General Estimation & Abstract Sheet of Royal City

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Abstract – The estimating and costing means technique of the calculating the various quantities of executed work and then determining their cost known as costing. The costing is mainly done by abstract sheet which is seen as follows. Also it is use to determine the cost and labors for the work and in this rates of DSR is use the rates given in the DSR are revised every year, also the rates given in DSR includes 10% contractor’s profit.

(Key words: estimating, costing, cost, abstract sheet, labors, 10% contractor’s profit)

1. INTRODUCTION

This project is under guidance of prof. shaikh A. S of General estimation of the city which has name as royal city, in which includes hospital (G+1), hostel (G), school (G+2), collage (G+2), 3bhk row houses, 3bhk apartments, 1bhk apartments and mall. And also abstract sheet is done after calculating the quantities of each building.

2. APPROXIMATE ESTIMATE

Approximate estimate means the preliminary estimate, because it is also use full for getting administrative approval also for it site plans and layout plans are required.

Purposes of approximate estimate

1. It gives rough idea about the cost which is required for the project or work which will be executed.
2. Easy to check feasibility of project.
3. It is also helpful to administrative approval and technical sanction.

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4. sample calculations

Measurement sheet

<table>
<thead>
<tr>
<th>SR.NO</th>
<th>DESCRIPTION</th>
<th>NOS</th>
<th>LENGTH</th>
<th>BREADH</th>
<th>HEIGTH</th>
<th>QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>EXCAVATION</td>
<td>17</td>
<td>1.2</td>
<td>1.2</td>
<td>1.5</td>
<td>17.13</td>
</tr>
<tr>
<td></td>
<td>Excavation in soft murum in foundation with lead &amp; lift etc. complete.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>PCC</td>
<td>17</td>
<td>1.2</td>
<td>1.2</td>
<td>0.2</td>
<td>4.89</td>
</tr>
<tr>
<td></td>
<td>Pcc bed below the foundation in proportion with providing &amp; laying, compacting, curing etc. complete.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Abstract sheet

<table>
<thead>
<tr>
<th>S.NO</th>
<th>DESCRIPTION</th>
<th>SPECIFICATION</th>
<th>UNIT</th>
<th>QUANTITY</th>
<th>COMPLETED RATE PER UNIT</th>
<th>AMOUNT</th>
<th>LABOUR RATE PER UNIT</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>EXCAVATION-</td>
<td>Spec.no.Bd.A.2</td>
<td>Cubic meter</td>
<td>36.7</td>
<td>118</td>
<td>4332.96</td>
<td>118</td>
<td>4332.96</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Page no.259</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Excavation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>For Foundation In Earth ,soil of all types ,sand,gravel,and soft murum including removing the excavated material up to a distance of 50 m</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Beyond the building area and stacking and spreading as directed ,dewatering preparing the bed for the foundation and necessary back filling ramming, watering including shoring and strutting etc. complete .with lift up to 1.50 m</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a.hard murum</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>lift up to 1.50 m</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>PCC-</td>
<td>Spec.no.Bd.E.1</td>
<td>Cubic meter</td>
<td>4.89</td>
<td>3823</td>
<td>18694.47</td>
<td>380</td>
<td>1858.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Page no.287/IS-456-2000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Providing and laying in situ ,cement concrete M-15/1:2:4 of trap/granite/quartzite/gneiss metal for foundation and bedding including bailing-out water manually formwork, compacting covering newly laid concrete by gunny bag, plastic tarpaulin curing etc. complete</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
there are various of approximate estimating and costing like

1. plinth area method
2. cubical content method
3. service unit method
4. typical bay method
5. approximate quantity method

and also methods to calculating quantities are
1. PWD(Long wall Short wall)method
2. Centerline method

1. **PWD(Long wall Short wall)method**: in this method the longer wall in the building are consider as long wall. this wall are measured from out to out. the shorter wall are perpendicular to the long wall are measured from in to in of length long walls are considered as short wall

Length of long wall = center to center length of long wall + width of item

Length of long wall = center to center length of long wall - width of item

![Fig. No 1: Plan of royal city, Shrirampur](image)

**Centerline method:**
- Draw centerline plan
- Calculate total length of center line
- Calculate no of T junction
- Take no of junction for walls meeting for three directions = 1
- No of junction for walls meeting from 4 directions = 2
- Calculate length of item as

\[ L = \text{total c/c length} - \left( \frac{1}{2} \right) \times \text{no of junction} \times \text{width of item} \]
Hence total completed rate = 23027.43

Total labour rate = 6191.16

Total amount for this item = labour rate + completed rate

Total amount for this item = 29218.59

<table>
<thead>
<tr>
<th>Building name</th>
<th>Amount for built with contractor’s profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 compartment of 3BHK</td>
<td>5545345 /-</td>
</tr>
<tr>
<td>compartment of 1BHK</td>
<td>5045565 /-</td>
</tr>
<tr>
<td>Hospital</td>
<td>565765 /-</td>
</tr>
<tr>
<td>School</td>
<td>7245435 /-</td>
</tr>
<tr>
<td>Collage</td>
<td>177342 /-</td>
</tr>
<tr>
<td>1 row house</td>
<td>312053.7 /-</td>
</tr>
<tr>
<td>Hostel</td>
<td>1022343 /-</td>
</tr>
<tr>
<td>mall</td>
<td>55454342 /-</td>
</tr>
</tbody>
</table>

5. CONCLUSION

Due to this we can publish also tender notices and also an importance of this project is that it is helpful to fixation to tax, also for the valuation it is very important.

Due to this also we can know the cost of our construction to do financial arrangements and the arrangements of labors and materials for project.

6. ACKNOWLEDGEMENT

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REFERENCES
1. Estimating And Costing, Author: Kavita L. Bavdekar
2. BUILDING BY LOWS BY govt.of india
3. www. Estimating And Costing. Wikipedia the free encyclopedia.in
4. District schedule rate of Nasik division(by PWD)

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