super Structure.	0.60	CUM	85.00	51.00
6	Carriage of Boulder Stones along the Nala/Khad O/D Rmt. Ave. by M/L or Mules.				
	ABSTRACT OF N	/ATE	RIAL C	OST	
1	Cost & Carriage of Boulder Stones. 741.				

**Dry Stone Check Dam** 

Ht. 1.00 mtrs. Length 2.50mtrs.

S.NO.	PARTICULARS	NOS.	MEASUREMENT			UNIT	QTY.
			Length	Width	Depth/Ht.		
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres, stacking the excavated soil not more than 3 metres clear from the edge of excavation and then returning the stacked soil in 15 cm. layers, where required into plinth, sides of foundation etc., consolidating each deposited layer by ramming and watering and then disposing off all surplus excavated earth as directed with in a lead of 20 metres:						
	i. Foundation ii Apron	1 1	3.00 2.50	1.25 1.00	0.40 0.30	CUM CUM <b>Total</b>	1.50 0.75 <b>2.25</b>
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.	2	0.50	1.25	1.20	CUM	1.50
3	Dry hand packed boulder stone filling in:  i. Foundation ii Apron	1 1	3.00 2.50	1.25 1.00	0.40 0.30+0.40 2	CUM CUM <b>Total</b>	1.50 0.87 <b>2.37</b>
4	Construction of check dam/ check wall in dry rough stone masonary i/c rough dressing in:  Super Structue	1	3.50+3.00 2	<u>0.50+1.25</u> 2	1.00	CUM	2.84

**Dry Stone Check Dam** 

Ht. 1.00 mtrs. Length 2.50mtrs.

S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres, and desposal surpluse excavated earth upto a lead of 20 metres.				
	Total Qty. Pick Work @ 50% Jumper Work @ 50%	2.25 1.12 1.13	CUM CUM CUM	53.50 98.00	59.92 110.74
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metres in anchorage.	1.50	СПМ	30.60	45.90
3	Dry hand packed boulder stone filling in Foundation & Apron.	2.37	CUM	49.05	116.25
4	Construction of check dam/ check wall in dry rough stone masonary i/c rough dressing in Super Structure.	2.84	CUM	87.15	247.51
5	Breaking of Boulder Stones @ 25 % of the qty. of stone masonary in Super Structure.	0.71	CUM	85.00	60.35
6	Carriage of Boulder Stones along the Nala/Khad O/DRmt. Ave. by M/L or Mules.				
	ABSTRACT OF N	//ATE	RIAL C	OST	
1	Cost & Carriage of Boulder Stones. 741.				

**Dry Stone Check Dam** 

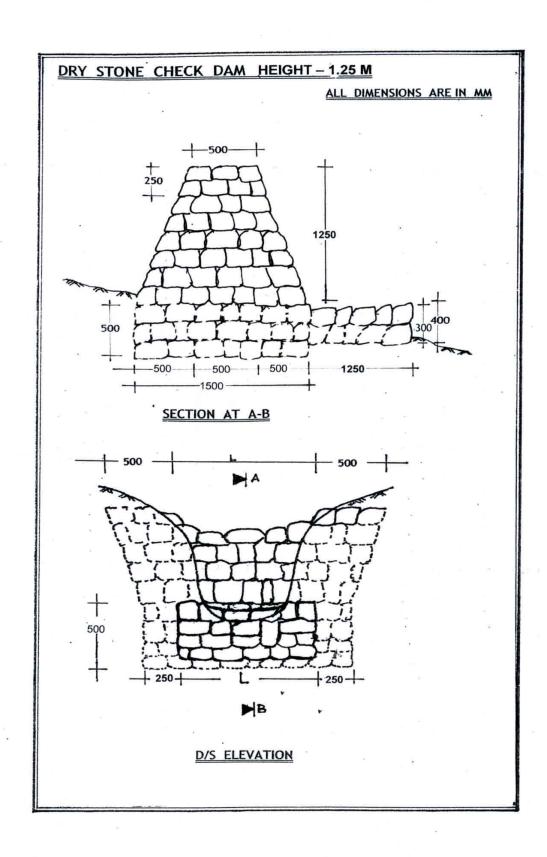
Ht. 1.00 mtrs. Length 3.00mtrs.

S.NO.	PARTICULARS	NOS.	MEASUREMENT			UNIT	QTY.
			Length	Width	Depth/Ht.		
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres, stacking the excavated soil not more than 3 metres clear from the edge of excavation and then returning the stacked soil in 15 cm. layers, where required into plinth, sides of foundation etc., consolidating each deposited layer by ramming and watering and then disposing off all surplus excavated earth as directed with in a lead of 20 metres:						
	i. Foundation ii Apron	1 1	3.50 3.00	1.25 1.00	0.40 0.30	CUM CUM <b>Total</b>	1.75 0.90 <b>2.65</b>
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.	2	0.50	1.25	1.20	CUM	1.50
3	Dry hand packed boulder stone filling in:  i. Foundation ii Apron	1 1	3.50 3.00	1.25 1.00	0.40 0.30+0.40 2	CUM CUM <b>Total</b>	1.75 1.05 <b>2.80</b>
4	Construction of check dam/ check wall in dry rough stone masonary i/c rough dressing in:  Super Structue	1	3.50+4.00 2	<u>0.50+1.25</u> 2	1.00	CUM	3.28

**Dry Stone Check Dam** 

Ht. 1.00 mtrs. Length 2.50mtrs.

S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres, and desposal surpluse excavated earth upto a lead of 20 metres.				
	Total Qty. Pick Work @ 50% Jumper Work @ 50%		CUM CUM CUM	53.50 98.00	70.62 130.34
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metres in anchorage.	1.50	СПМ	30.60	45.90
3	Dry hand packed boulder stone filling in Foundation & Apron.	2.8	CUM	49.05	137.34
4	Construction of check dam/ check wall in dry rough stone masonary i/c rough dressing in Super Structure.	3.28	CUM	87.25	286.18
5	Breaking of Boulder Stones @ 25 % of the qty. of stone masonary in Super Structure.	0.82	CUM	85.00	69.70
6	Carriage of Boulder Stones along the Nala/Khad O/D Rmt. Ave. by M/L or Mules.				
	ABSTRACT OF N	ЛАТЕ	RIAL C	OST	
1	Cost & Carriage of Boulder Stones. 741.				



**Dry Stone Check Dam** 

Ht. 1.25 mtrs. Length 1.00mtrs.

S.NO.	PARTICULARS	NOS.	MEASUREMENT			UNIT	QTY.
			Length	Width	Depth/Ht.		
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres, stacking the excavated soil not more than 3 metres clear from the edge of excavation and then returning the stacked soil in 15 cm. layers, where required into plinth, sides of foundation etc., consolidating each deposited layer by ramming and watering and then disposing off all surplus excavated earth as directed with in a lead of 20 metres:						
	i. Foundation ii Apron	1 1	1.50 1.00	1.50 1.25	0.50 0.30	CUM CUM <b>Total</b>	1.13 0.38 <b>1.50</b>
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.	2	0.50	1.5	1.25	CUM	1.88
3	Dry hand packed boulder stone filling in:  i. Foundation ii Apron	1 1	1.50 1.00	1.5 1.25	0.50 0.30+0.40 2	CUM CUM <b>Total</b>	1.13 0.44 <b>1.57</b>
4	Construction of check dam/ check wall in dry rough stone masonary i/c rough dressing in:  Super Structue	1	<u>2.00+1.50</u> 2	<u>0.50+1.50</u> 2	1.25	CUM	2.18

**Dry Stone Check Dam** 

Ht. 1.25 mtrs. Length 1.00mtrs.

S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres, and desposal surpluse excavated earth upto a lead of 20 metres.				
	Total Qty. Pick Work @ 50% Jumper Work @ 50%		CUM CUM CUM	53.50 98.00	40.13 73.50
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metres in anchorage.	1.87	CUM	30.65	57.32
3	Dry hand packed boulder stone filling in Foundation & Apron.	1.56	CUM	49.05	76.52
4	Construction of check dam/ check wall in dry rough stone masonary i/c rough dressing in Super Structure.	2.18	CUM	87.25	190.21
5	Breaking of Boulder Stones @ 25 % of the qty. of stone masonary in Super Structure.	0.54	CUM	85.00	45.90
6	Carriage of Boulder Stones along the Nala/Khad O/D Rmt. Ave. by M/L or Mules.				
	ABSTRACT OF N	/ATE	RIAL C	OST	
1	Cost & Carriage of Boulder Stones. 741.				

**Dry Stone Check Dam** 

Ht. 1.25 mtrs. Length 1.25mtrs.

S.NO.	PARTICULARS	NOS.	М	EASURE	MENT	UNIT	QTY.
			Length	Width	Depth/Ht.		
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres, stacking the excavated soil not more than 3 metres clear from the edge of excavation and then returning the stacked soil in 15 cm. layers, where required into plinth, sides of foundation etc., consolidating each deposited layer by ramming and watering and then disposing off all surplus excavated earth as directed with in a lead of 20 metres:						
	i. Foundation ii Apron	1 1	1.75 1.25	1.50 1.25	0.50 0.30	CUM CUM <b>Total</b>	1.31 0.47 <b>1.78</b>
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.	2	0.50	1.5	1.25	CUM	1.88
3	Dry hand packed boulder stone filling in:  i. Foundation ii Apron	1 1	1.75 1.25	1.5 1.25	0.50 0.30+0.40 2	CUM CUM <b>Total</b>	0.55 <b>0.55</b>
4	Construction of check dam/ check wall in dry rough stone masonary i/c rough dressing in: Super Structue	1	<u>2.25+1.75</u> 2	<u>0.50+1.50</u> 2	1.25	CUM	2.5

**Dry Stone Check Dam** 

Ht. 1.25 mtrs. Length 1.25mtrs.

S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres, and desposal surpluse excavated earth upto a lead of 20 metres.				
	Total Qty. Pick Work @ 50% Jumper Work @ 50%		CUM CUM CUM	53.50 98.00	47.08 87.22
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metres in anchorage.	1.87	СПМ	30.65	57.32
3	Dry hand packed boulder stone filling in Foundation & Apron.	1.86	CUM	49.05	91.23
4	Construction of check dam/ check wall in dry rough stone masonary i/c rough dressing in Super Structure.	2.50	CUM	87.25	218.13
5	Breaking of Boulder Stones @ 25 % of the qty. of stone masonary in Super Structure.	0.62	CUM	85.00	52.70
6	Carriage of Boulder Stones along the Nala/Khad O/DRmt. Ave. by M/L or Mules.				
	ABSTRACT OF N	/ATE	RIAL C	OST	
1	Cost & Carriage of Boulder Stones. 741.				

**Dry Stone Check Dam** 

Ht. 1.25 mtrs. Length 1.50mtrs.

S.NO.	PARTICULARS	NOS.	MEASUREMENT			UNIT	QTY.
			Length	Width	Depth/Ht.		
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres, stacking the excavated soil not more than 3 metres clear from the edge of excavation and then returning the stacked soil in 15 cm. layers, where required into plinth, sides of foundation etc., consolidating each deposited layer by ramming and watering and then disposing off all surplus excavated earth as directed with in a lead of 20 metres:						
	i. Foundation ii Apron	1	2.00 1.50	1.50 1.25	0.50 0.30	CUM CUM <b>Total</b>	1.50 0.56 <b>2.06</b>
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.	2	0.50	1.5	1.25	CUM	1.88
3	Dry hand packed boulder stone filling in:  i. Foundation ii Apron	1 1	2.00 1.50	1.5 1.25	0.50 0.30+0.40 2	CUM CUM	1.50 0.66 <b>2.16</b>
4	Construction of check dam/ check wall in dry rough stone masonary i/c rough dressing in:  Super Structue	1	2.50+2.00 2	0.50=1.50 2	1.25	CUM	2.81

**Dry Stone Check Dam** 

Ht. 1.25 mtrs. Length 1.50mtrs.

S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres, and desposal surpluse excavated earth upto a lead of 20 metres.				
	Total Qty. Pick Work @ 50% Jumper Work @ 50%		CUM CUM CUM	53.50 98.00	55.11 100.94
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metres in anchorage.	1.87	CUM	30.60	57.22
3	Dry hand packed boulder stone filling in Foundation & Apron.	2.16	CUM	49.05	105.95
4	Construction of check dam/ check wall in dry rough stone masonary i/c rough dressing in Super Structure.	2.81	CUM	87.25	245.17
5	Breaking of Boulder Stones @ 25 % of the qty. of stone masonary in Super Structure.	0.70	CUM	85.00	59.50
6	Carriage of Boulder Stones along the Nala/Khad O/D Rmt. Ave. by M/L or Mules.				
	ABSTRACT OF N	/ATE	RIAL C	OST	
1	Cost & Carriage of Boulder Stones. 741.				

**Dry Stone Check Dam** 

Ht. 1.25 mtrs. Length 1.75mtrs.

S.NO.	PARTICULARS	NOS.	MEASUREMENT			UNIT	QTY.
			Length	Width	Depth/Ht.		
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres, stacking the excavated soil not more than 3 metres clear from the edge of excavation and then returning the stacked soil in 15 cm. layers, where required into plinth, sides of foundation etc., consolidating each deposited layer by ramming and watering and then disposing off all surplus excavated earth as directed with in a lead of 20 metres:						
	i. Foundation ii Apron	1 1	2.25 1.75	1.50 1.25	0.50 0.30	CUM CUM <b>Total</b>	1.69 0.66 <b>2.34</b>
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.	2	0.50	1.5	1.25	CUM	1.88
3	Dry hand packed boulder stone filling in:  i. Foundation ii Apron	1 1	2.25 1.75	1.5 1.25	0.50 0.30+0.40 2	CUM CUM	1.69 0.77 <b>2.46</b>
4	Construction of check dam/ check wall in dry rough stone masonary i/c rough dressing in:  Super Structue	1	<u>2.75+2.25</u> 2	0.50=1.50 2	1.25	CUM	3.12

**Dry Stone Check Dam** 

Ht. 1.25 mtrs. Length 1.75mtrs.

S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres, and desposal surpluse excavated earth upto a lead of 20 metres.				
	Total Qty. Pick Work @ 50% Jumper Work @ 50%	2.34 1.17 1.17	CUM CUM CUM	53.50 98.00	62.60 114.66
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metres in anchorage.	1.87	СПМ	30.65	57.32
3	Dry hand packed boulder stone filling in Foundation & Apron.	2.45	CUM	49.05	120.17
4	Construction of check dam/ check wall in dry rough stone masonary i/c rough dressing in Super Structure.	3.12	CUM	87.25	272.22
5	Breaking of Boulder Stones @ 25 % of the qty. of stone masonary in Super Structure.	0.78	CUM	85.00	66.30
6	Carriage of Boulder Stones along the Nala/Khad O/D Rmt. Ave. by M/L or Mules.				
	ABSTRACT OF N	ЛАТЕ	RIAL C	OST	
1	Cost & Carriage of Boulder Stones. 741.				

**Dry Stone Check Dam** 

Ht. 1.25 mtrs. Length 2.00mtrs.

S.NO.	PARTICULARS	NOS.	S. MEASUREMENT			UNIT	QTY.
			Length	Width	Depth/Ht.		
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres, stacking the excavated soil not more than 3 metres clear from the edge of excavation and then returning the stacked soil in 15 cm. layers, where required into plinth, sides of foundation etc., consolidating each deposited layer by ramming and watering and then disposing off all surplus excavated earth as directed with in a lead of 20 metres:						
	i. Foundation ii Apron	1 1	2.50 2.00	1.50 1.25	0.50 0.30	CUM CUM <b>Total</b>	1.88 0.75 <b>2.63</b>
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.	2	0.50	1.50	1.25	CUM	1.88
3	Dry hand packed boulder stone filling in:  i. Foundation ii Apron	1 1	2.50 2.00	1.50 1.25	0.50 0.30+0.40 2	CUM CUM <b>Total</b>	1.88 0.88 <b>2.76</b>
4	Construction of check dam/ check wall in dry rough stone masonary i/c rough dressing in:  Super Structue	1	3.00+2.50 2	0.50+1.50 2	1.25	CUM	3.43

**Dry Stone Check Dam** 

Ht. 1.25 mtrs. Length 2.00mtrs.

S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres, and desposal surpluse excavated earth upto a lead of 20 metres.				
	Total Qty. Pick Work @ 50% Jumper Work @ 50%		CUM CUM CUM	53.50 98.00	70.09 128.38
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metres in anchorage.	1.87	CUM	30.65	57.32
3	Dry hand packed boulder stone filling in Foundation & Apron.	2.75	CUM	49.05	134.89
4	Construction of check dam/ check wall in dry rough stone masonary i/c rough dressing in Super Structure.	3.43	CUM	87.25	299.27
5	Breaking of Boulder Stones @ 25 % of the qty. of stone masonary in Super Structure.	0.85	CUM	85.00	72.25
6	Carriage of Boulder Stones along the Nala/Khad O/D Rmt. Ave. by M/L or Mules.				
	ABSTRACT OF N	ЛАТЕ	RIAL C	OST	
1	Cost & Carriage of Boulder Stones. 741.				

**Dry Stone Check Dam** 

Ht. 1.25 mtrs. Length 2.50mtrs.

S.NO.	PARTICULARS	NOS.	М	EASURE	MENT	UNIT	QTY.
			Length	Width	Depth/Ht.		
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres, stacking the excavated soil not more than 3 metres clear from the edge of excavation and then returning the stacked soil in 15 cm. layers, where required into plinth, sides of foundation etc., consolidating each deposited layer by ramming and watering and then disposing off all surplus excavated earth as directed with in a lead of 20 metres:						
	i. Foundation ii Apron	1 1	3.00 2.50	1.50 1.25	0.50 0.30	CUM CUM Total	2.25 0.94 <b>3.19</b>
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.	2	0.50	1.50	1.25	CUM	1.88
3	Dry hand packed boulder stone filling in:  i. Foundation ii Apron	1 1	3.00 2.50	1.50 1.25	0.50 0.30+0.40 2	CUM CUM <b>Total</b>	2.25 1.09 <b>3.34</b>
4	Construction of check dam/ check wall in dry rough stone masonary i/c rough dressing in: Super Structue	1	3.25+3.00 2	<u>0.50+1.50</u> 2	1.25	СИМ	4.06

**Dry Stone Check Dam** 

Ht. 1.25 mtrs. Length 2.50mtrs.

S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres, and desposal surpluse excavated earth upto a lead of 20 metres.				
	Total Qty. Pick Work @ 50% Jumper Work @ 50%		CUM CUM CUM	53.50 98.00	85.07 156.80
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metres in anchorage.	1.87	СПМ	30.65	57.32
3	Dry hand packed boulder stone filling in Foundation & Apron.	3.34	CUM	49.05	163.83
4	Construction of check dam/ check wall in dry rough stone masonary i/c rough dressing in Super Structure.	4.06	CUM	87.25	354.24
5	Breaking of Boulder Stones @ 25 % of the qty. of stone masonary in Super Structure.	1.01	CUM	85.00	85.85
6	Carriage of Boulder Stones along the Nala/Khad O/D Rmt. Ave. by M/L or Mules.				
	ABSTRACT OF N	ЛАТЕ	RIAL C	OST	
1	Cost & Carriage of Boulder Stones. 741.				

**Dry Stone Check Dam** 

Ht. 1.25 mtrs. Length 3.00mtrs.

S.NO.	PARTICULARS	NOS.	MEASUREMENT			UNIT	QTY.
			Length	Width	Depth/Ht.		
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres, stacking the excavated soil not more than 3 metres clear from the edge of excavation and then returning the stacked soil in 15 cm. layers, where required into plinth, sides of foundation etc., consolidating each deposited layer by ramming and watering and then disposing off all surplus excavated earth as directed with in a lead of 20 metres:						
	i. Foundation ii Apron	1 1	3.50 3.00	1.50 1.25	0.50 0.30	CUM CUM <b>Total</b>	2.63 1.13 <b>3.75</b>
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.	2	0.50	1.50	1.25	CUM	1.88
3	Dry hand packed boulder stone filling in:  i. Foundation ii Apron	1 1	3.50 3.00	1.50 1.25	0.50 0.30+0.40 2	CUM CUM	2.63 1.31 <b>3.94</b>
4	Construction of check dam/ check wall in dry rough stone masonary i/c rough dressing in:  Super Structue	1	3.50+4.00 2	<u>0.50+1.50</u> 2	1.25	CUM	4.68

**Dry Stone Check Dam** 

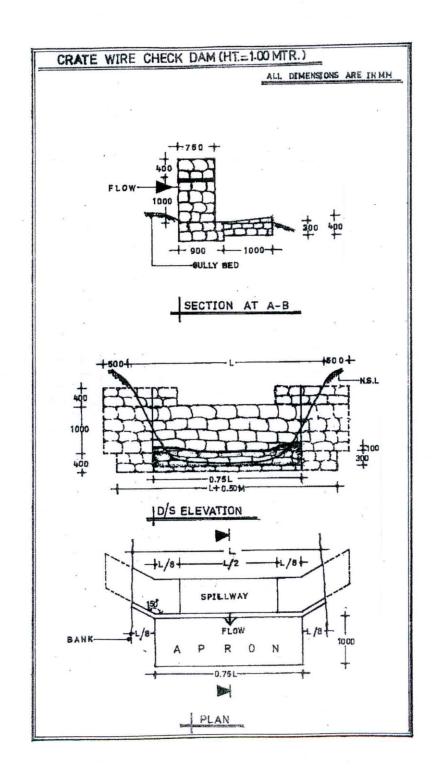
Ht. 1.25 mtrs. Length 3.00mtrs.

S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres, and desposal surpluse excavated earth upto a lead of 20 metres.				
	Total Qty. Pick Work @ 50% Jumper Work @ 50%		CUM CUM CUM	53.50 98.00	100.05 184.24
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metres in anchorage.	1.87	СПМ	30.65	57.32
3	Dry hand packed boulder stone filling in Foundation & Apron.	3.93	CUM	49.05	192.77
4	Construction of check dam/ check wall in dry rough stone masonary i/c rough dressing in Super Structure.	4.68	CUM	87.25	408.33
5	Breaking of Boulder Stones @ 25 % of the qty. of stone masonary in Super Structure.	1.17	CUM	85.00	99.45
6	Carriage of Boulder Stones along the Nala/Khad O/D Rmt. Ave. by M/L or Mules.				
	ABSTRACT OF N	ЛАТЕ	RIAL C	OST	
1	Cost & Carriage of Boulder Stones. 741.				

# STANDARD ESTIMATES OF WIRE CRATE / GABION CHECK DAMS

#### **GENERAL ABSTRACT**

Name of work:	
WDC	 G.P
MMWS/ Village :	During
1 Labour: 2 Material Cost: 3 Others:	
Grand Total:  Amount in words ( Rupees	
1 Lead:	
2 Mode of carriage of material	
3 Agency:- Department Labour.	
Certified that: 1. Leads and carriage shown in	the estimates are true to the best of my knowledge.
2. Cost of material provided in t	he estimate is as per the lowest cost prevailing in the market.
Signature:	
Village In-charge	Member of WWMC



#### Wire Crate Check Dam

Ht. 1.00 mtrs. Length 2.00mtrs.

S.NO.	PARTICULARS	NOS.	М	EASURE	MENT	UNIT	QTY.
			Length	Width	Depth/Ht.		
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and then disposing of all surplus excavated earth as directed with in a lead of 20 metres:						
	i. Foundation ii Apron	1	2.65 1.50	0.90 1.00	0.40 0.30	CUM CUM <b>Total</b>	0.95 0.45 <b>1.40</b>
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.	2	<u>0.50+0.75</u> 2	0.75	1.40	CUM	1.31
3	Dry hand packed boulder stone filling in:						
	i. Foundation ii Apron	1 1	2.65 1.50	0.90 1.00	0.40 0.30+0.40 2	CUM CUM	0.95 0.53 <b>1.48</b>
4	Construction of super structure of Check dam.	1	3.22	0.75	1.40	CUM	3.38
	Duduction of spilway	1	1.00	0.75	0.40	CUM Total	(-)0.30 <b>3.08</b>
	i) Dry Random Rubble Stone masnory masnory @ 25%	0	0	0	0	CUM	0.77
	ii) Dry hand packed boulder stone filling @ 75%	0	0	0	0	CUM	2.31

#### Wire Crate Check Dam

Ht. 1.00 mtrs. Length 2.00mtrs.

S.NO.	PARTICULARS	NOS.	М	EASURE	MENT	UNIT	QTY.
			Length	Width	Depth/Ht.		
5	Weaving of wire netting for wire crate						
	with G.I. wire 4mm/5mm or SWG No.						
	6/8 in 15cmx15cm mesh.						
	i) Foundation Bottom	1	2.65	0.90	0.00	Sqm	2.39
	Sides(i/c 15 c.m. top)	1	2.65	0.00	0.95	Sqm	2.52
	Ends	2	0.00	0.90	0.40	Sqm	0.72
	ii) Apron Top/Bottom	2	1.50	1.00	0.00	Sqm	3.00
	d/s Side	1	1.50	0.00	0.40	Sqm	0.60
	Ends	2	0.00	1.00	<u>0.30+0.40</u>	Sqm	0.70
					2		
	iii) Super Structure						
	Тор	1	3.22	0.75	0.00	Sqm	2.42
	Bottom	1	3.22-2.65	0.75	0.00	Sqm	0.43
	Sides	2	3.22	0.00	1.40	Sqm	9.02
	Ends	2	0.00	0.75	1.40	Sqm	2.10
	Ends of spilway	2	0.00	0.75	1.40	Sqm	2.10
	Deduction of Spilway Side	2	1.00	0.00	1.40	Sqm	(-)2.80
						Total	23.18
6	Spreading of wire crate over pitching ,				_		
	stone masonary, boulder filling etc.	Qty. S	ame as i	tem No.	5	Sqm	23.18
_			_				
7	Tipping of wire crates i/c equipment.	Qty. sa	me as Su	m of item	ıs 3-4	CUM	4.56

#### Wire Crate Check Dam

Ht. 1.00 mtrs. Length 2.00mtrs.

S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and disposal surplus excavated earth upto a lead of 20 metres.				
	Total Qty.	1.40	CUM		
	Pick Work @ 50%	0.70	CUM	53.50	37.45
2	Jumper Work @ 50% Cutting in earth work and disposal of excavated earth upto a lead of	0.70	CUM	98.00	68.60
	20 metres in anchorage.	1.31	CUM	30.65	40.15
3	Dry hand packed boulder stone filling in Foundation & Apron.	1.48	CUM	49.05	72.59
4	i) Dry random rubble stone masonry in super structure i/c rough dressing.	0.77	CUM	87.25	67.18
	ii) Dry hand packed boulder stone filling in super structure.	2.31	CUM	49.05	113.31
5	Weaving of wire netting for wire crate with G.I. wire 4mm/5mm or SWG No.6/8 in 15cmx15cm mesh.	23.17	Sqm	9.05	209.69
6	Spreading of wire crate over pitching stone masonary, boulder filling etc.	23.17	Sqm	10.95	253.71
7	Tipping of wire crates i/c equipment.	4.56	CUM	21.85	99.64
8	Breaking of boulder stones	0.77	CUM	85.00	65.45
9	Carriage of G.I. wire from store to worksite O/D by M/L or Mules.	0.051	Tonne/Km.		
10	Carriage of boulder stones from nala/ road head along nala to workshite over an average distance km. by M/L or Mules.		Cum/Km.		
	ABSTRACT OF N	<b>IATE</b>	RIAL C	OST	
1	Cost & carriage of G.I. wire upto store.	0.051	Tonne		
2	Cost & carriage of boulder stones upto road head.		CUM		
	iloda ileaa.		COIVI	Total	

#### Wire Crate Check Dam

Ht. 1.00 mtrs. Length 2.50mtrs.

S.NO.	PARTICULARS	NOS.	М	EASURE	UNIT	QTY.	
			Length	Width	Depth/Ht.		
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and then disposing of all surplus excavated earth as directed with in a lead of 20 metres:						
	i. Foundation ii Apron	1	3.17 1.88	0.90 1.00	0.40 0.30	CUM CUM Total	1.14 0.56 <b>1.71</b>
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.	2	<u>0.50+0.75</u> 2	0.75	1.40	CUM	1.31
3	Dry hand packed boulder stone filling in:						
	i. Foundation ii Apron	1 1	3.17 1.88	0.90 1.00	0.40 0.30+0.40 2	CUM CUM	1.14 0.66 <b>1.80</b>
4	Construction of super structure of Check dam.	1	3.75	0.75	1.40	CUM	3.94
	Duduction of spilway	1	1.25	0.75	0.40	CUM Total	(-)0.38 <b>3.56</b>
	i) Dry Random Rubble Stone masnory masnory @ 25%	0	0	0	0	CUM	0.89
	ii) Dry hand packed boulder stone filling @ 75%	0	0	0	0	CUM	2.67

#### Wire Crate Check Dam

Ht. 1.00 mtrs. Length 2.00mtrs.

S.NO.	PARTICULARS	NOS.	М	EASURE	UNIT	QTY.	
			Length	Width	Depth/Ht.		
5	Weaving of wire netting for wire crate						
	with G.I. wire 4mm/5mm or SWG No.						
	6/8 in 15cmx15cm mesh.						
	i) Foundation Bottom	1	3.17	0.90	0.00	Sqm	2.85
	Sides(i/c 15 c.m. top)	1	3.17	0.00	0.95	Sqm	3.01
	Ends	2	0.00	0.90	0.40	Sqm	0.72
	ii) Apron Bottom	1	3.75-3.17	0.75	0.00	Sqm	0.43
	iii) Apron Top	2	1.88	1.00	0.00	Sqm	3.76
	d/s Side	1	1.88	0.00	0.40	Sqm	0.75
	Ends	2	0.00	1.00	0.30+0.40	Sqm	0.70
					2		
	iv) Super Structure						
	Top/Bottom	1	3.75	0.75	0.00	Sqm	2.81
	Sides	2	3.75	0.73	1.40	Sqm	10.50
	Ends	2	0.00	0.75	1.40	Sqm	2.10
	Ends of spilway	2	0.00	0.75	1.40	Sqm	2.10
	Deduction of Spilway Side	2	1.25	0.00	1.40	Sqm	(-)1.00
	Decade of Opinway Glad	-	1.20	0.00	1.40	Total	27.23
6	Spreading of wire crate over pitching,				l		
ľ	stone masonary, boulder filling etc.	Qtv. S	ame as i	tem No.	5	Sqm	27.23
						- 4	
7	Tipping of wire grates i/a aguipment	Oty an	ma aa Cu	CUM	F 26		
′	Tipping of wire crates i/c equipment.	July. Sa	me as Su	5 3-4	COM	5.36	

#### **Wire Crate Check Dam**

Ht. 1.00 mtrs. Length 2.50mtrs.

S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and disposal surplus excavated earth upto a lead of 20 metres.				
	Total Qty. Pick Work @ 50%	1.70 0.85	CUM CUM	53.50	45.48
2	Jumper Work @ 50%  Cutting in earth work and disposal of excavated earth upto a lead of	0.85	CUM	98.00	83.30
	20 metres in anchorage.	1.71	CUM	30.65	52.41
3	Dry hand packed boulder stone filling in Foundation & Apron.	1.80	CUM	49.05	88.29
4	i) Dry random rubble stone masonry in super structure i/c rough dressing.	0.89	CUM	87.25	77.65
	ii) Dry hand packed boulder stone filling in super structure.	2.67	CUM	49.05	130.96
5	Weaving of wire netting for wire crate with G.I. wire 4mm/5mm or SWG No.6/8 in 15cmx15cm mesh.	27.23	Sqm	9.05	246.43
6	Spreading of wire crate over pitching stone masonary, boulder filling etc.	27.23	Sqm	10.95	298.17
7	Tipping of wire crates i/c equipment.	5.36	CUM	21.85	117.12
8	Breaking of boulder stones	0.89	CUM	85.00	75.65
9	Carriage of G.I. wire from store to worksite O/D by M/L or Mules.	0.058	Tonne/Km.		
10	Carriage of boulder stones from nala/ road head along nala to workshite over an average distance km. by M/L or Mules.		Cum/Km.		
	ABSTRACT OF N	/IATE	RIAL C	OST	
1	Cost & carriage of G.I. wire upto store.	0.058	Tonne		
2	Cost & carriage of boulder stones upto road head.		CUM	Tatal	
				Total	

#### Wire Crate Check Dam

Ht. 1.00 mtrs. Length 3.00mtrs.

PARTICULARS	NOS.	М	EASURE	UNIT	QTY.	
		Length	Width	Depth/Ht.		
Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and then disposing of all surplus excavated earth as directed with in a lead of 20 metres:						
i. Foundation ii Apron	1	3.69 2.25	0.90 1.00	0.40 0.30	CUM CUM Total	1.33 0.68 <b>2.00</b>
Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.	2	<u>0.50+0.75</u> 2	0.75	1.40	CUM	1.31
Dry hand packed boulder stone filling in:						
i. Foundation ii Apron	1	3.69 2.25	0.90 1.00	0.40 0.30+0.40 2	CUM CUM	1.33 0.79 <b>2.12</b>
Construction of super structure of	1	4.26	0.75	1.40	CUM	4.47
Duduction of spilway	1	1.50	0.75	0.40	CUM Total	(-)0.45 <b>4.02</b>
i) Dry Random Rubble Stone masnory masnory @ 25%	0	0	0	0	CUM	1.00
ii) Dry hand packed boulder stone filling @ 75%	0	0	0	0	CUM	3.02
	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and then disposing of all surplus excavated earth as directed with in a lead of 20 metres:  i. Foundation ii Apron  Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.  Dry hand packed boulder stone filling in:  i. Foundation ii Apron  Construction of super structure of Check dam. Duduction of spilway  i) Dry Random Rubble Stone masnory masnory @ 25%  ii) Dry hand packed boulder stone	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and then disposing of all surplus excavated earth as directed with in a lead of 20 metres:  i. Foundation ii Apron  1  Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.  Dry hand packed boulder stone filling in:  i. Foundation ii Apron  1  Construction of super structure of 1 Check dam. Duduction of spilway  1  i) Dry Random Rubble Stone masnory masnory @ 25%  ii) Dry hand packed boulder stone  0	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and then disposing of all surplus excavated earth as directed with in a lead of 20 metres:  i. Foundation ii Apron  Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.  Dry hand packed boulder stone filling in: i. Foundation ii Apron  1 3.69 2 0.50+0.75 2  Dry hand packed boulder stone filling in: i. Foundation ii Apron  1 3.69 1 2.25  Construction of super structure of 2.25  Construction of super structure of 3.69 1 2.25  Construction of super structure of 3.69 1 1.50  Construction of super structure of 3.69 1 2.25  Construction of super structure of 3.69 1 3.69	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and then disposing of all surplus excavated earth as directed with in a lead of 20 metres:  i. Foundation ii Apron  Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.  Dry hand packed boulder stone filling in:  i. Foundation ii Apron  1 3.69 0.90 2 0.50+0.75 2 0.75 2 0.75  Construction of super structure of the check dam. Duduction of spilway  1 4.26 0.75 Check dam. Duduction of spilway  1 1.50 0.75  i) Dry Random Rubble Stone masnory masnory @ 25%  ii) Dry hand packed boulder stone  0 0 0	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and then disposing of all surplus excavated earth as directed with in a lead of 20 metres:  i. Foundation ii Apron  Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.  Dry hand packed boulder stone filling in:  i. Foundation ii Apron  1 3.69 0.90 0.40 2 0.50+0.75 2  1.40  Dry hand packed boulder stone filling in:  i. Foundation ii Apron  1 3.69 0.90 0.40 2 2.25 1.00 0.30+0.40 2 2  Construction of super structure of Check dam. Duduction of spilway  1 1.50 0.75 1.40  i) Dry Random Rubble Stone masnory masnory @ 25% ii) Dry hand packed boulder stone 0 0 0 0	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and then disposing of all surplus excavated earth as directed with in a lead of 20 metres:  i. Foundation ii Apron 1 2.25 1.00 0.30 CUM Total  Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.  Dry hand packed boulder stone filling in:  i. Foundation 1 3.69 0.90 0.40 CUM CUM Total  Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.  Dry hand packed boulder stone filling in:  i. Foundation 1 3.69 0.90 0.40 CUM CUM CUM Total  Construction of super structure of 1 2.25 1.00 0.30+0.40 CUM CUM Total  Construction of super structure of 1 4.26 0.75 1.40 CUM CUM Total  i) Dry Random Rubble Stone masnory 0 0 0 0 CUM Total  i) Dry Random Rubble Stone masnory 0 0 0 0 CUM Total

#### **Wire Crate Check Dam**

Ht. 1.00 mtrs. Length 3.50mtrs.

S.NO.	PARTICULARS	NOS.	М	EASURE	UNIT	QTY.	
			Length	Width	Depth/Ht.		
5	Weaving of wire netting for wire crate						
	with G.I. wire 4mm/5mm or SWG No.						
	6/8 in 15cmx15cm mesh.						
	i) Foundation Bottom	1	3.69	0.90	0.40	Sqm	3.32
	Sides(i/c 15 c.m. top)		3.69	0.90	0.40	Sqm	3.51
	Ends	1 2	0.00	0.00	0.95	Sqm	0.72
		2	2.25	1.00	0.40		4.50
	ii) Apron Top/Bottom d/s Side	1	2.25			Sqm	
		-		0.00	0.40	Sqm	0.90
	Ends	2	0.00	1.00	<u>0.30+0.40</u>	Sqm	0.70
					2		
	iii) Super Structure						
	Тор	2	4.26	0.75	0.00	Sqm	6.39
	Bottom	1	4.26-3.69	0.75	0.00	Sqm	0.43
	Sides	2	4.26	0.00	1.40	Sqm	11.93
	Ends	2	0.00	0.75	1.40	Sqm	2.10
	Ends of spilway	2	0.00	0.75	1.40	Sqm	2.10
	Deduction of Spilway Side	2	1.50	0.00	1.40	Sqm	(-)1.20
	,					Total	30.70
6	Spreading of wire crate over pitching,				_		
	stone masonary, boulder filling etc.	Qty. S	ame as i	tem No.	5	Sqm	30.70
7	Tipping of wire crates i/c equipment.	Oty sa	me as Su	s 3-4	CUM	6.13	
'	Tripping of who ofates to equipment.	wiy. sa	inc as ou	3	JOINI	0.10	

#### Wire Crate Check Dam

Ht. 1.00 mtrs. Length 3.00mtrs.

S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and disposal surplus excavated earth upto a lead of 20 metres.				
	Total Qty.	2.00	CUM		
	Pick Work @ 50%	1.00	CUM	53.50	53.50
2	Jumper Work @ 50% Cutting in earth work and disposal of excavated earth upto a lead of	1.00	CUM	98.00	98.00
	20 metres in anchorage.	1.31	CUM	30.65	40.15
3	Dry hand packed boulder stone filling in Foundation & Apron.	2.11	CUM	49.00	103.39
4	i) Dry random rubble stone masonry in super structure i/c rough dressing.	1.00	CUM	87.25	87.25
	ii) Dry hand packed boulder stone filling in super structure.	3.02	CUM	49.05	148.13
5	Weaving of wire netting for wire crate with G.I. wire 4mm/5mm or SWG No.6/8 in 15cmx15cm mesh.	30.70	Sqm	9.05	277.84
6	Spreading of wire crate over pitching stone masonary, boulder filling etc.	30.70	Sqm	10.95	336.17
7	Tipping of wire crates i/c equipment.	6.13	CUM	21.85	133.94
8	Breaking of boulder stones	1.00	CUM	85.00	85.00
9	Carriage of G.I. wire from store to worksite O/D by M/L or Mules.	0.068	Tonne/Km.		
10	Carriage of boulder stones from nala/ road head along nala to workshite over an average distance km. by M/L or Mules.		Cum/Km.		
	ABSTRACT OF N	/ATE	RIAL C	OST	
1	Cost & carriage of G.I. wire upto store.	0.068	Tonne		
2	Cost & carriage of boulder stones upto road head.		CUM		
				Total	

#### Wire Crate Check Dam

Ht. 1.00 mtrs. Length 3.50mtrs.

S.NO.	PARTICULARS	NOS.	М	EASURE	UNIT	QTY.	
			Length	Width	Depth/Ht.		
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and then disposing of all surplus excavated earth as directed with in a lead of 20 metres:						
	i. Foundation ii Apron	1	4.21 2.63	0.90 1.00	0.40 0.30	CUM CUM Total	1.52 0.79 <b>2.30</b>
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.	2	<u>0.50+0.75</u> 2	0.75	1.40	CUM	1.31
3	Dry hand packed boulder stone filling in:						
	i. Foundation ii Apron	1	4.21 2.63	0.90 1.00	0.40 0.30+0.40 2	CUM CUM	1.52 0.92 <b>2.44</b>
4	Construction of super structure of Check dam.	1	4.79	0.75	1.40	CUM	5.02
	Duduction of spilway	1	1.75	0.75	0.40	CUM Total	(-)0.52 <b>4.50</b>
	i) Dry Random Rubble Stone masnory masnory @ 25%	0	0	0	0	CUM	1.12
	ii) Dry hand packed boulder stone filling @ 75%	0	0	0	0	CUM	3.38

#### **Wire Crate Check Dam**

Ht. 1.00 mtrs. Length 3.50mtrs.

S.NO.	PARTICULARS	NOS.	М	EASURE	MENT	UNIT	QTY.
			Length	Width	Depth/Ht.		
5	Weaving of wire netting for wire crate						
	with G.I. wire 4mm/5mm or SWG No.						
	6/8 in 15cmx15cm mesh.						
	i) Foundation Bottom	1	4.21	0.90	0.00	Sqm	3.79
	Sides(i/c 15 c.m. top)	1	4.21	0.00	0.95	Sqm	4.00
	Ends	2	0.00	0.90	0.40	Sqm	0.72
	ii) Apron Top/Bottom	2	2.63	1.00	0.00	Sqm	5.26
	d/s Side	1	2.63	0.00	0.40	Sqm	1.05
	Ends	2	0.00	1.00	<u>0.30+0.40</u>	Sqm	0.70
					2		
	iii) Super Structure						
	Тор	1	4.79	0.75	0.00	Sqm	3.59
	Bottom	1	4.79-421	0.75	0.00	Sqm	0.43
	Sides	2	4.79	0.00	1.40	Sqm	13.41
	Ends	2	0.00	0.75	1.40	Sqm	2.10
	Ends of spilway	2	0.00	0.75	0.40	Sqm	0.60
	Deduction of Spilway Side	2	1.75	0.00	0.40	Sqm	(-)1.40
						Total	34.24
6	Spreading of wire crate over pitching ,		l l		I		
"	stone masonary, boulder filling etc.	Oty S	ame as i	5	Sqm	34.24	
	Storie masonary, boarder mining etc.	Qty. O	arric as i	J	ОЧШ	54.24	
7	Tipping of wire crates i/c equipment.	Qty. sa	me as Su	s 3-4	CUM	6.93	

### Wire Crate Check Dam

Ht. 1.00 mtrs. Length 3.50mtrs.

S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and disposal surplus excavated earth upto a lead of 20 metres.				
	Total Qty.	2.31	CUM		
	Pick Work @ 50%	1.15	CUM	53.50	61.53
2	Jumper Work @ 50% Cutting in earth work and disposal of excavated earth upto a lead of	1.16	CUM	98.00	113.68
	20 metres in anchorage.	1.31	CUM	30.65	40.15
3	Dry hand packed boulder stone filling in Foundation & Apron.	2.43	CUM	49.05	119.19
4	i) Dry random rubble stone masonry in super structure i/c rough dressing.	1.12	CUM	87.25	97.72
	ii) Dry hand packed boulder stone filling in super structure.	3.38	CUM	49.05	165.79
5	Weaving of wire netting for wire crate with G.I. wire 4mm/5mm or SWG No.6/8 in 15cmx15cm mesh.	34.24	Sqm	9.05	309.87
6	Spreading of wire crate over pitching stone masonary, boulder filling etc.	34.24	Sqm	10.95	374.93
7	Tipping of wire crates i/c equipment.	6.93	CUM	21.85	151.42
8	Breaking of boulder stones	1.12	CUM	85.00	95.20
9	Carriage of G.I. wire from store to worksite O/D by M/L or Mules.	0.076	Tonne/Km.		
10	Carriage of boulder stones from nala/ road head along nala to workshite over an average distance km. by M/L or Mules.		Cum/Km.		
		/ATE	RIAL C	OST	
1	Cost & carriage of G.I. wire upto store.	0.076	Tonne		
2	Cost & carriage of boulder stones upto		OL INA		
	road head.		CUM	Total	
					1

### **Wire Crate Check Dam**

Ht. 1.00 mtrs. Length 4.00mtrs.

S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and disposal surplus excavated earth upto a lead of 20 metres.				
	Total Qty.	2.60	CUM		
2	Pick Work @ 50%  Jumper Work @ 50%  Cutting in earth work and disposal	1.30 1.30	CUM CUM	53.50 98.00	69.55 127.40
	of excavated earth upto a lead of 20 metres in anchorage.	1.31	CUM	30.65	40.15
3	Dry hand packed boulder stone filling in Foundation & Apron.	2.75	CUM	49.05	134.89
4	i) Dry random rubble stone masonry in super structure i/c rough dressing.	1.24	CUM	87.25	108.19
	ii) Dry hand packed boulder stone filling in super structure.	3.72	CUM	49.05	182.47
5	Weaving of wire netting for wire crate with G.I. wire 4mm/5mm or SWG No.6/8 in 15cmx15cm mesh.	37.71	Sqm	9.05	341.28
6	Spreading of wire crate over pitching stone masonary, boulder filling etc.	37.71	Sqm	10.95	412.92
7	Tipping of wire crates i/c equipment.	7.71	СИМ	21.85	168.46
8	Breaking of boulder stones	1.24	СИМ	85.00	105.40
9	Carriage of G.I. wire from store to worksite O/D by M/L or Mules.	0.084	Tonne/Km.		
10	Carriage of boulder stones from nala/ road head along nala to workshite over an average distance km. by M/L or Mules.		Cum/Km.		
	ABSTRACT OF N	/ATE	RIAL C	OST	
1	Cost & carriage of G.I. wire upto store.	0.084	Tonne		
2	Cost & carriage of boulder stones upto road head.		CUM		
				Total	

### **Wire Crate Check Dam**

Ht. 1.00 mtrs. Length 4.00mtrs.

S.NO.	PARTICULARS	NOS.	М	EASURE	MENT	UNIT	QTY.
			Length	Width	Depth/Ht.		
5	Weaving of wire netting for wire crate						
	with G.I. wire 4mm/5mm or SWG No.						
	6/8 in 15cmx15cm mesh.						
	i) Foundation Pottom	1	4.73	0.90	0.00	Sam	4.26
	i) Foundation Bottom		4.73 4.73		0.00	Sqm	4.49
	Sides(i/c 15 c.m. top) Ends	1	_	0.00		Sqm	
		2 2	0.00	0.90	0.40	Sqm	0.72
	ii) Apron Top/Bottom	1 1	3.00	1.00	0.00	Sqm	6.00
	d/s Side	· -	3.00	0.00	0.40	Sqm	1.20
	Ends	2	0.00	1.00	<u>0.30+0.40</u>	Sqm	0.70
					2		
	iii) Super Structure						
	Тор	1	5.30	0.75	0.00	Sqm	3.98
	Bottom	1	5.30-4.73	0.75	0.00	Sqm	0.43
	Sides	2	5.30	0.00	1.40	Sqm	14.84
	Ends	2	0.00	0.75	1.40	Sqm	2.10
	Ends of spilway	2	0.00	0.75	0.40	Sqm	0.60
	Deduction of Spilway Side	2	2.00	0.00	0.40	Sqm	(-)1.60
	, ,					Total	37.71
_	Spreading of wire crate over pitching,				l		
0	, ,	Otv. S	ame as i	tom No	E	Cam	37.71
	stone masonary, boulder filling etc.	Qiy. S	airie as i	tem No.	5	Sqm	37.71
7	Tipping of wire crates i/c equipment.	Qty. sa	me as Su	s 3-4	CUM	7.71	
<u> </u>							

### Wire Crate Check Dam

Ht. 1.00 mtrs. Length 4.00mtrs.

S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
1	Excavation in foundation, trenches				
	etc., in earth work, lift upto 1.50 metres				
	and disposal surplus excavated earth				
	upto a lead of 20 metres. Total Qty.	2.60	CUM		
	Pick Work @ 50%	1.30	CUM	53.50	69.55
	Jumper Work @ 50%	1.30	CUM	98.00	127.40
2	Cutting in earth work and disposal				
	of excavated earth upto a lead of				
	20 metres in anchorage.	1.31	CUM	30.65	40.15
3	Dry hand packed boulder stone	0.75	CLIM	40.05	404.00
	filling in Foundation & Apron.	2.75	CUM	49.05	134.89
4	i) Dry random rubble stone masonry				
	in super structure i/c rough dressing.	1.24	CUM	87.25	108.19
	ii) Dry hand packed boulder stone				
	filling in super structure.	3.72	CUM	49.05	182.47
5	Weaving of wire netting for wire crate				
	with G.I. wire 4mm/5mm or SWG No.6/8	37.71	Sqm	9.05	341.28
	in 15cmx15cm mesh.	<b>.</b>	<b>5</b> 4	0.00	011.20
6	Spreading of wire crate over pitching				
	stone masonary, boulder filling etc.	37.71	Sqm	10.95	412.92
7	Tipping of wire crates i/c equipment.	7.71	CUM	21.85	168.46
<b>'</b>	ripping of wife crates i/c equipment.	7.71	COM	21.65	100.40
8	Breaking of boulder stones	1.24	CUM	85.00	105.40
	_				
9	Carriage of G.I. wire from store to				
	worksite O/D by M/L or Mules.	0.084	Tonne/Km.		
10	Carriage of boulder stones from pale/				
10	Carriage of boulder stones from nala/ road head along nala to workshite over		Cum/Km.		
	an average distance km. by M/L		Odin/rani.		
	or Mules.				
	ABSTRACT OF N	/ATF	RIAL C	OST	
1	Cost & carriage of G.I. wire upto store.	0.084	Tonne	<del></del>	
2	Cost & carriage of boulder stones upto				
	road head.		CUM		
				Total	

Ht. 1.00 mtrs. Length 4.50mtrs.

S.NO.	PARTICULARS	NOS.	М	EASURE	MENT	UNIT	QTY.
			Length	Width	Depth/Ht.		
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and then disposing of all surplus excavated earth as directed with in a lead of 20 metres:						
	i. Foundation ii Apron	1	5.25 3.38	0.90 1.00	0.40 0.30	CUM CUM Total	1.89 1.01 <b>2.90</b>
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.	2	<u>0.50+0.75</u> 2	0.75	1.40	CUM	1.31
3	Dry hand packed boulder stone filling in:						
	i. Foundation ii Apron	1 1	5.25 3.38	0.90 1.00	0.40 0.30+0.40 2	CUM CUM	1.89 1.18 <b>3.07</b>
4	Construction of super structure of Check dam.	1	5.83	0.75	1.40	CUM	6.12
	Duduction of spilway	1	2.25	0.75	0.40	CUM <b>Total</b>	(-)0.68 <b>5.44</b>
	i) Dry Random Rubble Stone masnory masnory @ 25%	0	0	0	0	CUM	1.36
	ii) Dry hand packed boulder stone filling @ 75%	0	0	0	0	CUM	4.08

Ht. 1.00 mtrs. Length 4.50mtrs.

S.NO.	PARTICULARS	NOS.	М	EASURE	MENT	UNIT	QTY.
			Length	Width	Depth/Ht.		
5	Weaving of wire netting for wire crate						
	with G.I. wire 4mm/5mm or SWG No.						
	6/8 in 15cmx15cm mesh.						
	i) Foundation Bottom	1	5.25	0.90	0.00	Sqm	4.73
	Sides(i/c 15 c.m. top)	2	5.25	0.00	0.95	Sqm	4.98
	Ends	2	0.00	0.90	0.40	Sqm	0.72
	ii) Apron Top/Bottom	2	3.38	1.00	0.00	Sqm	6.76
	d/s Side	1	3.38	0.00	0.40	Sqm	1.35
	Ends	2	0.00	1.00	<u>0.30+0.40</u>	Sqm	0.70
					2		
	iii) Super Structure						
	Тор	1	5.83	0.75	0.00	Sqm	4.37
	Bottom	1	5.83-5.25	0.75	0.00	Sqm	0.43
	Sides	2	5.83	0.00	1.40	Sqm	16.32
	Ends	3	0.00	0.75	1.40	Sqm	3.15
	Deduction of Spilway Side	2	2.00	0.00	0.40	Sqm	(-)1.80
						Total	42.06
6	Spreading of wire crate over pitching ,						
	stone masonary, boulder filling etc.	Qty. S	ame as i	tem No.	5	Sqm	42.06
7	Tipping of wire crates i/c equipment.	Qty. sa	me as Su	ıs 3-4	CUM	8.51	

### **Wire Crate Check Dam**

Ht. 1.00 mtrs. Length 4.50mtrs.

S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and disposal surplus excavated earth upto a lead of 20 metres.				
	Total Qty.	2.90	CUM	50.50	77.50
	Pick Work @ 50% Jumper Work @ 50%	1.45 1.45	CUM CUM	53.50 98.00	77.58 142.10
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metres in anchorage.	1.31	CUM	30.65	40.15
3	Dry hand packed boulder stone filling in Foundation & Apron.	3.07	CUM	49.05	150.58
4	i) Dry random rubble stone masonry in super structure i/c rough dressing.	1.36	CUM	87.25	118.66
	ii) Dry hand packed boulder stone filling in super structure.	4.08	CUM	49.05	200.12
5	Weaving of wire netting for wire crate with G.I. wire 4mm/5mm or SWG No.6/8 in 15cmx15cm mesh.	42.06	Sqm	9.05	380.64
6	Spreading of wire crate over pitching stone masonary, boulder filling etc.	42.06	Sqm	10.95	460.56
7	Tipping of wire crates i/c equipment.	8.51	CUM	21.85	185.94
8	Breaking of boulder stones	1.36	CUM	85.00	115.60
9	Carriage of G.I. wire from store to worksite O/D by M/L or Mules.	0.093	Tonne/Km.		
10	Carriage of boulder stones from nala/ road head along nala to workshite over an average distance km. by M/L or Mules.		Cum/Km.		
	ABSTRACT OF N	/IATE	RIAL C	OST	
1	Cost & carriage of G.I. wire upto store.	0.093	Tonne		
2	Cost & carriage of boulder stones upto road head.		СИМ	Tatal	
				Total	

Ht. 1.00 mtrs. Length 5.00 mtrs.

S.NO.	PARTICULARS	NOS.	М	EASURE	MENT	UNIT	QTY.
			Length	Width	Depth/Ht.		
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and then disposing of all surplus excavated earth as directed with in a lead of 20 metres:						
	i. Foundation ii Apron	1	5.77 3.75	0.90 1.00	0.40 0.30	CUM CUM Total	2.08 1.13 <b>3.20</b>
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.	2	<u>0.50+0.75</u> 2	0.75	1.40	CUM	1.31
3	Dry hand packed boulder stone filling in:						
	i. Foundation ii Apron	1 1	5.77 3.75	0.90 1.00	0.40 0.30+0.40 2	CUM CUM	2.08 1.31 <b>3.39</b>
4	Construction of super structure of Check dam.	1	6.34	0.75	1.40	CUM	6.66
	Duduction of spilway	1	2.50	0.75	0.40	CUM Total	(-)0.75 <b>5.91</b>
	i) Dry Random Rubble Stone masnory masnory @ 25%	0	0	0	0	CUM	1.48
	ii) Dry hand packed boulder stone filling @ 75%	0	0	0	0	CUM	4.43

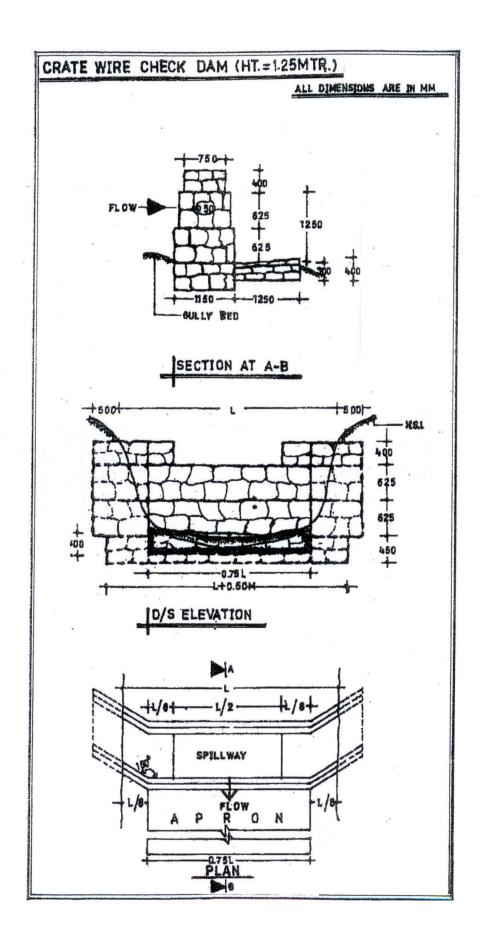
Ht. 1.00 mtrs. Length 5.00mtrs.

S.NO.	PARTICULARS	NOS.	М	EASURE	MENT	UNIT	QTY.
			Length	Width	Depth/Ht.		
5	Weaving of wire netting for wire crate with G.I. wire 4mm/5mm or SWG No. 6/8 in 15cmx15cm mesh.						
	i) Foundation Bottom Sides(i/c 15 c.m. top) Ends ii) Apron Top/Bottom d/s Side Ends	1 1 2 2 1 2	5.77 5.77 0.00 3.75 3.75 0.00	0.90 0.00 0.90 1.00 0.00	0.00 0.95 0.40 0.00 0.40 0.30+0.40	Sqm Sqm Sqm Sqm Sqm Sqm	5.19 5.48 0.72 7.50 1.50 0.70
	iii) Super Structure Top Bottom Sides Ends	1 1 2 3	6.34 6.34-5.77 6.34 0.00	0.75 0.75 0.00 0.75	0.00 0.00 1.40 1.40	Sqm Sqm Sqm Sqm	4.76 0.43 17.75 3.15
	Deduction of Spilway Side	2	2.50	0.00	0.40	Sqm Total	(-)2.00 <b>55.69</b>
6	Spreading of wire crate over pitching , stone masonary, boulder filling etc.	Qty. S	ame as i	<b>I</b> 5	Sqm	55.69	
7	Tipping of wire crates i/c equipment.	Qty. sa	me as Su	CUM	9.29		

### Wire Crate Check Dam

Ht. 1.00 mtrs. Length 5.00 mtrs.

******	Date Check Daili	nii. 1.00 mas. Lengar 3.00 mas.					
S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT		
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and disposal surplus excavated earth upto a lead of 20 metres.						
	Total Qty.	3.20	CUM				
	Pick Work @ 50%	1.60	CUM	53.50	85.60		
2	Jumper Work @ 50% Cutting in earth work and disposal of excavated earth upto a lead of	1.60	CUM	98.00	156.80		
_	20 metres in anchorage.	1.31	CUM	30.65	40.15		
3	Dry hand packed boulder stone filling in Foundation & Apron.	3.38	CUM	49.05	165.79		
4	i) Dry random rubble stone masonry in super structure i/c rough dressing.	1.48	CUM	87.25	129.13		
	ii) Dry hand packed boulder stone filling in super structure.	4.43	CUM	49.05	217.29		
5	Weaving of wire netting for wire crate with G.I. wire 4mm/5mm or SWG No.6/8 in 15cmx15cm mesh.	45.88	Sqm	9.05	415.21		
6	Spreading of wire crate over pitching stone masonary, boulder filling etc.	45.88	Sqm	10.95	502.39		
7	Tipping of wire crates i/c equipment.	9.29	CUM	21.85	202.99		
8	Breaking of boulder stones	1.48	CUM	85.00	125.80		
9	Carriage of G.I. wire from store to worksite O/D by M/L or Mules.	0.102	Tonne/Km.				
10	Carriage of boulder stones from nala/ road head along nala to workshite over an average distance km. by M/L or Mules.		Cum/Km.				
	ABSTRACT OF N	/ATE		OST			
1	Cost & carriage of G.I. wire upto store.	0.102	Tonne				
2	Cost & carriage of boulder stones upto road head.		CUM				
				Total			



Ht. 1.25 mtrs. Length 2.00 mtrs.

S.NO.	PARTICULARS	NOS.	М	EASURE	MENT	UNIT	QTY.
			Length	Width	Depth/Ht.		
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and then disposing of all surplus excavated earth as directed with in a lead of 20 metres:						
	i. Foundation ii Apron	1	2.65 1.50	1.15 1.25	0.45 0.30	CUM CUM Total	1.37 0.56 <b>1.93</b>
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.	2	<u>0.50+0.75</u> 2	1.15	1.65	CUM	2.37
3	Dry hand packed boulder stone filling in:						
	i. Foundation ii Apron	1 1	2.65 1.50	1.15 1.25	0.45 0.30+0.40 2	CUM CUM	1.37 0.66
						Total	2.03
4	Construction of super structure of Check dam.						
	Ist Block 2nd Block 3rd Block	1	3.22 3.22 1.11	1.15 0.95 0.75	0.63 0.63 0.40	CUM CUM CUM Total	2.31 1.91 0.67 <b>4.89</b>
	i) Dry Random Rubble Stone masnory masnory @ 25%	0	0	0	0	СИМ	1.22
	ii) Dry hand packed boulder stone filling @ 75%	0	0	0	0	CUM	3.66

#### **Wire Crate Check Dam**

Ht. 1.25 mtrs. Length 2.00mtrs.

S.NO.	P/	RTICULARS	NOS.	M	EASURE	MENT	UNIT	QTY.
				Length	Width	Depth/Ht.		
5		re netting for wire crate						
	with G.I. wire	4mm/5mm or SWG No.						
	6/8 in 15cmx15	cm mesh.						
	i) Foundation	Bottom	1	2.65	1.15	0.00	Sqm	3.05
	Sides(	i/c 15 c.m. top)	2	2.65	0.00	0.45	Sqm	2.39
	Ends	• ,	2	0.00	1.15	0.45	Sqm	1.04
	ii) Apron	Top/Bottom	2	1.50	1.25	0.00	Sqm	3.75
	, .	d/s Side	1	1.50	0.00	0.40	Sqm	0.60
		Ends	2	0.00	1.25	0.30+0.40	Sqm	0.88
			2					
	iii) Super Structure							
		- op	1	3.22	1.15	0.00	Sqm	3.70
	Bottom		1	3.22-2.65	1.15	0.00	Sqm	0.66
		Sides	2	3.22	0.00	0.63	Sqm	4.03
		Ends	2	0.00	1.15	0.63	Sqm	1.44
	Super Structure-		_					
	(2nd Block)	Top/Bottom	1	3.22	0.95	0.00	Sqm	3.06
	,	Sides	2	3.22	0.00	0.625	Sqm	4.03
		Ends	2	0.00	0.95	0.625	Sqm	1.19
			_					
	Super Structure-							
	(3rd Block)	Top/Bottom	2	1.11	0.75	0.00	Sqm	1.67
	(	Sides	2x2	1.11	0.00	0.40	Sqm	1.78
		Ends	4	0.00	0.75	0.40	Sqm	1.20
							Total	34.44
							10001	•
6	Spreading of wi	re crate over pitching,		]		<u>!</u>		
Ī		, boulder filling etc.	Qtv. S	ame as i	tem No.	5	Sqm	34.44
		<b>3</b>	,					
7	Tipping of wire	crates i/c equipment.	Qty. sa	me as Su	s 3-4	CUM	6.91	

### **Wire Crate Check Dam**

Ht. 1.25 mtrs. Length 2.00 mtrs.

S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and disposal surplus excavated earth upto a lead of 20 metres.				
	Total Qty. Pick Work @ 50%	1.93 0.96	CUM CUM	53.50	51.36
2	Jumper Work @ 50% Cutting in earth work and disposal of excavated earth upto a lead of	0.97	CUM	98.00	95.06
	20 metres in anchorage.	2.37	СИМ	30.65	72.64
3	Dry hand packed boulder stone filling in Foundation & Apron.	2.03	CUM	49.05	99.57
4	i) Dry random rubble stone masonry in super structure i/c rough dressing.	1.22	CUM	87.25	106.45
	ii) Dry hand packed boulder stone filling in super structure.	3.66	CUM	49.05	179.52
5	Weaving of wire netting for wire crate with G.I. wire 4mm/5mm or SWG No.6/8 in 15cmx15cm mesh.	34.44	Sqm	9.05	311.68
6	Spreading of wire crate over pitching stone masonary, boulder filling etc.	34.44	Sqm	10.95	377.12
7	Tipping of wire crates i/c equipment.	6.91	CUM	21.85	150.98
8	Breaking of boulder stones	1.22	CUM	85.00	103.70
9	Carriage of G.I. wire from store to worksite O/D by M/L or Mules.	0.077	Tonne/Km.		
10	Carriage of boulder stones from nala/ road head along nala to workshite over an average distance km. by M/L or Mules.		Cum/Km.		
	ABSTRACT OF N	/IATE	RIAL C	OST	
1	Cost & carriage of G.I. wire upto store.	0.077	Tonne		
2	Cost & carriage of boulder stones upto road head.		CUM	Tatal	
				Total	

Ht. 1.25 mtrs. Length 2.50 mtrs.

Excavation in foundation, trenches etc., in earth work, lift upto 1.50		Length	Width	Depth/Ht.		
•						
metres and then disposing of all surplus excavated earth as directed with in a lead of 20 metres:						
i. Foundation ii Apron	1	3.17 1.88	1.15 1.25	0.45 0.30	CUM CUM Total	1.64 0.71 <b>2.35</b>
Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.	2	<u>0.50+0.75</u> 2	1.15	1.65	CUM	2.37
Dry hand packed boulder stone filling in:						
i. Foundation ii Apron	1	3.17 1.88	1.15 1.25	0.45 0.30+0.40 2	CUM CUM	1.64 0.82
					Total	2.46
Construction of super structure of Check dam.						
Ist Block	1	3.75	1.15	0.63	CUM	2.70
2nd Block	1	3.75	0.95	0.63	CUM	2.23
3rd Block	2	1.25	0.75	0.40	CUM	0.75
					Total	5.67
i) Dry Random Rubble Stone masnory masnory @ 25%	0	0	0	0	CUM	1.42
ii) Dry hand packed boulder stone filling @ 75%	0	0	0	0	CUM	4.25
	surplus excavated earth as directed with in a lead of 20 metres:  i. Foundation ii Apron  Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.  Dry hand packed boulder stone filling in:  i. Foundation ii Apron  Construction of super structure of Check dam.  Ist Block 2nd Block 3rd Block 3rd Block i) Dry Random Rubble Stone masnory masnory @ 25%  ii) Dry hand packed boulder stone	surplus excavated earth as directed with in a lead of 20 metres:  i. Foundation ii Apron  Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.  Dry hand packed boulder stone filling in:  i. Foundation ii Apron  1  Construction of super structure of Check dam.  Ist Block 2 nd Block 3rd Block 2  i) Dry Random Rubble Stone masnory masnory @ 25%  ii) Dry hand packed boulder stone  0	surplus excavated earth as directed with in a lead of 20 metres:  i. Foundation ii Apron  Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.  Dry hand packed boulder stone filling in: i. Foundation ii Apron  1 3.17 2 0.50+0.75 2  Dry hand packed boulder stone filling in: i. Foundation ii Apron  1 3.17 1 1.88  Construction of super structure of Check dam.  Ist Block 1 3.75 2nd Block 1 3.75 3rd Block 2 1.25  i) Dry Random Rubble Stone masnory masnory @ 25%  ii) Dry hand packed boulder stone  0 0	surplus excavated earth as directed with in a lead of 20 metres:  i. Foundation ii Apron  Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.  Dry hand packed boulder stone filling in:  i. Foundation ii Apron  1 3.17 1.15 2 1.15 2 1.15  Construction of super structure of Check dam.  Ist Block 1 3.75 1.15 2nd Block 1 3.75 0.95 3rd Block 2 1.25 0.75  i) Dry Random Rubble Stone masnory masnory @ 25%  ii) Dry hand packed boulder stone  0 0 0	surplus excavated earth as directed with in a lead of 20 metres:       1       3.17       1.15       0.45         ii. Foundation ii Apron       1       1.88       1.25       0.30         Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.       2       0.50+0.75       1.15       1.65         Dry hand packed boulder stone filling in:       1       3.17       1.15       0.45         ii. Foundation ii Apron       1       3.17       1.15       0.45         Construction of super structure of Check dam.       1       3.75       1.15       0.63         2nd Block 2nd Block 2nd Block 3rd Block 3	Surplus excavated earth as directed with in a lead of 20 metres:   i. Foundation   1   3.17   1.15   0.45   CUM   Total

#### **Wire Crate Check Dam**

Ht. 1.25 mtrs. Length 2.50mtrs.

S.NO.	P	ARTICULARS	NOS.	M	EASURE	MENT	UNIT	QTY.
				Length	Width	Depth/Ht.		
5	•	ire netting for wire crate						
		4mm/5mm or SWG No.						
	6/8 in 15cmx15	cm mesh.						
		_						
	i) Foundation		1	3.17	1.15	0.00	Sqm	3.65
	l '	(i/c 15 c.m. top)	2	3.17	0.00	0.45	Sqm	2.85
	Ends		2	0.00	1.15	0.45	Sqm	1.04
	ii) Apron	Top/Bottom	2	1.88	1.25	0.00	Sqm	4.70
		d/s Side	1	1.88	0.00	0.40	Sqm	0.75
		Ends	2	0.00	1.25	<u>0.30+0.40</u>	Sqm	0.88
						2		
	iii) Super Struct							
		Гор	1	3.75	1.15	0.00	Sqm	4.31
		Bottom	1	3.75-3.17	1.15	0.00	Sqm	0.66
		Sides	2	3.75	0.00	0.63	Sqm	4.69
		Ends	2	0.00	1.15	0.63	Sqm	1.44
	Super Structure-		l .					
	(2nd Block)	Top/Bottom	1	3.75	0.95	0.00	Sqm	3.56
		Sides	2	3.75	0.00	0.625	Sqm	4.69
		Ends	2	0.00	0.95	0.625	Sqm	1.19
	Super Structure-							
	(3rd Block)	Top/Bottom	2	1.25	0.75	0.00	Sqm	1.88
	(	Sides	2x2	1.25	0.00	0.40	Sqm	2.00
		Ends	4	0.00	0.75	0.40	Sqm	1.20
							Total	39.48
6	Spreading of w	ire crate over pitching,				•		
	stone masonar	y, boulder filling etc.	Qty. S	ame as i	tem No.	5	Sqm	39.48
_		,	_	_				
7	i ipping of wire	crates i/c equipment.	Qty. sa	me as Su	ıs 3-4	CUM	8.13	

### **Wire Crate Check Dam**

Ht. 1.25 mtrs. Length 2.50 mtrs.

S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and disposal surplus excavated earth upto a lead of 20 metres.				
	Total Qty.	2.35	Cum		
	Pick Work @ 50%	1.17	Cum	53.50	62.60
2	Jumper Work @ 50% Cutting in earth work and disposal of excavated earth upto a lead of	1.18	Cum	98.00	115.64
	20 metres in anchorage.	2.37	Cum	30.65	72.64
3	Dry hand packed boulder stone filling in Foundation & Apron.	2.46	Cum	49.05	120.66
4	i) Dry random rubble stone masonry in super structure i/c rough dressing.	1.42	Cum	87.25	123.90
	ii) Dry hand packed boulder stone filling in super structure.	4.25	Cum	49.05	208.46
5	Weaving of wire netting for wire crate with G.I. wire 4mm/5mm or SWG No.6/8 in 15cmx15cm mesh.	39.48	Sqm	9.05	357.29
6	Spreading of wire crate over pitching stone masonary, boulder filling etc.	39.48	Sqm	10.95	432.31
7	Tipping of wire crates i/c equipment.	8.13	Cum	21.85	177.64
8	Breaking of boulder stones	1.42	Cum	85.00	120.70
9	Carriage of G.I. wire from store to worksite O/D by M/L or Mules.	0.088	Tonne/Km.		
10	Carriage of boulder stones from nala/ road head along nala to workshite over an average distance km. by M/L or Mules.		Cum/Km.		
		/ATE	RIAL C	OST	
1	Cost & carriage of G.I. wire upto store.	0.088	Tonne		
2	Cost & carriage of boulder stones upto				
	road head.		Cum		
			·	Total	

Ht. 1.25 mtrs. Length 3.00 mtrs.

S.NO.	PARTICULARS	NOS.				UNIT	QTY.
			Length	Width	Depth/Ht.		
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and then disposing of all surplus excavated earth as directed with in a lead of 20 metres:						
	i. Foundation ii Apron	1 1	3.69 2.25	1.15 1.25	0.45 0.30	Cum Cum <b>Total</b>	1.91 0.84 <b>2.75</b>
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.	2	<u>0.50+0.75</u> 2	1.15	1.65	Cum	2.37
3	Dry hand packed boulder stone filling in:						
	i. Foundation ii Apron	1 1	3.69 2.25	1.15 1.25	0.45 0.30+0.40 2	Cum Cum	1.91 0.98 <b>2.89</b>
4	Construction of super structure of Check dam.						
	Ist Block 2nd Block 3rd Block	1	4.26 4.26 1.38	1.15 0.95 0.75	0.63 0.63 0.40	Cum Cum Cum	3.06 2.53 0.83 <b>6.42</b>
	i) Dry Random Rubble Stone masnory masnory @ 25%	0	0	0	0	Cum	1.60
	ii) Dry hand packed boulder stone filling @ 75%	0	0	0	0	Cum	4.82

Ht. 1.25 mtrs. Length 3.00mtrs.

S.NO.	P.A	RTICULARS	NOS.	М	EASURE	MENT	UNIT	QTY.
				Length	Width	Depth/Ht.		
5	_	re netting for wire crate						
		1mm/5mm or SWG No.						
	6/8 in 15cmx15	cm mesh.						
	i) Foundation		1	3.69	1.15	0.00	Sqm	4.24
	•	i/c 15 c.m. top)	2	3.69	0.00	0.45	Sqm	3.32
	Ends		2	0.00	1.15	0.45	Sqm	1.04
	ii) Apron	Top/Bottom	2	2.25	1.25	0.00	Sqm	5.63
		d/s Side	1	2.25	0.00	0.40	Sqm	0.90
		Ends	2	0.00	1.25	0.30+0.40	Sqm	0.88
						2		
	iii) Super Struct							
		ор	1	4.26	1.15	0.00	Sqm	4.90
		Bottom	1	4.26-3.69	1.15	0.00	Sqm	0.66
		Sides	2	4.26	0.00	0.63	Sqm	5.33
		Ends	2	0.00	1.15	0.63	Sqm	1.44
	Super Structure-							
	(2nd Block)	Top/Bottom	1	4.26	0.95	0.00	Sqm	4.05
		Sides	2	4.26	0.00	0.625	Sqm	5.33
		Ends	2	0.00	0.95	0.625	Sqm	1.19
	Super Structure-							
	(3rd Block)	Top/Bottom	2	1.38	0.75	0.00	Sqm	2.07
		Sides	2x2	1.38	0.00	0.40	Sqm	2.21
		Ends	4	0.00	0.75	0.40	Sqm	1.20
							Total	44.37
6		re crate over pitching, , boulder filling etc.	Oty S	l ame as i	tem No	<b> </b>	Sqm	44.37
	Storic masonary	, boulder mining etc.	Qty. O	arric as i	tem No.	J	Oqiii	44.57
7	Tipping of wire	crates i/c equipment.	Qty. sa	me as Su	Cum	9.30		

### **Wire Crate Check Dam**

Ht. 1.25 mtrs. Length 3.00 mtrs.

S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and disposal surplus excavated earth upto a lead of 20 metres.				
	Total Qty.	2.74	Cum		
	Pick Work @ 50%	1.37	Cum	53.50	73.30
2	Jumper Work @ 50% Cutting in earth work and disposal of excavated earth upto a lead of	1.37	Cum	98.00	134.26
	20 metres in anchorage.	2.37	Cum	30.65	72.64
3	Dry hand packed boulder stone filling in Foundation & Apron.	2.88	Cum	49.05	141.26
4	i) Dry random rubble stone masonry in super structure i/c rough dressing.	1.60	Cum	87.25	139.60
	ii) Dry hand packed boulder stone filling in super structure.	4.82	Cum	49.05	236.42
5	Weaving of wire netting for wire crate with G.I. wire 4mm/5mm or SWG No.6/8 in 15cmx15cm mesh.	44.39	Sqm	9.05	401.73
6	Spreading of wire crate over pitching stone masonary, boulder filling etc.	44.39	Sqm	10.95	486.07
7	Tipping of wire crates i/c equipment.	9.30	Cum	21.85	203.21
8	Breaking of boulder stones	1.60	Cum	85.00	136.00
9	Carriage of G.I. wire from store to worksite O/D by M/L or Mules.	0.099	Tonne/Km.		
10	Carriage of boulder stones from nala/ road head along nala to workshite over an average distance km. by M/L or Mules.		Cum/Km.		
	ABSTRACT OF N	<b>IATE</b>	RIAL C	OST	
1	Cost & carriage of G.I. wire upto store.	0.099	Tonne		
2	Cost & carriage of boulder stones upto				
_	road head.		Cum		
	2000		3	Total	

Ht. 1.25 mtrs. Length 3.50 mtrs.

S.NO.	PARTICULARS	NOS.	М	EASURE	MENT	UNIT	QTY.
			Length	Width	Depth/Ht.		
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and then disposing of all surplus excavated earth as directed with in a lead of 20 metres:						
	i. Foundation ii Apron	1 1	4.21 2.63	1.15 1.25	0.45 0.30	Cum Cum <b>Total</b>	2.18 0.99 <b>3.16</b>
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.	2	<u>0.50+0.75</u> 2	1.15	1.65	Cum	2.37
3	Dry hand packed boulder stone filling in:						
	i. Foundation ii Apron	1 1	4.21 2.63	1.15 1.25	0.45 0.30+0.40 2	Cum Cum	2.18 1.15 <b>3.33</b>
						Total	3.33
4	Construction of super structure of Check dam.						
	Ist Block 2nd Block 3rd Block	1	4.79 4.79 1.52	1.15 0.95 0.75	0.63 0.63 0.40	Cum Cum Cum	3.44 2.84 0.91 <b>7.20</b>
	i) Dry Random Rubble Stone masnory masnory @ 25%	0	0	0	0	Cum	1.80
	ii) Dry hand packed boulder stone filling @ 75%	0	0	0	0	Cum	5.39

Ht. 1.25 mtrs. Length 3.50mtrs.

S.NO.	PARTICULARS	NOS.		EASURE		UNIT	QTY.
			Length	Width	Depth/Ht.		
5	Weaving of wire netting for wire craft						
	with G.I. wire 4mm/5mm or SWG No						
	6/8 in 15cmx15cm mesh.						
	i) Foundation Bottom	1	4.21	1.15	0.00	Sqm	4.84
	Sides(i/c 15 c.m. top)	2	4.21	0.00	0.45	Sqm	3.79
	Ends	2	0.00	1.15	0.45	Sqm	1.04
	ii) Apron Top/Bottom	2	2.63	1.25	0.00	Sqm	6.58
	d/s Side	1	2.63	0.00	0.40	Sqm	1.05
	Ends	2	0.00	1.25	0.30+0.40	Sqm	0.88
					2		
	iii) Super Structure						
	Тор	1	4.79	1.15	0.00	Sqm	5.51
	Bottom	1	4.79-4.21	1.15	0.00	Sqm	0.66
	Sides	2	4.79	0.00	0.63	Sqm	5.99
	Ends	2	0.00	1.15	0.63	Sqm	1.44
	Super Structure-						
	(2nd Block) Top/Bottom	1	4.79	0.95	0.00	Sqm	4.55
	Sides	2	4.79	0.00	0.625	Sqm	5.99
	Ends	2	0.00	0.95	0.625	Sqm	1.19
	Super Structure-						
	(3rd Block) Top/Bottom	2	1.52	0.75	0.00	Sqm	2.28
	Sides	2x2	1.52	0.00	0.40	Sqm	2.43
	Ends	4	0.00	0.75	0.40	Sqm	1.20
						Total	49.40
6	Spreading of wire crate over pitching,						
	stone masonary, boulder filling etc.	Qty. S	ame as i	tem No.	5	Sqm	49.40
	·						
7	Tipping of wire crates i/c equipment.	Qty. sa	me as Su	m of item	ıs 3-4	Cum	10.52

Cost & carriage of boulder stones upto road head.	Cum		
		Total	

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# ABSTRACT OF LABOUR COST

### **Retaining/Breast Wall**

Ht. 1.00 mtrs. Length 1.00 mtrs.

S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres, stacking the excavated soil not more than 3 mtrs. clear from the edge of excavation and then returning the stacked soil in 15cm layers, where required into plinth, sides of foundation etc. consolidating each deposited layer by ramming and watering and then disposing of all surplus excavated earth as directed within a lead of 20 mtrs. in pick and jumper work.	0.38	75.75	Cum	28.79
2	Laying of cement concrete 1:6:12 in foundation, under floor pavement i/c ramming & curing complete.	0.16	156.70	Cum	25.07
3	Random rubble stone masonary in cement mortor (1:6) in foundation of retaining / breast walls & abutments of culvert etc. i/c dressing of stone and curing complete.				
	a) 50% dry stone masonary b) 50% in cement mortor (1:6)	0.075 0.075	87.15 307.30	Cum Cum	6.54 23.05
4	Random rubble stone masonary in cement mortor (1:6) in super structure upto 3 mtrs., height i/c scaffolding, rough dressing and curing complete.				
	a) 50% dry stone masonary b) 50% in cement mortor (1:6)	0.27 0.28	87.15 353.8	Cum Cum	23.53 99.06
5	Laying of cement conc. 1:2:4 on the top of retaining walls / breast walls i/c curing complete.	0.02	156.7	Cum	3.13

**Dry Stone Check Dam** 

Ht. 0.75 mtrs. Length 1.00 mtrs.

S.NO.	PARTICULARS	NOS.				UNIT	QTY.
			Length	Width	Depth/Ht.		
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres, stacking the excavated soil not more than 3 metres clear from the edge of excavation and then returning the stacked soil in 15 cm. layers, where required into plinth, sides of foundation etc., consolidating each deposited layer by ramming and watering and then disposing off all surplus excavated earth as directed with in a lead of 20 metres:						
	i. Foundation ii Apron	1	1.50 1.00	1.00 0.75	0.30 0.30	CUM CUM <b>Total</b>	0.45 0.22 <b>0.67</b>
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.	2	0.50	1.00	0.90	CUM	0.90
3	Dry hand packed boulder stone filling in:  i. Foundation ii Apron	1	1.50 1.00	1.00 0.75	0.30 0.30+0.40 2	CUM CUM <b>Total</b>	0.45 0.26
4	Construction of check dam/ check wall in dry rough stone masonary i/c rough dressing in: Super Structue	1	2.00+1.50 2	0.50+1.00 2	0.75	CUM	0.98

7	Tipping of wire crates i/c equipment.	Qty. same as Sum of items 3-4	Cum	9.57

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# **DETAIL OF MEASUREMENTS**

#### Wire Crate Check Dam

Ht. 1.50 mtrs. Length 2.50 mtrs.

S.NO.	PARTICULARS	NOS.	М	EASURE	MENT	UNIT	QTY.
			Length	Width	Depth/Ht.		
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and then disposing of all surplus excavated earth as directed with in a lead of 20 metres:						
	i. Foundation	1	3.17	1.35	0.60	Cum	2.57
	ii Apron	1	1.88	1.50	0.30	Cum	0.85
						Total	3.41
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.	2	<u>0.50+0.75</u> 2	1.35	2.00	Cum	3.38
3	Dry hand packed boulder stone filling in:						
	i. Foundation	1	3.17	1.35	0.60	Cum	2.57
	ii Apron	1	1.88	1.50	0.30+0.40	Cum	0.99
		-			2		
						Total	3.56
4	Construction of super structure of Check dam.						
	lst Block	1	3.75	1.35	0.75	Cum	3.80
	2nd Block	1	3.75	1.05	0.75	Cum	2.95
	3rd Block	2	1.25	0.75	0.50	Cum	0.94

### **Wire Crate Check Dam**

Ht. 1.25 mtrs. Length 4.00mtrs.

S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and disposal surplus excavated earth upto a lead of 20 metres.				
	Total Qty.	3.57	Cum		
	Pick Work @ 50%	1.78	Cum	53.50	95.23
2	Jumper Work @ 50% Cutting in earth work and disposal of excavated earth upto a lead of	1.79	Cum	98.00	175.42
	20 metres in anchorage.	2.37	Cum	30.65	72.64
3	Dry hand packed boulder stone filling in Foundation & Apron.	3.75	Cum	49.05	183.94
4	i) Dry random rubble stone masonry in super structure i/c rough dressing.	1.99	Cum	87.25	173.63
	ii) Dry hand packed boulder stone filling in super structure.	5.96	Cum	49.05	292.34
5	Weaving of wire netting for wire crate with G.I. wire 4mm/5mm or SWG No.6/8 in 15cmx15cm mesh.	54.31	Sqm	9.05	491.51
6	Spreading of wire crate over pitching stone masonary, boulder filling etc.	54.31	Sqm	10.95	594.69
7	Tipping of wire crates i/c equipment.	11.70	Cum	21.85	255.65
8	Breaking of boulder stones	1.99	Cum	85.00	169.15
9	Carriage of G.I. wire from store to worksite O/D by M/L or Mules.	0.121	Tonne/Km.		
10	Carriage of boulder stones from nala/ road head along nala to workshite over an average distance km. by M/L or Mules.		Cum/Km.		
	ABSTRACT OF N	/ATE	RIAL C	OST	
1	Cost & carriage of G.I. wire upto store.	0.121	Tonne		
2	Cost & carriage of boulder stones upto road head.		Cum	Total	

Ht. 1.25 mtrs. Length 4.50 mtrs.

n in foundation, trenches earth work, lift upto 1.50 and then disposing of all excavated earth as directed ead of 20 metres:  undation on  n earth work and disposal ated earth upto a lead of n anchorage.	1 1	5.25 3.38	1.15 1.25	0.45 0.30	Cum Cum Total	2.72 1.27
earth work, lift upto 1.50 and then disposing of all excavated earth as directed ead of 20 metres:  undation on earth work and disposal ated earth upto a lead of	1				Cum	1.27
undation on n earth work and disposal ated earth upto a lead of	1				Cum	1.27
n earth work and disposal ated earth upto a lead of	·	3.30	1.23	0.30		
ated earth upto a lead of	2					3.98
		0.50+0.75 2	1.15	1.65	Cum	2.37
l packed boulder stone						
undation on	1 1	5.25 3.38	1.15 1.25	0.45 0.30+0.40	Cum Cum	2.72 1.48
				2	Total	4.20
on of super structure of m.						
Ist Block	1	5.83	1.15	0.63	Cum	4.19
		5.83	0.95	0.63	Cum	3.46
3rd Block	2	1.79	0.75	0.40	Cum	1.07
					Total	8.73
dom Rubble Stone masnory 25%	0	0	0	0	Cum	2.18
d packed boulder stone 5%	0	0	0	0	Cum	6.54
	packed boulder stone undation on on of super structure of n. Ist Block 2nd Block 3rd Block 3rd Block dom Rubble Stone masnory 25% d packed boulder stone	n anchorage.  packed boulder stone  undation on 1  on of super structure of n.  Ist Block 2nd Block 3rd Block 3rd Block 2  dom Rubble Stone masnory 25%  d packed boulder stone 0	ated earth upto a lead of n anchorage.  2 0.50+0.75 2  1 packed boulder stone  2 1 1 5.25 1 3.38  2 1 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	ated earth upto a lead of n anchorage.    packed boulder stone	ated earth upto a lead of n anchorage.  2	Description   Description

Ht. 1.25 mtrs. Length 4.00mtrs.

S.NO.	PARTICUL	.ARS	NOS.	М	EASURE	MENT	UNIT	QTY.
				Length	Width	Depth/Ht.		
5	Weaving of wire netti	•						
	with G.I. wire 4mm/5m							
	6/8 in 15cmx15cm mes	h.						
			_					
	i) Foundation Bottom		1	5.25	1.15	0.00	Sqm	6.04
	Sides(i/c 15 c.	m. top)	2	5.25	0.00	0.45	Sqm	4.73
	Ends		3	0.00	1.15	0.45	Sqm	1.55
	, .	Bottom	2	3.38	1.25	0.00	Sqm	8.45
	d/s Si		1	3.38	0.00	0.40	Sqm	1.35
	End	S	2	0.00	1.25	0.30+0.40	Sqm	0.88
						2		
	iii) Super Structure							
	(Ist Block) Top		1	5.83	1.15	0.00	Sqm	6.70
	Bottom		1	5.83-5.25	1.15	0.00	Sqm	0.66
	Sides		2	5.83	0.00	0.63	Sqm	7.29
	Ends		3	0.00	1.15	0.63	Sqm	2.16
	Super Structure-		_					
	` '	op/Bottom	1	5.83	0.95	0.00	Sqm	5.54
		des	2	5.83	0.00	0.625	Sqm	7.29
	Eı	nds	3	0.00	0.95	0.625	Sqm	1.78
	Super Structure-							
	·	op/Bottom	2	1.79	0.75	0.00	Sqm	2.69
	Si	des	2x2	1.79	0.00	0.40	Sqm	2.86
	Ei	nds	4	0.00	0.75	0.40	Sqm	1.20
							Total	61.16
6	Spreading of wire crate	over pitching.						
	stone masonary, bould		Qty. S	ame as i	tem No.	5	Sqm	61.16
7	Tipping of wire crates i/c equipment.		Qty. sa	me as Su	m of item	s 3-4	Cum	12.91

### **Wire Crate Check Dam**

Ht. 1.25 mtrs. Length 4.50mtrs.

S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres				
	and disposal surplus excavated earth				
	upto a lead of 20 metres.	0.07	0		
	Total Qty. Pick Work @ 50%	3.97 1.98	Cum Cum	53.50	105.93
	Jumper Work @ 50%	1.99	Cum	98.00	195.02
2	Cutting in earth work and disposal of excavated earth upto a lead of				
	20 metres in anchorage.	2.37	Cum	30.65	72.64
3	Dry hand packed boulder stone filling in Foundation & Apron.	4.19	Cum	49.05	205.52
	,	0	Gain	10.00	200.02
4	i) Dry random rubble stone masonry	2.18	Cum	07.0F	100.01
	in super structure i/c rough dressing.	2.10	Cum	87.25	190.21
	ii) Dry hand packed boulder stone		_		
	filling in super structure.	6.54	Cum	49.05	320.79
5	Weaving of wire netting for wire crate				
	with G.I. wire 4mm/5mm or SWG No.6/8 in 15cmx15cm mesh.	61.14	Sqm	9.05	553.32
	iii iodiixiodii mesii.				
6	Spreading of wire crate over pitching				
	stone masonary, boulder filling etc.	61.14	Sqm	10.95	669.48
7	Tipping of wire crates i/c equipment.	12.91	Cum	21.85	282.08
8	Breaking of boulder stones	2.18	Cum	85.00	185.30
	_				
9	Carriage of G.I. wire from store to worksite O/D by M/L or Mules.	0.136	Tonne/Km.		
	worksite O/D by W/L or Wides.	0.130	TOTILIE/IXITI.		
10	Carriage of boulder stones from nala/		0 "/		
	road head along nala to workshite over an average distance km. by M/L		Cum/Km.		
	or Mules.				
	ABSTRACT OF N	<b>IATE</b>	RIAL C	OST	
1	Cost & carriage of G.I. wire upto store.	0.136	Tonne		
2	Cost & carriage of boulder stones upto				
	road head.		Cum		
				Total	

Ht. 1.25 mtrs. Length 5.00 mtrs.

S.NO.	PARTICULARS	NOS.	М	EASURE	MENT	UNIT	QTY.
			Length	Width	Depth/Ht.		
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and then disposing of all surplus excavated earth as directed with in a lead of 20 metres:						
	i. Foundation ii Apron	1 1	5.77 3.75	1.15 1.25	0.45 0.30	Cum Cum <b>Total</b>	2.99 1.41 <b>4.39</b>
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.	2	<u>0.50+0.75</u> 2	1.15	1.65	Cum	2.37
3	Dry hand packed boulder stone filling in:						
	i. Foundation ii Apron	1 1	5.77 3.75	1.15 1.25	0.45 0.30+0.40 2	Cum Cum	2.99 1.64 <b>4.63</b>
4	Construction of super structure of Check dam.						
	Ist Block 2nd Block 3rd Block	1	6.34 6.34 1.92	1.15 0.95 0.75	0.63 0.63 0.40	Cum Cum Cum	4.56 3.76 1.15 <b>9.47</b>
	i) Dry Random Rubble Stone masnory masnory @ 25%	0	0	0	0	Cum	2.36
	ii) Dry hand packed boulder stone filling @ 75%	0	0	0	0	Cum	7.10

Ht. 1.25 mtrs. Length 5.00 mtrs.

S.NO.	PA	RTICULARS	NOS.				UNIT	QTY.
				Length	Width	Depth/Ht.		
5	Weaving of wir	e netting for wire crate						
	with G.I. wire 4	mm/5mm or SWG No.						
	6/8 in 15cmx15c	cm mesh.						
	i) Foundation E		1	5.77	1.15	0.00	Sqm	6.64
		/c 15 c.m. top)	2	5.77	0.00	0.45	Sqm	5.19
	Ends		3	0.00	1.15	0.45	Sqm	1.55
	ii) Apron	Top/Bottom	2	3.75	1.25	0.00	Sqm	9.38
		d/s Side	1	3.75	0.00	0.40	Sqm	1.50
		Ends	2	0.00	1.25	0.30+0.40	Sqm	0.88
						2		
	iii) Super Structu							
	(Ist Block) T	Гор	1	6.34	1.15	0.00	Sqm	7.29
		ttom	1	6.34-5.77	1.15	0.00	Sqm	0.66
	S	ides	2	6.34	0.00	0.625	Sqm	7.93
		nds	3	0.00	1.15	0.625	Sqm	2.16
	Super Structure-							
	(2nd Block)	Top/Bottom	1	6.34	0.95	0.00	Sqm	6.02
		Sides	2	6.34	0.00	0.625	Sqm	7.93
		Ends	3	0.00	0.95	0.625	Sqm	1.78
	Super Structure-							
	(3rd Block)	Top/Bottom	2	1.92	0.75	0.00	Sqm	2.88
		Sides	2x2	1.92	0.00	0.40	Sqm	3.07
		Ends	4	0.00	0.75	0.40	Sqm	1.20
							Total	66.05
		an anata arran mitabina						
6		e crate over pitching,	04. 0		tom No	F	0	00.05
	Islone masonary	, boulder filling etc.	Qiy. S	ame as i	tem No.	5	Sqm	66.05
	7 Tipping of wire crates i/c equipment.							
7			Qty. sa	me as Su	m of item	ıs 3-4	Cum	14.08
	ı							

### **Wire Crate Check Dam**

Ht. 1.25 mtrs. Length 5.00mtrs.

S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and disposal surplus excavated earth				
	upto a lead of 20 metres.	4.00	0		
	Total Qty. Pick Work @ 50%	4.38 2.19	Cum Cum	53.50	117.17
	Jumper Work @ 50%	2.19	Cum	98.00	214.62
2	Cutting in earth work and disposal				
	of excavated earth upto a lead of 20 metres in anchorage.	2.37	Cum	30.65	72.64
3	Dry hand packed boulder stone				
	filling in Foundation & Apron.	4.62	Cum	49.05	226.61
4	i) Dry random rubble stone masonry				
	in super structure i/c rough dressing.	2.36	Cum	87.25	205.91
	ii) Dry hand packed boulder stone filling in super structure.	7.10	Cum	49.05	348.26
		7110	3411	10.00	0.10.20
5	Weaving of wire netting for wire crate with G.I. wire 4mm/5mm or SWG No.6/8	66.04	Sqm	9.05	597.66
	in 15cmx15cm mesh.		·		
6	Spreading of wire crate over pitching				
	stone masonary, boulder filling etc.	66.04	Sqm	10.95	723.14
7	Tipping of wire crates i/c equipment.	14.08	Cum	21.85	307.65
8	Breaking of boulder stones	2.36	Cum	85.00	200.60
9	Carriage of G.I. wire from store to				
	worksite O/D by M/L or Mules.	0.147	Tonne/Km.		
10	Carriage of boulder stones from nala/ road head along nala to workshite over		Cum/Km.		
	an average distance km. by M/L		Culli/Kill.		
	or Mules.	4 A T.C.			
			RIAL C	051	
1	Cost & carriage of G.I. wire upto store.	0.147	Tonne		
2	Cost & carriage of boulder stones upto				
	road head.		Cum	Total	

Ht. 1.50 mtrs. Length 2.00 mtrs.

S.NO.	PARTICULARS	NOS.	М	EASURE	MENT	UNIT	QTY.
			Length	Width	Depth/Ht.		
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and then disposing of all surplus excavated earth as directed with in a lead of 20 metres:						
	i. Foundation ii Apron	1 1	2.65 1.50	1.35 1.50	0.60 0.30	Cum Cum <b>Total</b>	2.15 0.68 <b>2.82</b>
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.	2	<u>0.50+0.75</u> 2	1.35	2.00	Cum	3.38
3	Dry hand packed boulder stone filling in:						
	i. Foundation ii Apron	1 1	2.65 1.50	1.35 1.50	0.60 0.30+0.40 2	Cum Cum	2.15 0.79 <b>2.94</b>
4	Construction of super structure of Check dam.						
	Ist Block 2nd Block 3rd Block	1	3.22 3.22 1.11	1.35 1.05 0.75	0.75 0.75 0.50	Cum Cum Cum Total	3.26 2.54 0.83 <b>6.63</b>
	i) Dry Random Rubble Stone masnory masnory @ 25%	0	0	0	0	Cum	1.68
	ii) Dry hand packed boulder stone filling @ 75%	0	0	0	0	Cum	4.95

Ht. 1.50 mtrs. Length 2.00 mtrs.

S.NO.	Р	ARTICULARS	NOS.				UNIT	QTY.
				Length	Width	Depth/Ht.		
5	Weaving of w	vire netting for wire crate						
	with G.I. wire	4mm/5mm or SWG No.						
	6/8 in 15cmx1	5cm mesh.						
	i) Foundation	Bottom	1	2.65	1.35	0.00	Sqm	3.58
	Sides	(i/c 15 c.m. top)	2	2.65	0.00	0.60	Sqm	3.18
	Ends		2	0.00	1.35	0.60	Sqm	1.62
	ii) Apron	Top/Bottom	2	1.50	1.50	0.00	Sqm	4.50
		d/s Side	1	1.50	0.00	0.40	Sqm	0.60
		Ends	2	0.00	1.50	0.30+0.40	Sqm	1.05
						2		
	iii) Super Struc	ture						
	(Ist Block)	Тор	1	3.22	1.35	0.00	Sqm	4.35
	(Ist Block)	Bottom	1	3.22-2.65	1.35	0.00	Sqm	0.77
		Sides	2	3.22	0.00	0.75	Sqm	4.83
		Ends	2	0.00	1.35	0.75	Sqm	2.03
	Super Structure	-						
	(2nd Block)	Top/Bottom	1	3.22	1.05	0.00	Sqm	3.38
		Sides	2	3.22	0.00	0.75	Sqm	4.83
		Ends	2	0.00	1.05	0.75	Sqm	1.58
	Super Structure	-						
	(3rd Block)	Top/Bottom	2	1.11	0.75	0.00	Sqm	1.67
		Sides	2x2	1.11	0.00	0.50	Sqm	2.22
		Ends	4	0.00	0.75	0.50	Sqm	1.50
							Total	41.67
6		vire crate over pitching,						
	stone masonal	ry, boulder filling etc.	Qty. S	ame as i	tem No.	5	Sqm	41.67
7	Tipping of wire	crates i/c equipment.	Qty. same as Sum of items 3-4			Cum	9.57	

### **Wire Crate Check Dam**

Ht. 1.50 mtrs. Length 2.00mtrs.

S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and disposal surplus excavated earth upto a lead of 20 metres.				
	Total Qty. Pick Work @ 50%	2.83 1.42	Cum Cum	53.50	75.97
2	Jumper Work @ 50% Cutting in earth work and disposal of excavated earth upto a lead of	1.41	Cum	98.00	138.18
	20 metres in anchorage.	3.38	Cum	30.65	103.60
3	Dry hand packed boulder stone filling in Foundation & Apron.	2.94	Cum	49.05	144.21
4	i) Dry random rubble stone masonry in super structure i/c rough dressing.	1.68	Cum	87.25	146.58
	ii) Dry hand packed boulder stone filling in super structure.	4.95	Cum	49.05	242.80
5	Weaving of wire netting for wire crate with G.I. wire 4mm/5mm or SWG No.6/8 in 15cmx15cm mesh.	41.69	Sqm	9.05	377.29
6	Spreading of wire crate over pitching stone masonary, boulder filling etc.	41.69	Sqm	10.95	456.51
7	Tipping of wire crates i/c equipment.	9.57	Cum	21.85	209.10
8	Breaking of boulder stones	1.68	Cum	85.00	142.80
9	Carriage of G.I. wire from store to worksite O/D by M/L or Mules.	0.093	Tonne/Km.		
10	Carriage of boulder stones from nala/ road head along nala to workshite over an average distance km. by M/L or Mules.		Cum/Km.		
	ABSTRACT OF N	/IATE	RIAL C	OST	
1	Cost & carriage of G.I. wire upto store.	0.093	Tonne		
2	Cost & carriage of boulder stones upto road head.		Cum		
				Total	

#### Wire Crate Check Dam

Ht. 1.50 mtrs. Length 2.50 mtrs.

S.NO.	PARTICULARS	NOS.	. MEASUREMENT			UNIT	QTY.
			Length	Width	Depth/Ht.		
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and then disposing of all surplus excavated earth as directed with in a lead of 20 metres:						
	i. Foundation ii Apron	1	3.17 1.88	1.35 1.50	0.60 0.30	Cum Cum <b>Total</b>	2.57 0.85 <b>3.41</b>
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.	2	<u>0.50+0.75</u> 2	1.35	2.00	Cum	3.38
3	Dry hand packed boulder stone filling in:						
	i. Foundation ii Apron	1	3.17 1.88	1.35 1.50	0.60 0.30+0.40 2	Cum Cum	2.57 0.99 <b>3.56</b>
4	Construction of super structure of Check dam.						
	Ist Block 2nd Block 3rd Block	1	3.75 3.75 1.25	1.35 1.05 0.75	0.75 0.75 0.50	Cum Cum Cum Total	3.80 2.95 0.94 <b>7.69</b>
	i) Dry Random Rubble Stone masnory masnory @ 25%	0	0	0	0	Cum	1.92
	ii) Dry hand packed boulder stone filling @ 75%	0	0	0	0	Cum	5.77

Ht. 1.50 mtrs. Length 2.50 mtrs.

S.NO.	F	PARTICULARS	NOS.				UNIT	QTY.
				Length	Width	Depth/Ht.		
5	_	wire netting for wire crate						
		4mm/5mm or SWG No.						
	6/8 in 15cmx1	5cm mesh.						
	i) Foundation-		1	3.17	1.35	0.00	Sqm	4.28
		s(i/c 15 c.m. top)	2	3.17	0.00	0.60	Sqm	3.80
	Ends		2	0.00	1.35	0.60	Sqm	1.62
	ii) Apron	Top/Bottom	2	1.88	1.50	0.00	Sqm	5.64
		d/s Side	1	1.88	0.00	0.40	Sqm	0.75
		Ends	2	0.00	1.50	<u>0.30+0.40</u>	Sqm	1.05
						2		
	iii) Super Stru	cture						
	(Ist Block)	Тор	1	3.75	1.35	0.00	Sqm	5.06
	(Ist Block)	Bottom	1	3.75-3.17	1.35	0.00	Sqm	0.78
		Sides	2	3.75	1.35	0.75	Sqm	5.63
		Ends	2	0.00	1.35	0.75	Sqm	2.03
	Super Structure	<b>)-</b>						
	(2nd Block)	Top/Bottom	1	3.75	1.05	0.00	Sqm	3.94
		Sides	2	3.75	0.00	0.75	Sqm	5.63
		Ends	2	0.00	1.05	0.75	Sqm	1.58
	Super Structure	<del>)-</del>						
	(3rd Block)	Top/Bottom	2	1.25	0.75	0.00	Sqm	1.88
		Sides	2x2	1.25	0.00	0.50	Sqm	2.50
		Ends	4	0.00	0.75	0.50	Sqm	1.50
							Total	47.66
6	Spreading of v	wire crate over pitching,						
	stone masona	ry, boulder filling etc.	Qty. S	ame as i	tem No.	5	Sqm	47.66
_	<u>_</u> , .							
7	Tipping of wire	e crates i/c equipment.	Qty. sa	me as Su	Cum	11.24		

#### **Wire Crate Check Dam**

Ht. 1.50 mtrs. Length 2.50mtrs.

S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and disposal surplus excavated earth upto a lead of 20 metres.				
	Total Qty.	3.41	Cum		
	Pick Work @ 50%	1.70	Cum	53.50	90.95
2	Jumper Work @ 50% Cutting in earth work and disposal of excavated earth upto a lead of	1.71	Cum	98.00	167.58
	20 metres in anchorage.	3.38	Cum	30.65	103.60
3	Dry hand packed boulder stone filling in Foundation & Apron.	3.55	Cum	49.05	174.13
4	i) Dry random rubble stone masonry in super structure i/c rough dressing.	1.92	Cum	87.25	167.52
	ii) Dry hand packed boulder stone filling in super structure.	5.77	Cum	49.05	283.02
5	Weaving of wire netting for wire crate with G.I. wire 4mm/5mm or SWG No.6/8 in 15cmx15cm mesh.	47.67	Sqm	9.05	431.41
6	Spreading of wire crate over pitching stone masonary, boulder filling etc.	47.67	Sqm	10.95	521.99
7	Tipping of wire crates i/c equipment.	11.24	Cum	21.85	245.59
8	Breaking of boulder stones	1.92	Cum	85.00	163.20
9	Carriage of G.I. wire from store to worksite O/D by M/L or Mules.	0.106	Tonne/Km.		
10	Carriage of boulder stones from nala/ road head along nala to workshite over an average distance km. by M/L or Mules.		Cum/Km.		
	ABSTRACT OF N	<b>IATE</b>	RIAL C	OST	
1	Cost & carriage of G.I. wire upto store.	0.106	Tonne		
	Coat & carriage of boulder stones with				
2	Cost & carriage of boulder stones upto road head.		Cum		
			33111	Total	

Ht. 1.50 mtrs. Length 3.00 mtrs.

S.NO.	PARTICULARS	NOS.	. MEASUREMENT			UNIT	QTY.
			Length	Width	Depth/Ht.		
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and then disposing of all surplus excavated earth as directed with in a lead of 20 metres:						
	i. Foundation ii Apron	1 1	3.69 2.25	1.35 1.50	0.60 0.30	Cum Cum <b>Total</b>	2.99 1.01 <b>4.00</b>
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.	2	<u>0.50+0.75</u> 2	1.35	2.00	Cum	3.38
3	Dry hand packed boulder stone filling in:						
	i. Foundation ii Apron	1	3.69 2.25	1.35 1.50	0.60 0.30+0.40 2	Cum Cum	2.99 1.19 <b>4.18</b>
4	Construction of super structure of Check dam.						
	Ist Block 2nd Block 3rd Block	1	4.26 4.26 4.26	1.35 1.05 0.75	0.75 0.75 0.50	Cum Cum Cum Total	4.31 3.35 3.20 <b>10.86</b>
	i) Dry Random Rubble Stone masnory masnory @ 25%	0	0	0	0	Cum	2.18
	ii) Dry hand packed boulder stone filling @ 75%	0	0	0	0	Cum	6.52

#### **Wire Crate Check Dam**

Ht. 1.50 mtrs. Length 3.00mtrs.

S.NO.		PARTICULARS	NOS.	М	EASURE	MENT	UNIT	QTY.
				Length	Width	Depth/Ht.		
5		wire netting for wire crate						
	with G.I. wir	e 4mm/5mm or SWG No.						
	6/8 in 15cmx	15cm mesh.						
	i) Foundation		1	3.69	1.35	0.00	Sqm	4.98
		es(i/c 15 c.m. top)	2	3.69	0.00	0.60	Sqm	4.43
	End		2	0.00	1.35	0.60	Sqm	1.62
	ii) Apron	Top/Bottom	2	2.25	1.50	0.00	Sqm	6.75
		d/s Side	1	2.25	0.00	0.40	Sqm	0.90
		Ends	2	0.00	1.50	<u>0.30+0.40</u>	Sqm	1.05
						2		
	iii) Super Str	ucture						
	(Ist Block)	Тор	1	4.26	1.35	0.00	Sqm	5.75
	(Ist Block)	Bottom	1	4.26-3.69	1.35	0.00	Sqm	0.77
		Sides	2	4.26	0.00	0.75	Sqm	6.39
		Ends	2	0.00	1.35	0.75	Sqm	2.03
	Super Structur	re-						
	(2nd Block)	Top/Bottom	1	4.26	1.05	0.00	Sqm	4.47
		Sides	2	4.26	0.00	0.75	Sqm	6.39
		Ends	2	0.00	1.05	0.75	Sqm	1.58
	Super Structur	re-						
	(3rd Block)	Top/Bottom	2	1.38	0.75	0.00	Sqm	2.07
	,	Sides	2x2	1.38	0.00	0.50	Sqm	2.76
		Ends	4	0.00	0.75	0.50	Sqm	1.50
							Total	53.43
6	Spreading of	wire crate over pitching,						
	stone mason	ary, boulder filling etc.	Qty. S	ame as i	5	Sqm	53.43	
7	Tipping of wi	re crates i/c equipment.	Oty sa	me as Su	m of item	s 3-4	Cum	12.87
'	Tripping or Wi	το σταίου πο οφαιριπιστία.	July. Sa	เกษ สร	III OI ILEIII	IS J <del>-4</del>		12.01

#### **Wire Crate Check Dam**

Ht. 1.50 mtrs. Length 3.00mtrs.

S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and disposal surplus excavated earth upto a lead of 20 metres.				
	Total Qty. Pick Work @ 50%	4.00 2.00	Cum Cum	53.50	107.00
2	Jumper Work @ 50% Cutting in earth work and disposal	2.00	Cum	98.00	196.00
	of excavated earth upto a lead of 20 metres in anchorage.	3.38	Cum	30.65	103.60
3	Dry hand packed boulder stone filling in Foundation & Apron.	4.17	Cum	49.05	204.54
4	i) Dry random rubble stone masonry in super structure i/c rough dressing.	2.18	Cum	87.25	190.21
	ii) Dry hand packed boulder stone filling in super structure.	6.62	Cum	49.05	324.71
5	Weaving of wire netting for wire crate with G.I. wire 4mm/5mm or SWG No.6/8 in 15cmx15cm mesh.	53.43	Sqm	9.05	483.54
6	Spreading of wire crate over pitching stone masonary, boulder filling etc.	53.43	Sqm	10.95	585.06
7	Tipping of wire crates i/c equipment.	12.87	Cum	21.85	281.21
8	Breaking of boulder stones	2.18	Cum	85.00	185.30
9	Carriage of G.I. wire from store to worksite O/D by M/L or Mules.	0.119	Tonne/Km.		
10	Carriage of boulder stones from nala/ road head along nala to workshite over an average distance km. by M/L or Mules.		Cum/Km.		
	ABSTRACT OF N	/ATE	RIAL C	OST	
1	Cost & carriage of G.I. wire upto store.	0.119	Tonne		
2	Cost & carriage of boulder stones upto road head.		Cum		
				Total	

Ht. 1.50 mtrs. Length 3.50 mtrs.

S.NO.	PARTICULARS	NOS.	. MEASUREMENT			UNIT	QTY.
			Length	Width	Depth/Ht.		
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and then disposing of all surplus excavated earth as directed with in a lead of 20 metres:						
	i. Foundation ii Apron	1 1	4.21 2.63	1.35 1.50	0.60 0.30	Cum Cum <b>Total</b>	3.41 1.18 <b>4.59</b>
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.	2	<u>0.50+0.75</u> 2	1.35	2.00	Cum	3.38
3	Dry hand packed boulder stone filling in:						
	i. Foundation ii Apron	1 1	4.21 2.63	1.35 1.50	0.60 0.30+0.40 2	Cum Cum	3.41 1.38 <b>4.79</b>
						Total	4.73
4	Construction of super structure of Check dam.						
	Ist Block 2nd Block 3rd Block	1	4.79 4.79 1.52	1.35 1.05 0.75	0.75 0.75 0.50	Cum Cum Cum Total	4.85 3.77 1.14 <b>9.76</b>
	i) Dry Random Rubble Stone masnory masnory @ 25%	0	0	0	0	Cum	2.44
	ii) Dry hand packed boulder stone filling @ 75%	0	0	0	0	Cum	7.32

#### **Wire Crate Check Dam**

Ht. 1.50 mtrs. Length 3.50mtrs.

S.NO.	ı	PARTICULARS	NOS.	М	EASURE	MENT	UNIT	QTY.
				Length	Width	Depth/Ht.		
5		wire netting for wire crate						
		e 4mm/5mm or SWG No.						
	6/8 in 15cmx1	5cm mesh.						
	i) Foundation-	Bottom	1	4.21	1.35	0.00	Sqm	5.68
	· ·	s(i/c 15 c.m. top)	2	4.21	0.00	0.60	Sqm	5.05
	Ends	• • • • • • • • • • • • • • • • • • • •	2	0.00	1.35	0.60	Sqm	1.62
	ii) Apron	Top/Bottom	2	2.63	1.50	0.00	Sqm	7.89
	, ,	d/s Side	1	2.63	0.00	0.40	Sqm	1.05
		Ends	2	0.00	1.50	0.30+0.40	Sqm	1.05
						2		
	iii) Super Stru	cture						
	(Ist Block)	Тор	1	4.79	1.35	0.00	Sqm	6.47
	(Ist Block)	Bottom	2	4.79-4.21	1.35	0.00	Sqm	0.78
		Sides	2	4.79	0.00	0.75	Sqm	7.19
		Ends	2	0.00	1.35	0.75	Sqm	2.03
	Super Structure							
	(2nd Block)	Top/Bottom	1	4.79	1.05	0.00	Sqm	5.03
		Sides	2	4.79	0.00	0.75	Sqm	7.19
		Ends	2	0.00	1.05	0.75	Sqm	1.58
	Super Structure	<del>)-</del>						
	(3rd Block)	Top/Bottom	2	1.52	0.75	0.00	Sqm	2.28
		Sides	2x2	1.52	0.00	0.50	Sqm	3.04
		Ends	4	0.00	0.75	0.50	Sqm	1.50
							Total	59.41
6	Sproading of	wire crate over pitching,		l l		l		
0		ary, boulder filling etc.		ame as i	tem No	5	Sqm	59.41
	Storie masona	ary, bodider filling etc.	Qty. S	aiii <del>c</del> as i	leili NO.	5	Sqiii	39.41
7	Tipping of wire	e crates i/c equipment.	Otv. so	me as Su	Cum	14.55		
'		e oraces i/o equipment.	Qiy. Sa	iiie as su	Cuiii	14.00		

#### **Wire Crate Check Dam**

Ht. 1.50 mtrs. Length 3.50mtrs.

S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT				
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and disposal surplus excavated earth								
	upto a lead of 20 metres.								
	Total Qty.	4.59	Cum						
	Pick Work @ 50%	2.29	Cum	53.50	122.52				
2	Jumper Work @ 50% Cutting in earth work and disposal of excavated earth upto a lead of	2.30	Cum	98.00	225.40				
	20 metres in anchorage.	3.38	Cum	30.65	103.60				
3	Dry hand packed boulder stone filling in Foundation & Apron.	4.79	Cum	49.05	234.95				
4	i) Dry random rubble stone masonry in super structure i/c rough dressing.	2.44	Cum	87.25	212.89				
	ii) Dry hand packed boulder stone filling in super structure.	7.32	Cum	49.05	359.05				
5	Weaving of wire netting for wire crate with G.I. wire 4mm/5mm or SWG No.6/8 in 15cmx15cm mesh.	59.42	Sqm	9.05	537.75				
6	Spreading of wire crate over pitching stone masonary, boulder filling etc.	59.42	Sqm	10.95	650.65				
7	Tipping of wire crates i/c equipment.	14.55	Cum	21.85	317.92				
8	Breaking of boulder stones	2.44	Cum	85.00	207.40				
9	Carriage of G.I. wire from store to worksite O/D by M/L or Mules.	0.132	Tonne/Km.						
10	Carriage of boulder stones from nala/ road head along nala to workshite over an average distance km. by M/L or Mules.		Cum/Km.						
	ABSTRACT OF MATERIAL COST								
1	Cost & carriage of G.I. wire upto store.	0.132	Tonne						
2	Cost & carriage of boulder stones upto road head.		Cum	Tatal					
				Total					

Ht. 1.50 mtrs. Length 4.00 mtrs.

S.NO.	PARTICULARS	NOS.	. MEASUREMENT			UNIT	QTY.
			Length	Width	Depth/Ht.		
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and then disposing of all surplus excavated earth as directed with in a lead of 20 metres:						
	i. Foundation ii Apron	1 1	4.73 3.00	1.35 1.50	0.60 0.30	Cum Cum <b>Total</b>	3.83 1.35 <b>5.18</b>
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.	2	<u>0.50+0.75</u> 2	1.35	2.00	Cum	3.38
3	Dry hand packed boulder stone filling in:						
	i. Foundation ii Apron	1 1	4.73 3.00	1.35 1.50	0.60 0.30+0.40 2	Cum Cum	3.83 1.58
						Total	5.41
4	Construction of super structure of Check dam.						
	Ist Block	1	5.30	1.35	0.75	Cum	5.37
	2nd Block	1	5.30	1.05	0.75	Cum	4.17
	3rd Block	2	1.65	0.75	0.50	Cum	1.24
						Total	10.78
	i) Dry Random Rubble Stone masnory masnory @ 25%	0	0	0	0	Cum	2.70
	ii) Dry hand packed boulder stone filling @ 75%	0	0	0	0	Cum	8.08

Ht. 1.50 mtrs. Length 4.00mtrs.

S.NO.	ı	PARTICULARS	NOS.	M	EASURE	MENT	UNIT	QTY.
				Length	Width	Depth/Ht.		
5	_	wire netting for wire crate						
	with G.I. wire	e 4mm/5mm or SWG No.						
	6/8 in 15cmx1	5cm mesh.						
	i) Foundation-	- Bottom	1	4.73	1.35	0.00	Sqm	6.39
	Sides	s(i/c 15 c.m. top)	2	4.73	0.00	0.60	Sqm	5.68
	Ends	3	2	0.00	1.35	0.60	Sqm	1.62
	ii) Apron	Top/Bottom	2	3.00	1.50	0.00	Sqm	9.00
		d/s Side	1	3.00	0.00	0.40	Sqm	1.20
		Ends	2	0.00	1.50	0.30+0.40	Sqm	1.05
						2		
	iii) Super Stru	cture						
	(Ist Block)	Тор	1	5.30	1.35	0.00	Sqm	7.16
	(Ist Block)	Bottom	1	5.30-4.73	1.35	0.00	Sqm	0.77
		Sides	2	5.30	0.00	0.75	Sqm	7.95
		Ends	2	0.00	1.35	0.75	Sqm	2.03
	Super Structure	<del>)-</del>						
	(2nd Block)	Top/Bottom	1	5.30	1.05	0.00	Sqm	5.57
	,	Sides	2	5.30	0.00	0.75	Sqm	7.95
		Ends	2	0.00	1.05	0.75	Sqm	1.58
	Super Structure	<del>)</del> -						
	(3rd Block)	Top/Bottom	2	1.65	0.75	0.00	Sqm	2.48
	,	Sides	2x2	1.65	0.00	0.50	Sqm	3.30
		Ends	4	0.00	0.75	0.50	Sqm	1.50
							Total	65.20
6	Spreading of	wire crate over pitching,						
	stone masona	ary, boulder filling etc.	Qty. S	ame as i	tem No.	5	Sqm	65.20
						_		
7	Tipping of wire	e crates i/c equipment.	Qty. same as Sum of items 3-4				Cum	16.19
	Į							

#### **Wire Crate Check Dam**

Ht. 1.50 mtrs. Length 4.00mtrs.

S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres				
	and disposal surplus excavated earth				
	upto a lead of 20 metres.  Total Qty.	5.18	Cum		
	Pick Work @ 50%	2.59	Cum	53.50	138.57
	Jumper Work @ 50%	2.59	Cum	98.00	253.82
2	Cutting in earth work and disposal				
	of excavated earth upto a lead of				
	20 metres in anchorage.	3.38	Cum	30.65	103.60
3	Dry hand packed boulder stone				
	filling in Foundation & Apron.	5.41	Cum	49.05	265.36
4	i) Dry random rubble stone masonry	0.70	Curr	07.05	225 50
	in super structure i/c rough dressing.	2.70	Cum	87.25	235.58
	ii) Dry hand packed boulder stone				
	filling in super structure.	8.08	Cum	49.05	396.32
_					
5	Weaving of wire netting for wire crate with G.I. wire 4mm/5mm or SWG No.6/8	65.20	Sam	9.05	590.06
	in 15cmx15cm mesh.	03.20	Sqm	9.03	590.00
6	Spreading of wire crate over pitching				
	stone masonary, boulder filling etc.	65.20	Sqm	10.95	713.94
7	Tipping of wire crates i/c equipment.	16.19	Cum	21.85	353.75
	Tripping of time diates to equipment		<b>G</b>		0000
8	Breaking of boulder stones	2.70	Cum	85.00	229.50
9	Coming of C.I. wire from store to				
9	Carriage of G.I. wire from store to worksite O/D by M/L or Mules.	0.145	Tonne/Km.		
	By Will of Middle.	0.1 10	1011110/111111		
10	Carriage of boulder stones from nala/				
	road head along nala to workshite over		Cum/Km.		
	an average distance km. by M/L or Mules.				
		4 A T.C.		OOT	
		/IAIE	<u>RIAL C</u>	<u> </u>	
1	Cost & carriage of G.I. wire upto store.	0.145	Tonne		
2	Cost & carriage of boulder stones upto				
	road head.		Cum		
			- 2	Total	

Ht. 1.50 mtrs. Length 4.50 mtrs.

S.NO.	PARTICULARS	NOS.	MEASUREMENT			UNIT	QTY.
			Length	Width	Depth/Ht.		
1	Excavation in foundation, trenches						
	etc., in earth work, lift upto 1.50						
	metres and then disposing of all						
	surplus excavated earth as directed with in a lead of 20 metres:						
	with in a lead of 20 metres.						
	i. Foundation	1	5.25	1.35	0.60	Cum	4.25
	ii Apron	1	3.38	1.50	0.30	Cum	1.52
	, , , , , , , , , , , , , , , , , , ,					Total	5.77
2	Cutting in earth work and disposal						
	of excavated earth upto a lead of	2	0.50+0.75	1.35	2.00	Cum	3.38
	20 metre in anchorage.		2				
2	Dwy hand madead baylday stone						
3	Dry hand packed boulder stone filling in:						
	illiling in:						
	i. Foundation	1	5.25	1.35	0.60	Cum	4.25
	ii Apron	1	3.38	1.50	0.30+0.40	Cum	1.77
	·				2		
						Total	6.02
4	Construction of super structure of Check dam.						
	Ist Block	1	5.83	1.35	0.75	Cum	5.90
	2nd Block		5.83	1.05	0.75	Cum	4.59
	3rd Block		1.79	0.75	0.50	Cum	1.34
	514 <b>5</b> 1651.	_	0	0.7.0	0.00	Total	11.84
	i) Dry Random Rubble Stone masnory	0	0	0	0	Cum	2.96
	masnory @ 25%	-		-			
	•						
	ii) Dry hand packed boulder stone	0	0	0	0	Cum	8.87
	filling @ 75%						
L							

Ht. 1.50 mtrs. Length 4.50mtrs.

S.NO.	P/	ARTICULARS	NOS.	M	EASURE	MENT	UNIT	QTY.
				Length	Width	Depth/Ht.		
5		ire netting for wire crate						
		4mm/5mm or SWG No.						
	6/8 in 15cmx15	cm mesh.						
	i) Foundation		1	5.25	1.35	0.00	Sqm	7.09
		i/c 15 c.m. top)	2	5.25	0.00	0.60	Sqm	6.30
	Ends		3	0.00	1.35	0.60	Sqm	2.43
	ii) Apron	Top/Bottom	2	3.38	1.50	0.00	Sqm	10.14
		d/s Side	1	3.38	0.00	0.40	Sqm	1.35
		Ends	2	0.00	1.50	0.30+0.40	Sqm	1.05
						2		
	iii) Super Struct	ture						
	(Ist Block)	Тор	1	5.83	1.35	0.00	Sqm	7.87
	(Ist Block)	Bottom	2	5.83-5.25	1.35	0.00	Sqm	0.78
		Sides	2	5.83	0.00	0.75	Sqm	8.75
	i i	Ends	3	0.00	1.35	0.75	Sqm	3.04
	Super Structure-							
	(2nd Block)	Top/Bottom	1	5.83	1.05	0.00	Sqm	6.12
		Sides	2	5.83	0.00	0.75	Sqm	8.75
		Ends	3	0.00	1.05	0.75	Sqm	2.36
	Super Structure-							
	(3rd Block)	Top/Bottom	2	1.79	0.75	0.00	Sqm	2.69
		Sides	2x2	1.79	0.00	0.50	Sqm	3.58
		Ends	4	0.00	0.75	0.50	Sqm	1.50
							Total	73.79
6		ire crate over pitching,		_				
	stone masonar	y, boulder filling etc.	Qty. S	ame as i	tem No.	5	Sqm	73.79
7	Tipping of wire	arataa i/a aguinmant	04	0	C	47.05		
_ ′	ripping of wire	crates i/c equipment.	Qty. sa	me as Su	Cum	17.85		

#### **Wire Crate Check Dam**

Ht. 1.50 mtrs. Length 4.50mtrs.

S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and disposal surplus excavated earth upto a lead of 20 metres.				
	Total Qty.	5.77	Cum		
	Pick Work @ 50%	2.88	Cum	53.50	154.08
2	Jumper Work @ 50% Cutting in earth work and disposal of excavated earth upto a lead of	2.89	Cum	98.00	283.22
	20 metres in anchorage.	3.38	Cum	30.65	103.60
3	Dry hand packed boulder stone filling in Foundation & Apron.	6.02	Cum	49.05	295.28
4	i) Dry random rubble stone masonry in super structure i/c rough dressing.	2.96	Cum	87.25	258.26
	ii) Dry hand packed boulder stone filling in super structure.	8.87	Cum	49.05	435.07
5	Weaving of wire netting for wire crate with G.I. wire 4mm/5mm or SWG No.6/8 in 15cmx15cm mesh.	73.78	Sqm	9.05	667.71
6	Spreading of wire crate over pitching stone masonary, boulder filling etc.	73.78	Sqm	10.95	807.89
7	Tipping of wire crates i/c equipment.	17.85	Cum	21.85	390.02
8	Breaking of boulder stones	2.96	Cum	85.00	251.60
9	Carriage of G.I. wire from store to worksite O/D by M/L or Mules.	0.164	Tonne/Km.		
10	Carriage of boulder stones from nala/ road head along nala to workshite over an average distance km. by M/L or Mules.		Cum/Km.		
	ABSTRACT OF N	/ATE	RIAL C	OST	
1	Cost & carriage of G.I. wire upto store.	0.164	Tonne		
2	Cost & carriage of boulder stones upto				
	road head.		Cum		
				Total	

Ht. 1.50 mtrs. Length 5.00 mtrs.

		Length	1871 141			
		Lengin	Width	Depth/Ht.		
Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and then disposing of all surplus excavated earth as directed with in a lead of 20 metres:						
i. Foundation ii Apron	1 1	5.77 3.75	1.35 1.50	0.60 0.30	Cum Cum <b>Total</b>	4.67 1.69 <b>6.36</b>
Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.	2	<u>0.50+0.75</u> 2	1.35	2.00	Cum	3.38
Dry hand packed boulder stone filling in:						
i. Foundation ii Apron	1 1	5.77 3.75	1.35 1.50	0.60 0.30+0.40 2	Cum Cum	4.67 1.97
					Total	6.64
Construction of super structure of Check dam.						
Ist Block	1	6.34	1.35	0.75	Cum	6.42
2nd Block	1	6.34	1.05	0.75	Cum	4.99
3rd Block	2	1.92	0.75	0.50	Cum	1.44
					Total	12.85
i) Dry Random Rubble Stone masnory masnory @ 25%	0	0	0	0	Cum	3.21
ii) Dry hand packed boulder stone filling @ 75%	0	0	0	0	Cum	9.64
	etc., in earth work, lift upto 1.50 metres and then disposing of all surplus excavated earth as directed with in a lead of 20 metres:  i. Foundation ii Apron  Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.  Dry hand packed boulder stone filling in:  i. Foundation ii Apron  Construction of super structure of Check dam.  Ist Block 2nd Block 3rd Block i) Dry Random Rubble Stone masnory masnory @ 25%  ii) Dry hand packed boulder stone	etc., in earth work, lift upto 1.50 metres and then disposing of all surplus excavated earth as directed with in a lead of 20 metres:  i. Foundation ii Apron  Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.  Dry hand packed boulder stone filling in: i. Foundation ii Apron  1  Construction of super structure of Check dam.  Ist Block 1 2nd Block 3rd Block 2  i) Dry Random Rubble Stone masnory masnory @ 25%  ii) Dry hand packed boulder stone  0	etc., in earth work, lift upto 1.50 metres and then disposing of all surplus excavated earth as directed with in a lead of 20 metres:  i. Foundation ii Apron  Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.  Dry hand packed boulder stone filling in: i. Foundation ii Apron  1 5.77 1 3.75  Construction of super structure of Check dam.  Ist Block 2nd Block 1 6.34 2nd Block 2 1.92  i) Dry Random Rubble Stone masnory masnory @ 25%  ii) Dry hand packed boulder stone  0 0	etc., in earth work, lift upto 1.50 metres and then disposing of all surplus excavated earth as directed with in a lead of 20 metres:  i. Foundation ii Apron  Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.  Dry hand packed boulder stone filling in:  i. Foundation ii Apron  1 5.77 1.35 2 1.35 2 1.35  Construction of super structure of Check dam.  Ist Block 2 1 6.34 1.35 2nd Block 3 1 6.34 1.05 3rd Block 2 1.92 0.75  i) Dry Random Rubble Stone masnory masnory @ 25%  ii) Dry hand packed boulder stone  0 0 0	etc., in earth work, lift upto 1.50 metres and then disposing of all surplus excavated earth as directed with in a lead of 20 metres:  i. Foundation ii Apron  1 5.77 1.35 0.60 0.30  Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.  Dry hand packed boulder stone filling in: i. Foundation ii Apron  1 5.77 1.35 2.00  2 0.50+0.75 2  1.35 2.00  Construction of super structure of Check dam.  Ist Block 1 6.34 1.35 0.75 0.75 0.75 0.50  i) Dry Random Rubble Stone masnory masnory @ 25%  ii) Dry hand packed boulder stone 0 0 0 0	etc., in earth work, lift upto 1.50 metres and then disposing of all surplus excavated earth as directed with in a lead of 20 metres:  i. Foundation ii Apron  1 5.77 1.35 0.60 Cum  Total  Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.  2 0.50+0.75 2 1.35 2.00 Cum  Total  Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.  Dry hand packed boulder stone filling in:  i. Foundation ii Apron  1 5.77 1.35 0.60 Cum  Cum  Total  Construction of super structure of Check dam.  Ist Block 1 6.34 1.35 0.75 Cum  2 1.92 0.75 0.50 Cum  Total  i) Dry Random Rubble Stone masnory and Block 2 1.92 0.75 0.50 Cum  Total  i) Dry Random Rubble Stone masnory 2 0 0 0 0 Cum  Total  i) Dry hand packed boulder stone 0 0 0 0 Cum

Ht. 1.50 mtrs. Length 5.00mtrs.

S.NO.	Р	PARTICULARS	NOS.	М	EASURE	MENT	UNIT	QTY.
				Length	Width	Depth/Ht.		
5	_	vire netting for wire crate						
	with G.I. wire	4mm/5mm or SWG No.						
	6/8 in 15cmx1	5cm mesh.						
	i) Foundation	- Bottom	1	5.77	1.35	0.00	Sqm	7.79
	Sides	s(i/c 15 c.m. top)	2	5.77	0.00	0.60	Sqm	6.92
	Ends		3	0.00	1.35	0.60	Sqm	2.43
	ii) Apron	Top/Bottom	2	3.75	1.50	0.00	Sqm	11.25
		d/s Side	1	3.75	0.00	0.40	Sqm	1.50
		Ends	2	0.00	1.50	<u>0.30+0.40</u>	Sqm	1.05
						2		
	iii) Super Struc	cture						
	(Ist Block)	Тор	1	6.34	1.35	0.00	Sqm	8.56
	(Ist Block)	Bottom	2	6.34-5.77	1.35	0.00	Sqm	0.77
		Sides	2	6.34	0.00	0.75	Sqm	9.51
		Ends	3	0.00	1.35	0.75	Sqm	3.04
	Super Structure	-						
	(2nd Block)	Top/Bottom	1	6.34	1.05	0.00	Sqm	6.66
		Sides	2	6.34	0.00	0.75	Sqm	9.51
		Ends	3	0.00	1.05	0.75	Sqm	2.36
	Super Structure							
	(3rd Block)	Top/Bottom	2	1.92	0.75	0.00	Sqm	2.88
		Sides	2x2	1.92	0.00	0.50	Sqm	3.84
		Ends	4	0.00	0.75	0.50	Sqm	1.50
							Total	79.57
	0	odna ovada ovana sitalata s		]		<u> </u>		
6		vire crate over pitching,		:	4 NI-	_	0	70.50
	stone masonal	ry, boulder filling etc.	JUty. S	ame as i	tem ivo.	5	Sqm	79.56
7	Tipping of wire	e crates i/c equipment.	Oty sa	me as Su	Cum	19.49		
'		crates i/e equipment.	Qty. Sa	ine as ou	Cuiii	13.43		

#### **Wire Crate Check Dam**

Ht. 1.50 mtrs. Length 5.00mtrs.

S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and disposal surplus excavated earth upto a lead of 20 metres.				
	Total Qty.	6.36	Cum		
	Pick Work @ 50%	3.18	Cum	53.50	170.13
2	Jumper Work @ 50% Cutting in earth work and disposal of excavated earth upto a lead of	3.18	Cum	98.00	311.64
	20 metres in anchorage.	3.38	Cum	30.65	103.60
3	Dry hand packed boulder stone filling in Foundation & Apron.	6.64	Cum	49.05	325.69
4	i) Dry random rubble stone masonry in super structure i/c rough dressing.	3.21	Cum	87.25	280.07
	ii) Dry hand packed boulder stone filling in super structure.	9.64	Cum	49.05	472.84
5	Weaving of wire netting for wire crate with G.I. wire 4mm/5mm or SWG No.6/8 in 15cmx15cm mesh.	79.56	Sqm	9.05	720.02
6	Spreading of wire crate over pitching stone masonary, boulder filling etc.	79.56	Sqm	10.95	871.18
7	Tipping of wire crates i/c equipment.	19.49	Cum	21.85	425.86
8	Breaking of boulder stones	3.21	Cum	85.00	272.85
9	Carriage of G.I. wire from store to worksite O/D by M/L or Mules.	0.177	Tonne/Km.		
10	Carriage of boulder stones from nala/ road head along nala to workshite over an average distance km. by M/L or Mules.		Cum/Km.		
	ABSTRACT OF N	/IATE	RIAL C	OST	
1	Cost & carriage of G.I. wire upto store.	0.177	Tonne		
2	Cost & carriage of boulder stones upto				
	road head.		Cum	Tatal	
				Total	

Ht. 1.75 mtrs. Length 2.50 mtrs.

S.NO.	PARTICULARS	NOS.	MEASUREMENT			UNIT	QTY.
			Length	Width	Depth/Ht.		
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and then disposing of all						
	surplus excavated earth as directed with in a lead of 20 metres:						
	i. Foundation ii Apron	1 1	3.17 1.88	1.60 1.75	0.75 0.30	Cum Cum <b>Total</b>	3.80 0.99 <b>4.79</b>
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.	2	<u>0.50+0.75</u> 2	1.60	2.25	Cum	4.50
3	Dry hand packed boulder stone filling in:						
	i. Foundation	1	3.17	1.60	0.75	Cum	3.80
	ii Apron	1	1.88	1.75	0.30+0.40 2	Cum	1.15
						Total	4.95
4	Construction of super structure of Check dam.						
	Ist Block		3.75	1.60	0.875	Cum	5.25
	2nd Block		3.75	1.30	0.875	Cum	4.27
	3rd Block	2	1.25	1.00	0.50	Cum <b>Total</b>	1.25 <b>10.77</b>
						Total	10.77
	i) Dry Random Rubble Stone masnory masnory @ 25%	0	0	0	0	Cum	2.70
	ii) Dry hand packed boulder stone filling @ 75%	0	0	0	0	Cum	8.07

Ht. 1.75 mtrs. Length 2.50mtrs.

S.NO.	F	PARTICULARS	NOS.	M	EASURE	MENT	UNIT	QTY.
				Length	Width	Depth/Ht.		
5	_	wire netting for wire crate						
		e 4mm/5mm or SWG No.						
	6/8 in 15cmx1	5cm mesh.						
	i) Foundation Datton		١,	0.47	4.00	0.00		F 07
	i) Foundation-		1	3.17	1.60	0.00	Sqm	5.07
		s(i/c 15 c.m. top)	2	3.17	0.00	0.75	Sqm	4.76
	Ends		2	0.00	1.60	0.75	Sqm	2.40
	ii) Apron	Top/Bottom	2	1.88	1.75	0.00	Sqm	6.58
		d/s Side	1	1.88	0.00	0.40	Sqm	0.75
		Ends	2	0.00	1.75	<u>0.30+0.40</u>	Sqm	1.23
						2		
	iii) Super Stru	cture						
	(Ist Block)	Тор	1	3.75	1.60	0.00	Sqm	6.00
	(Ist Block)	Bottom	2	3.75-3.17	1.60	0.00	Sqm	0.93
		Sides	2	3.75	0.00	0.875	Sqm	6.56
		Ends	2	0.00	1.60	0.875	Sqm	2.80
	Super Structure	<del>)-</del>						
	(2nd Block)	Top/Bottom	1	3.75	1.30	0.00	Sqm	4.88
		Sides	2	3.75	0.00	0.875	Sqm	6.56
		Ends	2	0.00	1.30	0.875	Sqm	2.28
	Super Structure	<del>)-</del>						
	(3rd Block)	Top/Bottom	2	1.25	1.00	0.00	Sqm	2.50
		Sides	2x2	1.25	0.00	0.50	Sqm	2.50
		Ends	4	0.00	1.00	0.50	Sqm	2.00
							Total	57.79
	Core eding of	vivo arata avar nitabina						
٥		wire crate over pitching, ary, boulder filling etc.	Otv. 6	omo oo i	tom No	5	Cam	57.79
	Storie masona	iry, boulder miling etc.	July. S	ame as i	tem No.	3	Sqm	57.79
	L							
7	Tipping of wire	e crates i/c equipment.	Qty. sa	ime as Su	Cum	15.72		
	I .							

#### **Wire Crate Check Dam**

Ht. 1.75 mtrs. Length 2.50mtrs.

S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and disposal surplus excavated earth upto a lead of 20 metres.				
	Total Qty.	4.79	Cum		
	Pick Work @ 50%	2.39	Cum	53.50	127.87
2	Jumper Work @ 50% Cutting in earth work and disposal of excavated earth upto a lead of	2.40	Cum	98.00	235.20
	20 metres in anchorage.	4.50	Cum	30.65	137.93
3	Dry hand packed boulder stone filling in Foundation & Apron.	4.95	Cum	49.05	242.80
4	i) Dry random rubble stone masonry in super structure i/c rough dressing.	2.70	Cum	87.25	235.58
	ii) Dry hand packed boulder stone filling in super structure.	8.07	Cum	49.05	395.83
5	Weaving of wire netting for wire crate with G.I. wire 4mm/5mm or SWG No.6/8 in 15cmx15cm mesh.	57.79	Sqm	9.05	523.00
6	Spreading of wire crate over pitching stone masonary, boulder filling etc.	57.79	Sqm	10.95	632.80
7	Tipping of wire crates i/c equipment.	15.72	Cum	21.85	343.48
8	Breaking of boulder stones	2.70	Cum	85.00	229.50
9	Carriage of G.I. wire from store to worksite O/D by M/L or Mules.	0.128	Tonne/Km.		
10	Carriage of boulder stones from nala/ road head along nala to workshite over an average distance km. by M/L or Mules.		Cum/Km.		
		/ATE	RIAL C	OST	
1	Cost & carriage of G.I. wire upto store.	0.128	Tonne		
2	Cost & carriage of boulder stones upto				
	road head.		Cum		
				Total	

Ht. 1.75 mtrs. Length 3.00 mtrs.

S.NO.	PARTICULARS	NOS.	MEASUREMENT			UNIT	QTY.
			Length	Width	Depth/Ht.		
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and then disposing of all surplus excavated earth as directed with in a lead of 20 metres:						
	i. Foundation ii Apron	1	3.69 2.25	1.60 1.75	0.75 0.30	Cum Cum <b>Total</b>	4.43 1.18 <b>5.61</b>
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.	2	<u>0.50+0.75</u> 2	1.60	2.25	Cum	4.50
3	Dry hand packed boulder stone filling in:						
	i. Foundation ii Apron	1 1	3.69 2.25	1.60 1.75	0.75 0.30+0.40 2	Cum Cum	4.43 1.37
						Total	5.80
4	Construction of super structure of Check dam.						
	Ist Block 2nd Block 3rd Block	1	4.26 4.26 1.38	1.60 1.30 1.00	0.875 0.875 0.50	Cum Cum Cum	5.96 4.85 1.38 <b>12.19</b>
	i) Dry Random Rubble Stone masnory masnory @ 25%	0	0	0	0	Cum	3.05
	ii) Dry hand packed boulder stone filling @ 75%	0	0	0	0	Cum	9.13

Ht. 1.75 mtrs. Length 3.00mtrs.

S.NO.	ı	PARTICULARS	NOS.	M	EASURE	MENT	UNIT	QTY.
				Length	Width	Depth/Ht.		
5	_	wire netting for wire crate						
		e 4mm/5mm or SWG No.						
	6/8 in 15cmx1	5cm mesh.						
	i) Favordation Dattage			0.00	4.00	0.00		5.00
	i) Foundation-		1	3.69	1.60	0.00	Sqm	5.90
		s(i/c 15 c.m. top)	2	3.69	0.00	0.75	Sqm	5.54
	Ends		2	0.00	1.60	0.75	Sqm	2.40
	ii) Apron	Top/Bottom	2	2.25	1.75	0.00	Sqm	7.88
		d/s Side	1	2.25	0.00	0.40	Sqm	0.90
		Ends	2	0.00	1.75	0.30+0.40	Sqm	1.23
						2		
	iii) Super Stru	cture						
	(Ist Block)	Тор	1	4.26	1.60	0.00	Sqm	6.82
	(Ist Block)	Bottom	2	4.26-3.69	1.60	0.00	Sqm	0.91
		Sides	2	4.26	0.00	0.875	Sqm	7.46
		Ends	2	0.00	1.60	0.875	Sqm	2.80
	Super Structure	<b>)-</b>						
	(2nd Block)	Top/Bottom	1	4.26	1.30	0.00	Sqm	5.54
		Sides	2	4.26	0.00	0.875	Sqm	7.46
		Ends	2	0.00	1.30	0.875	Sqm	2.28
	Super Structure	à-						
	(3rd Block)	Top/Bottom	2	1.38	1.00	0.00	Sqm	2.76
	(0.0 =)	Sides	2x2	1.38	0.00	0.50	Sqm	2.76
		Ends	4	0.00	1.00	0.50	Sqm	2.00
							Total	64.61
6		wire crate over pitching,						
	stone masona	ary, boulder filling etc.	Qty. S	ame as i	tem No.	5	Sqm	64.61
7	Tipping of wire	e crates i/c equipment.	Oty sa	me as Su	Cum	17.97		
'		e crates i/c equipment.	Qty. Sa	ille as Su	Cuiii	17.31		

#### **Wire Crate Check Dam**

Ht. 1.75 mtrs. Length 3.00mtrs.

S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and disposal surplus excavated earth upto a lead of 20 metres.				
	Total Qty.	5.60	Cum		
	Pick Work @ 50% Jumper Work @ 50%	2.80 2.80	Cum Cum	53.50 98.00	149.80 274.40
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metres in anchorage.	4.50	Cum	30.65	137.93
	20 metres in anchorage.	4.50	Cum	30.05	137.93
3	Dry hand packed boulder stone filling in Foundation & Apron.	5.79	Cum	49.05	284.00
4	i) Dry random rubble stone masonry in super structure i/c rough dressing.	3.05	Cum	87.25	266.11
	ii) Dry hand packed boulder stone filling in super structure.	9.13	Cum	49.05	447.83
5	Weaving of wire netting for wire crate with G.I. wire 4mm/5mm or SWG No.6/8 in 15cmx15cm mesh.	64.61	Sqm	9.05	584.72
6	Spreading of wire crate over pitching stone masonary, boulder filling etc.	64.61	Sqm	10.95	707.48
7	Tipping of wire crates i/c equipment.	17.97	Cum	21.85	392.64
8	Breaking of boulder stones	3.05	Cum	85.00	259.25
9	Carriage of G.I. wire from store to worksite O/D by M/L or Mules.	0.144	Tonne/Km.		
10	Carriage of boulder stones from nala/ road head along nala to workshite over an average distance km. by M/L or Mules.		Cum/Km.		
	ABSTRACT OF N	/IATE	RIAL C	OST	
1	Cost & carriage of G.I. wire upto store.	0.144	Tonne		
2	Cost & carriage of boulder stones upto				
	road head.		Cum		
				Total	

Ht. 1.75 mtrs. Length 3.50 mtrs.

S.NO.	PARTICULARS	NOS.				UNIT	QTY.
			Length	Width	Depth/Ht.		
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and then disposing of all surplus excavated earth as directed with in a lead of 20 metres:						
	i. Foundation ii Apron	1 1	4.21 2.63	1.60 1.75	0.75 0.30	Cum Cum <b>Total</b>	5.05 1.38 <b>6.43</b>
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.	2	<u>0.50+0.75</u> 2	1.60	2.25	Cum	4.50
3	Dry hand packed boulder stone filling in:						
	i. Foundation ii Apron	1 1	4.21 2.63	1.60 1.75	0.75 0.30+0.40 2	Cum Cum	5.05 1.61 <b>6.66</b>
4	Construction of super structure of Check dam.						
	Ist Block 2nd Block 3rd Block	1	4.79 4.79 1.52	1.60 1.30 1.00	0.875 0.875 0.50	Cum Cum Cum Total	6.71 5.45 1.52 13.67
	i) Dry Random Rubble Stone masnory masnory @ 25%	0	0	0	0	Cum	3.42
	ii) Dry hand packed boulder stone filling @ 75%	0	0	0	0	Cum	10.26

Ht. 1.75 mtrs. Length 3.50mtrs.

S.NO.	P	PARTICULARS	NOS.	М	EASURE	MENT	UNIT	QTY.
				Length	Width	Depth/Ht.		
5	_	vire netting for wire crate						
	with G.I. wire	4mm/5mm or SWG No.						
	6/8 in 15cmx1	5cm mesh.						
	i) Foundation	- Bottom	1	4.21	1.60	0.00	Sqm	6.74
	Sides	s(i/c 15 c.m. top)	2	4.21	0.00	0.75	Sqm	6.32
	Ends		2	0.00	1.60	0.75	Sqm	2.40
	ii) Apron	Top/Bottom	2	2.63	1.75	0.00	Sqm	9.21
		d/s Side	1	2.63	0.00	0.40	Sqm	1.05
		Ends	2	0.00	1.75	0.30+0.40	Sqm	1.23
						2		
	iii) Super Struc	cture						
	(Ist Block)	Тор	1	4.79	1.60	0.00	Sqm	7.66
	(Ist Block)	Bottom	2	4.79-4.21	1.60	0.00	Sqm	0.92
		Sides	2	4.79	0.00	0.875	Sqm	8.38
		Ends	2	0.00	1.60	0.875	Sqm	2.80
	Super Structure	-						
	(2nd Block)	Top/Bottom	1	4.79	1.30	0.00	Sqm	6.23
		Sides	2	4.79	0.00	0.875	Sqm	8.38
		Ends	2	0.00	1.30	0.875	Sqm	2.28
	Super Structure	-						
	(3rd Block)	Top/Bottom	2	1.52	1.00	0.00	Sqm	3.04
		Sides	2x2	1.52	0.00	0.50	Sqm	3.04
		Ends	4	0.00	1.00	0.50	Sqm	2.00
							Total	71.67
6	Spreading of v	vire crate over pitching,						
	stone masona	ry, boulder filling etc.	Qty. S	ame as i	tem No.	5	Sqm	71.67
_	Tipping of wire	orataa ila aquinmant	Qty. same as Sum of items 3-4				Cum	20.24
'	Tripping or wire	e crates i/c equipment.	Qty. sa	me as Su	im or item	IS 3-4	Cum	20.34

#### **Wire Crate Check Dam**

Ht. 1.75 mtrs. Length 3.50mtrs.

S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
1	Excavation in foundation, trenches				
	etc., in earth work, lift upto 1.50 metres and disposal surplus excavated earth				
	upto a lead of 20 metres.				
	Total Qty.	6.43	Cum		
	Pick Work @ 50%	3.21	Cum	53.50	171.74
_	Jumper Work @ 50%	3.22	Cum	98.00	315.56
2	Cutting in earth work and disposal of excavated earth upto a lead of				
	20 metres in anchorage.	4.50	Cum	30.65	137.93
	20 metres in anchorage.	4.50	Odili	30.03	107.90
3	Dry hand packed boulder stone				
	filling in Foundation & Apron.	6.66	Cum	49.05	326.67
4	i) Dry random rubble stone masonry		_		
	in super structure i/c rough dressing.	3.42	Cum	87.25	298.40
	ii) Dry hand packed boulder stone				
	ii) Dry hand packed boulder stone filling in super structure.	10.26	Cum	49.05	503.25
	ining in super structure.	10.20	Odili	49.00	303.23
5	Weaving of wire netting for wire crate				
	with G.I. wire 4mm/5mm or SWG No.6/8	71.65	Sqm	9.05	648.43
	in 15cmx15cm mesh.				
6	Spreading of wire crate over pitching	74.05	0	40.05	704.57
	stone masonary, boulder filling etc.	71.65	Sqm	10.95	784.57
7	Tipping of wire crates i/c equipment.	20.34	Cum	21.85	444.43
, <i>'</i>	Tripping of who diated he equipment.	20.01	Odili	21.00	111.10
8	Breaking of boulder stones	3.42	Cum	85.00	290.70
9	Carriage of G.I. wire from store to				
	worksite O/D by M/L or Mules.	0.159	Tonne/Km.		
40	Coming of houlder stones from note/				
10	Carriage of boulder stones from nala/ road head along nala to workshite over		Cum/Km.		
	an average distance km. by M/L		Culli/Kill.		
	or Mules.				
		/ATF	RIAL C	OST	
1	Cost & carriage of G.I. wire upto store.	0.159	Tonne	<del></del>	
'	out a barriage of o.i. wife apto store.	0.100	101110		
2	Cost & carriage of boulder stones upto				
	road head.		Cum		
				Total	

Ht. 1.75 mtrs. Length 4.00 mtrs.

S.NO.	PARTICULARS	NOS.				UNIT	QTY.
			Length	Width	Depth/Ht.		
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50						
	metres and then disposing of all						
	surplus excavated earth as directed						
	with in a lead of 20 metres:						
	i. Foundation	1	4.73	1.60	0.75	Cum	5.68
	ii Apron	1	3.00	1.75	0.30	Cum	1.58
						Total	7.25
2	Cutting in earth work and disposal						
	of excavated earth upto a lead of	2	0.50+0.75	1.60	2.25	Cum	4.50
	20 metre in anchorage.		2				
3	Dry hand packed boulder stone						
	filling in:						
	S						
	i. Foundation	1	4.73	1.60	0.75	Cum	5.68
	ii Apron	1	3.00	1.75	0.30+0.40	Cum	1.84
					2	Total	7.52
						Total	1.52
4	Construction of super structure of Check dam.						
	lst Block	1	5.30	1.60	0.875	Cum	7.42
	2nd Block	1	5.30	1.30	0.875	Cum	6.03
	3rd Block	2	1.65	1.00	0.50	Cum	1.65
						Total	15.10
	i) Dry Random Rubble Stone masnory masnory @ 25%	0	0	0	0	Cum	3.78
	ii) Dry hand packed boulder stone	0	0	0	0	Cum	11.32
	filling @ 75%						

Ht. 1.75 mtrs. Length 4.00 mtrs.

S.NO.	PARTICULARS	NOS.				UNIT	QTY.
			Length	Width	Depth/Ht.		
5	Weaving of wire netting for wire crate	:					
	with G.I. wire 4mm/5mm or SWG No.						
	6/8 in 15cmx15cm mesh.						
	i) Foundation Bottom	1	4.73	1.60	0.00	Sqm	7.57
	Sides(i/c 15 c.m. top)	2	4.73	0.00	0.75	Sqm	7.10
	Ends	2	0.00	1.60	0.75	Sqm	2.40
	ii) Apron Top/Bottom	2	3.00	1.75	0.00	Sqm	10.50
	d/s Side	1	3.00	0.00	0.40	Sqm	1.20
	Ends	2	0.00	1.75	0.30+0.40	Sqm	1.23
					2		
	iii) Super Structure						
	(Ist Block) Top	1	5.30	1.60	0.00	Sqm	8.48
	Bottom	2	5.30-4.73	1.60	0.00	Sqm	0.91
	Sides	2	5.30	0.00	0.875	Sqm	9.28
	Ends	2	0.00	1.60	0.875	Sqm	2.80
	Super Structure-						
	(2nd Block) Top/Bottom	1	5.30	1.30	0.00	Sqm	6.89
	Sides	2	5.30	0.00	0.875	Sqm	9.28
	Ends	2	0.00	1.30	0.875	Sqm	2.28
	Super Structure-						
	(3rd Block) Top/Bottom	2	1.65	1.00	0.00	Sqm	3.30
	Sides	2x2	1.65	0.00	0.50	Sqm	3.30
	Ends	4	0.00	1.00	0.50	Sqm	2.00
						Total	78.50
6	Spreading of wire crate over pitching, stone masonary, boulder filling etc.	Oty S	l ame as i	tem No	5	Sqm	78.50
	Stone masonary, boulder miling cite.	Qty. 0	arric as i	tem No.	J	Oqiii	70.50
7	Tipping of wire crates i/c equipment.	Qty. sa	Qty. same as Sum of items 3-4				22.61

#### **Wire Crate Check Dam**

Ht. 1.75 mtrs. Length 4.00 mtrs.

S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and disposal surplus excavated earth				
	upto a lead of 20 metres.				
	Total Qty. Pick Work @ 50%	7.25 3.62	Cum Cum	53.50	193.67
	Jumper Work @ 50%	3.62	Cum	98.00	355.74
2	Cutting in earth work and disposal of excavated earth upto a lead of	0.00	ou	00.00	330.7
	20 metres in anchorage.	4.50	Cum	30.65	137.93
3	Dry hand packed boulder stone				
	filling in Foundation & Apron.	7.51	Cum	49.05	368.37
4	i) Dry random rubble stone masonry	0.70		07.05	000.04
	in super structure i/c rough dressing.	3.78	Cum	87.25	329.81
	ii) Dry hand packed boulder stone filling in super structure.	11.32	Cum	49.05	555.25
	illing in super structure.	11.32	Cuiii	49.03	555.25
5	Weaving of wire netting for wire crate with G.I. wire 4mm/5mm or SWG No.6/8	78.50	Sqm	9.05	710.43
	in 15cmx15cm mesh.	76.50	Sqiii	9.05	710.43
6	Spreading of wire crate over pitching				
	stone masonary, boulder filling etc.	78.50	Sqm	10.95	859.58
7	Tipping of wire crates i/c equipment.	22.61	Cum	21.85	494.03
8	Breaking of boulder stones	3.78	Cum	85.00	321.30
9	Carriage of G.I. wire from store to				
	worksite O/D by M/L or Mules.	0.175	Tonne/Km.		
10	Carriage of boulder stones from nala/ road head along nala to workshite over		Cum/Km.		
	an average distance km. by M/L or Mules.				
		ΛΔΤΕ	RIAL C	OST	
1	Cost & carriage of G.I. wire upto store.	0.175	Tonne		
_					
2	Cost & carriage of boulder stones upto road head.		Cum		
	2.00		3	Total	

Ht. 1.75 mtrs. Length 4.50 mtrs.

S.NO.	PARTICULARS	NOS.	М	EASURE	MENT	UNIT	QTY.
			Length	Width	Depth/Ht.		
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and then disposing of all surplus excavated earth as directed with in a lead of 20 metres:						
	i. Foundation ii Apron	1 1	5.25 3.38	1.60 1.75	0.75 0.30	Cum Cum <b>Total</b>	6.30 1.77 <b>8.07</b>
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.	2	<u>0.50+0.75</u> 2	1.60	2.25	Cum	4.50
3	Dry hand packed boulder stone filling in:						
	i. Foundation ii Apron	1 1	5.25 3.38	1.60 1.75	0.75 0.30+0.40 2	Cum Cum	6.30 2.07
4	Construction of super structure of Check dam.						
	Ist Block 2nd Block 3rd Block	1	5.83 5.83 1.79	1.60 1.30 1.00	0.875 0.875 0.50	Cum Cum Cum	8.16 6.63 1.79 <b>16.58</b>
	i) Dry Random Rubble Stone masnory masnory @ 25%	0	0	0	0	Cum	4.15
	ii) Dry hand packed boulder stone filling @ 75%	0	0	0	0	Cum	12.43

Ht. 1.75 mtrs. Length 4.50 mtrs.

S.NO.	F	PARTICULARS	NOS.	М	EASURE	MENT	UNIT	QTY.
				Length	Width	Depth/Ht.		
5		wire netting for wire crate						
		e 4mm/5mm or SWG No.						
	6/8 in 15cmx1	5cm mesh.						
	i) Foundation-	- Bottom	1	5.25	1.60	0.00	Sqm	8.40
	l '	s(i/c 15 c.m. top)	2	5.25	0.00	0.75	Sqm	7.88
		Ends		0.00	1.60	0.75	Sqm	3.60
	ii) Apron	Top/Bottom	3 2	3.38	1.75	0.00	Sqm	11.83
	′ ′	d/s Side	1	3.38	0.00	0.40	Sqm	1.35
		Ends	2	0.00	1.75	0.30+0.40	Sqm	1.23
	35					2		
	iii) Super Stru	cture						
	(Ist Block)	Тор	1	5.83-5.25	1.60	0.00	Sqm	0.92
	Bottom		1	5.83	1.60	0.00	Sqm	9.33
		Sides	2	5.83	0.00	0.875	Sqm	10.20
		Ends	3	0.00	1.60	0.875	Sqm	4.20
	Super Structure							
	(2nd Block)	Top/Bottom	1	5.83	1.30	0.00	Sqm	7.58
		Sides	2	5.83	0.00	0.875	Sqm	10.20
		Ends	3	0.00	1.30	0.875	Sqm	3.41
	Super Structure	<b>)-</b>						
	(3rd Block)	Top/Bottom	2	1.79	1.00	0.00	Sqm	3.58
		Sides	2x2	1.79	0.00	0.50	Sqm	3.58
		Ends	4	0.00	1.00	0.50	Sqm	2.00
							Total	89.29
6	Sprooding of	vira arata avar nitahing						
6		wire crate over pitching, ary, boulder filling etc.	Otv. 8	ame as i	tom No	5	Sqm	89.29
	1310116 111430114	iry, boulder miling etc.	July. 3	anie as i	leiii NO.	5	Sqm	09.29
7	Tipping of wire	o aratao i/a aguinmant	041.00	C.	Cum	24.05		
′	Tripping or wife	e crates i/c equipment.	July. Sa	me as Su	iii oi item	5 3-4	Cum	24.95

#### **Wire Crate Check Dam**

Ht. 1.75 mtrs. Length 4.50 mtrs.

S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
1	Excavation in foundation, trenches				
	etc., in earth work, lift upto 1.50 metres				
	and disposal surplus excavated earth				
	upto a lead of 20 metres.	0.07	0		
	Total Qty.	8.07	Cum	50.50	045.04
	Pick Work @ 50% Jumper Work @ 50%	4.03 4.04	Cum Cum	53.50 98.00	215.61 395.92
2	Cutting in earth work and disposal	4.04	Culli	96.00	393.92
	of excavated earth upto a lead of				
	20 metres in anchorage.	4.50	Cum	30.65	137.93
	20 menes in anomorage.	1.00	ou	00.00	107.00
3	Dry hand packed boulder stone				
	filling in Foundation & Apron.	8.37	Cum	49.05	410.55
4	i) Dry random rubble stone masonry				
	in super structure i/c rough dressing.	4.15	Cum	87.25	362.09
	ii) Dry hand packed boulder stone				
	filling in super structure.	12.43	Cum	49.05	609.69
5	Weaving of wire netting for wire crate				
	with G.I. wire 4mm/5mm or SWG No.6/8	89.28	Sqm	9.05	807.98
	in 15cmx15cm mesh.				
6	Spreading of wire crote, ever pitching				
0	Spreading of wire crate over pitching stone masonary, boulder filling etc.	89.28	Sqm	10.95	977.62
	Storie masoriary, bodider miling etc.	09.20	Sqiii	10.93	911.02
7	Tipping of wire crates i/c equipment.	24.95	Cum	21.85	545.16
'	Tripping of time drates we equipment.	2 1.00	Gain	21.00	0.10.10
8	Breaking of boulder stones	4.15	Cum	85.00	352.75
	, and the second				
9	Carriage of G.I. wire from store to				
	worksite O/D by M/L or Mules.	0.199	Tonne/Km.		
10	Carriage of boulder stones from nala/				
	road head along nala to workshite over		Cum/Km.		
	an average distance km. by M/L				
	or Mules.				
	ABSTRACT OF N	<b>IATE</b>	RIAL C	OST	
1	Cost & carriage of G.I. wire upto store.	0.199	Tonne		
2	Cost & carriage of boulder stones upto		_		
	road head.		Cum	<del>-</del> · ·	
				Total	

Ht. 1.75 mtrs. Length 5.00 mtrs.

S.NO.	PARTICULARS	NOS.				UNIT	QTY.
			Length	Width	Depth/Ht.		
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and then disposing of all surplus excavated earth as directed with in a lead of 20 metres:						
	i. Foundation ii Apron	1 1	5.77 3.75	1.60 1.75	0.75 0.30	Cum Cum <b>Total</b>	6.92 1.97 <b>8.89</b>
2	Cutting in earth work and disposal of excavated earth upto a lead of 20 metre in anchorage.	2	<u>0.50+0.75</u> 2	1.60	2.25	Cum	4.50
3	Dry hand packed boulder stone filling in:						
	i. Foundation ii Apron	1 1	5.77 3.75	1.60 1.75	0.75 0.30+0.40 2	Cum Cum	6.92 2.30
						Total	9.22
4	Construction of super structure of Check dam.						
	Ist Block 2nd Block 3rd Block	1	6.34 6.34 1.92	1.60 1.30 1.00	0.875 0.875 0.50	Cum Cum Cum	8.88 7.21 1.92 <b>18.01</b>
	i) Dry Random Rubble Stone masnory masnory @ 25%	0	0	0	0	Cum	4.50
	ii) Dry hand packed boulder stone filling @ 75%	0	0	0	0	Cum	13.51

Ht. 1.75 mtrs. Length 5.00 mtrs.

S.NO.	PAR	TICULARS	NOS.				UNIT	QTY.
				Length	Width	Depth/Ht.		
5	Weaving of wire	netting for wire crate						
	with G.I. wire 4n	nm/5mm or SWG No.						
	6/8 in 15cmx15cr	n mesh.						
	i) Foundation Bo	ottom	1	5.77	1.60	0.00	Sqm	9.23
	Sides(i/d	: 15 c.m. top)	2	5.77	0.00	0.75	Sqm	8.66
	Ends		3	0.00	1.60	0.75	Sqm	3.60
	ii) Apron	Top/Bottom	2	3.75	1.75	0.00	Sqm	13.13
		d/s Side	1	3.75	0.00	0.40	Sqm	1.50
		Ends	2	0.00	1.75	0.30+0.40	Sqm	1.23
						2		
	iii) Super Structur	e						
	(Ist Block) To	р	1	6.34	1.60	0.00	Sqm	10.14
	Bottom		1	6.34-5.77	1.60	0.00	Sqm	0.91
	Sic	les	2	6.34	0.00	0.875	Sqm	11.10
	En	ds	3	0.00	1.60	0.875	Sqm	4.20
	Super Structure-							
	(2nd Block)	Top/Bottom	1	6.34	1.30	0.00	Sqm	8.24
	,	Sides	2	6.34	0.00	0.875	Sqm	11.10
		Ends	3	0.00	1.30	0.875	Sqm	3.41
	Super Structure-							
	(3rd Block)	Top/Bottom	2	1.92	1.00	0.00	Sqm	3.84
		Sides	2x2	1.92	0.00	0.50	Sqm	3.84
		Ends	4	0.00	1.00	0.50	Sqm	2.00
							Total	96.12
6	Spreading of wire	crate over pitching,						
	stone masonary,	boulder filling etc.	Qty. S	ame as i	tem No.	5	Sqm	96.12
7	Tipping of wire cr	ates i/c equipment.	Qty. same as Sum of items 3-4				Cum	27.23
<u> </u>								

#### **Wire Crate Check Dam**

Ht. 1.75 mtrs. Length 5.00 mtrs.

S.NO.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
1	Excavation in foundation, trenches etc., in earth work, lift upto 1.50 metres and disposal surplus excavated earth upto a lead of 20 metres.				
	Total Qty.	8.89	Cum		
	Pick Work @ 50%	4.44	Cum	53.50	237.54
2	Jumper Work @ 50% Cutting in earth work and disposal of excavated earth upto a lead of	4.45	Cum	98.00	436.10
	20 metres in anchorage.	4.50	Cum	30.65	137.93
3	Dry hand packed boulder stone filling in Foundation & Apron.	9.22	Cum	49.05	452.24
4	i) Dry random rubble stone masonry in super structure i/c rough dressing.	4.50	Cum	87.25	392.63
	ii) Dry hand packed boulder stone filling in super structure.	13.51	Cum	49.05	662.67
5	Weaving of wire netting for wire crate with G.I. wire 4mm/5mm or SWG No.6/8 in 15cmx15cm mesh.	96.13	Sqm	9.05	869.98
6	Spreading of wire crate over pitching stone masonary, boulder filling etc.	96.13	Sqm	10.95	1052.62
7	Tipping of wire crates i/c equipment.	27.23	Cum	21.85	594.98
8	Breaking of boulder stones	4.50	Cum	85.00	382.50
9	Carriage of G.I. wire from store to worksite O/D by M/L or Mules.	0.214	Tonne/Km.		
10	Carriage of boulder stones from nala/ road head along nala to workshite over an average distance km. by M/L or Mules.		Cum/Km.		
	ABSTRACT OF N	<b>IATE</b>	RIAL C	OST	
1	Cost & carriage of G.I. wire upto store.	0.214	Tonne		
2	Cost & carriage of boulder stones upto				
_	road head.		Cum		
				Total	