OFFICE OF THE ENGINEER-IN-CHIEF,
WATER RESOURCES DEPARTMENT,
JAL SANSADAN BHAWAN, TULSINAGAR, BHOPAL (M.P.)

Bhopal, Dated 8 / 05/2014

To,

1. All Chief Engineers, Water Resources Department, M.P.
   2. Web Manager, Bhopal

Sub : Micro-Irrigation System.

Ref : This office letter No. 01/वनिस/प्र.अ. /2014 dated 11 January 2014

This office vide letter under reference had prescribed certain norms for Sprinkler System. After consultation with various Sprinkler Manufacturers, certain changes have been introduced in the previous circular, which is enclosed herewith.

A schematic diagram showing a general layout plan and laying of pipeline etc., is also enclosed for general guidance. Analysis for a single pump of 5 HP serving about 7 hectares land is also enclosed for general reference. This supersedes the previous analysis annexed with the letter under reference.

Encl. : As above.

(M.G. Choubey)
Engineer-in-Chief,
Water Resources Deptt., Bhopal
WATER RESOURCES DEPARTMENT

ANALYSIS OF RATES FOR SPRINKLER SYSTEM

COST OF MECHANICAL WORKS FOR EACH UNIT TO SERVE 7 HA
ONE PUMP'S COVERING AREA : APPROX 7.0 HECTARES

(Rate on 01.01.2014)

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Item</th>
<th>Quantity</th>
<th>Rate in Rs.</th>
<th>Unit</th>
<th>Amount in Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Pump (5 HP openwell Monoset)</td>
<td>01</td>
<td>17500</td>
<td>One</td>
<td>17500/-</td>
</tr>
<tr>
<td>2.</td>
<td>Starter</td>
<td>01</td>
<td>1600</td>
<td>One</td>
<td>1600/-</td>
</tr>
<tr>
<td>3.</td>
<td>NRV</td>
<td>01</td>
<td>3500</td>
<td>One</td>
<td>3500/-</td>
</tr>
<tr>
<td>4.</td>
<td>Fitting like cables etc. (L.S.)</td>
<td>01</td>
<td>1500</td>
<td>One</td>
<td>1500/-</td>
</tr>
<tr>
<td>5.</td>
<td>Pipe HDPE 90 mm Dia</td>
<td>250 m</td>
<td>180</td>
<td>Metre</td>
<td>45000/-</td>
</tr>
<tr>
<td>6.</td>
<td>Outlet, i/c Riser assembly etc.</td>
<td>04 No.</td>
<td>1500</td>
<td>Each</td>
<td>6000/-</td>
</tr>
<tr>
<td>7.</td>
<td>Maintenance, Installation cost and taxes</td>
<td></td>
<td></td>
<td></td>
<td>22500/-</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>97600/-</strong></td>
</tr>
</tbody>
</table>

Says Rs. 98000.00

- Cost per hectare 980000/7.0 = 14000/-
- As per Ruling Rate 14000/200 = 70 R
- Add for Civil works as per standard design of the department = 15 R
- Total Rs. = 85 R

Note: R is Ruling rate for labour (connected with Price Index).

(M.G. Choubey)
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Water Resources Deptt.,
Bhopal