**Detailed Calculation 0f Package No. BWDB/Kish/HFMLIP/PW-02.**

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| **S.L**  **No & Code No** | **Description of Items** | **Measurement** | **Quantity** |
|  | **Re-excavation of Khal** |  |  |
| 59/  16-100 | Erection of bamboo profile with full bamboo posts and pegs not less than 60mm in diameter and coir strings etc. complete as per direction of Engineer in charge. | 1. Diakul khal = 2980.00 m 2. Manick hali khal = 4475.00 m 3. Bamon khal = 2225.00 m 4. Gorader Khal = 2380.00 m 5. Bata khal =2790.00 m   Total length =14850.00m  Nos of peg=14850.00÷50.00+5 = **302.00 nos** | **302.002 nos** |
| 60/  16-220 | Earth work by manual labour with clayey soil (minimum 30% clay, 0-40% silt and 0-30% sand) in construction of cross bundh/ ring bundh as per design and specification with all leads and lifts, throwing the earth in layers not exceeding 150mm in thickness, including breaking clods, rough dressing, clearing the jungle, removing stumps, dug bailing and 75mm cambering etc. complete as per direction of Engineer in charge. | 1. Diakul khal cross bundh = 16 nos   Cross bund volume  = 16 x(8.00+11.75)/2x(1.500+6.500)/2x1.25  **=790.00 cum.**   1. Manickhali khal cross bundh = 23 nos   Cross bund volume  = 23 x(8.00+10.970)/2x(1.500+5.460)/2x0.990  =23x9.485x3.480x0.990 **=751.588 cum**   1. Bamon khal cross bundh = 12 nos   Cross bund volume  = 12 x(6.00+8.700)/2x(1.500+5.100)/2x0.900  =12x7.350x3.300x0.900 **=261.954 cum**   1. Gorader Khal cross bundh   =2380÷ 200+1 =13 nos  Cross bund volume  = 13 x(6.00+8.700)/2x(1.500+5.10)/2x0.900  =13x7.350x3.300x0.900 **=283.78 cum**   1. Bata khal cross bundh = 15 nos   Cross bund volume  = 15 x(6.00+8.700)/2x(1.500+5.100)/2x0.900  =15x7.350x3.300x0.900 **=327.442 cum**  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  **Total= 2414.764 cum.** | **2414.764 cum.** |
| 61/  12-310-20 | Bailing out of water with all leads and lifts by manual labour or pump, with all arrangements for protection of ring bund and side slopes of foundation pit against erosion or washout etc. complete actual volume of work will be measured by sounding method before starting the work) as per direction of Engineer in charge. | **Bailing out of water**   1. Diakul khal =2980.00x(8.00+11.00)/2x0.900x3 times   **=76437.00 cum.**   1. Manickhali khal = 4475.00x(8.00+11.00)/2x0.900x3 times   **=114783.750 cum.**   1. Bamon khal =2225.00x(6.00+8.400)/2x0.900x3 times   **= 43254.00 cum**.   1. Gorader khal =2380.00x(5.00+7.700)/2x0.900x3 times   **= 40805.100 cum.**   1. Bata Khal= 2790.00x(6.00+10.00)/2x1.000x3 times   **=66960.00 cum.**  **Total =3,42,239.850 cum.** | **3,42,239.850 cum.** |
| 62/  16-600-100 | Earth work by Mechanical Excavator (Long Boon) in constructing/ resectioning of embankment/canal bank/ road etc. compacted to 85%/90% maximum dry density at optimum moisture content, with reference to laboratory density test AAHSTO modified hammer, with clayey soil(minm 30% clay, 0-40% silt, 0-30% sand) within the initial lead of 30m and all lifts including throwing the spoils to profiles in layers not exceeding 230mm in thickness with clod breaking to a maximum size of 100mm, benching the side slopes, removing roots and stumps of trees of girth upto 200mm from the ground, stripping/ploughing the base of embankment and borrow pit area, dug bailing, rough dressing including 150mm cambering at the centre of crest etc. complete, including maintenance of the same for 6 months after completion, (compaction will be done by the contractor with approved equipment, including all ancillary charges for compaction and  testing) as per direction of Engineer in charge.16-600-10 Beyond 200m | **Earth Wark**   1. Diakul khal = km 1.710 to km 3.710 = 2000.00m   = 2000.00 x (5.00+9.00 av)/2 x 0.400 (av)  **= 5600.00 cum**   1. B) Manick khali khal   = km 0.180 to km 2.335 = 2155 m  Volume of earth =2155.00 x (8.00+13.50)/2x 1.35  **= 31274.437 cum**  Km 2.335 to km 2.320 = 2135.00 m  Volume of earth =2135.00 x (5.00+13)/2x 1.00  **= 20880.00 cum**   1. Bamon khal= km 1.780 to km 2.225 = 245.00m   Volume of earth =245.00 x (5.00+8.00)/2x 1.50  **= 62458.250 cum**   1. Gorader Khal = 200.00m   Volume of earth =200.00 x (5.00+9.00)/2x 0.80  **= 1040.00 cum**   1. Bata khal = km0.200 to km 0.600 =400.00m   Volume of earth =400.00 x (6.00+10.00)/2x 1.20  **= 3840.00 cum**  **Total = 65023.187**  Total Earth =52211.07 cum  Total=211770.448 cum.  75% earth cutting by excavator =211770.488x75%=158827.836 cum |  |
| 63/  16-130 | Earth work by manual labour in all kinds of soil in excavation or  Re excavation of channels with the initial lead of 30m and lift of 1.5m  including levelling, dressing and throwing the spoils to profile with  breaking clods, rough dressing, clearing jungles including cutting trees up to 00mm girth, dug bailing etc. complete as per direction of Engineer in charge. | Same as Item No- 62 = 65023.187 cum x 25%  = 16255.796 cum | 16255.796 cum |
| 65/  16-190 | Extra rate for every additional lead of 15m or part thereof beyond the initial lead of 30m upto a maximum of 19 leads (3m neglected) for all kinds ofearth work. | Same as item no-62 Total quantity=65023.187 cum | 65023.187 cum |
| 66/  NSI | Video documents for every sequence of work for all item of packages | 1 no LS tk.=1,00,000.00 | 1,00,000.00 |

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