

| CRONOGRAMA VALORADO DE TRABAJOS                                                                          |        |          |            |            |          |          |          |       |
|----------------------------------------------------------------------------------------------------------|--------|----------|------------|------------|----------|----------|----------|-------|
| OBRA: SISTEMA PLUVIAL PARA LA CABECERA PARROQUIAL DE ISLA DE BEJUCAL, CANTÓN BABA, PROVINCIA DE LOS RÍOS |        |          |            |            |          |          |          |       |
| UBICACION: Parroquia Isla de Bejucal                                                                     |        |          |            |            |          |          |          |       |
| DESCRIPCION                                                                                              | UNIDAD | CANTIDAD | P.UNITARIO | TOTAL      | Mes 1    | Mes 2    | Mes 3    | Mes 4 |
| REPLANTEO Y NIVELACIÓN DE EJE LONGITUDINAL                                                               | km     | 8.30     | \$462.53   | \$3,839.00 | 3,839.00 |          |          |       |
|                                                                                                          |        |          |            |            | 100.00%  |          |          |       |
| ROTURA DE PAVIMENTO                                                                                      | m2     | 1,972.00 | \$3.67     | \$7,237.24 | 3,618.62 | 3,618.62 |          |       |
|                                                                                                          |        |          |            |            | 50.00%   | 50.00%   |          |       |
| EXCAVACION DE ZANJAS A MAQUINA EN TIERRA H=0.00-2.00M                                                    | m3     | 1,084.79 | \$2.59     | \$2,809.61 | 842.88   | 1,966.72 |          |       |
|                                                                                                          |        |          |            |            | 30.00%   | 70.00%   |          |       |
| EXCAVACION MANUAL EN TIERRA H= 0-2.00M                                                                   | m3     | 990.44   | \$7.87     | \$7,794.76 |          | 3,897.38 | 3,897.38 |       |
|                                                                                                          |        |          |            |            |          | 50.00%   | 50.00%   |       |
| RASANTEO DE ZANJA A MANO                                                                                 | m2     | 9,964.93 | \$0.94     | \$9,367.03 | 4,683.52 | 4,683.52 |          |       |
|                                                                                                          |        |          |            |            | 50.00%   | 50.00%   |          |       |

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| <p align="center"><b>CRONOGRAMA VALORADO DE TRABAJOS</b></p> <p align="center"><b>OBRA: SISTEMA PLUVIAL PARA LA CABECERA PARROQUIAL DE ISLA DE BEJUCAL, CANTÓN BABA, PROVINCIA DE LOS RÍOS</b></p> <p align="center"><b>UBICACION: Parroquia Isla de Bejucal</b></p> |  |
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| DESCRIPCION                                                                         | UNIDAD | CANTIDAD | P.UNITARIO | TOTAL        | Mes 1      | Mes 2      | Mes 3      | Mes 4      |  |  |
|-------------------------------------------------------------------------------------|--------|----------|------------|--------------|------------|------------|------------|------------|--|--|
| RELLENO<br>COMPACTADO<br>(MAT.<br>EXCAVACION)                                       | m3     | 306.44   | \$5.44     | \$1,667.03   |            | 833.52     | 833.52     |            |  |  |
|                                                                                     |        |          |            |              |            |            |            |            |  |  |
|                                                                                     |        |          |            |              |            | 50.00%     | 50.00%     |            |  |  |
| HORMIGON<br>SIMPLE<br>f'c=210kg/cm2                                                 | m3     | 2,799.81 | \$191.24   | \$535,435.66 | 107,087.13 | 160,630.70 | 160,630.70 | 107,087.13 |  |  |
|                                                                                     |        |          |            |              |            |            |            |            |  |  |
|                                                                                     |        |          |            |              | 20.00%     | 30.00%     | 30.00%     | 20.00%     |  |  |
| CAJA DE REVISION<br>60*60*60 CM                                                     | u      | 81.00    | \$146.77   | \$11,888.37  |            |            | 5,944.19   | 5,944.19   |  |  |
|                                                                                     |        |          |            |              |            |            |            |            |  |  |
|                                                                                     |        |          |            |              |            |            | 50.00%     | 50.00%     |  |  |
| REJILLA DE HIERRO<br>FUNDIDO para<br>DRENAJE b=60cm                                 | m      | 346.00   | \$162.92   | \$56,370.32  |            | 28,185.16  | 28,185.16  |            |  |  |
|                                                                                     |        |          |            |              |            |            |            |            |  |  |
|                                                                                     |        |          |            |              |            | 50.00%     | 50.00%     |            |  |  |
| TUBERIA<br>ESTRUCTURADA<br>PVC<br>ALCANTARILLADO<br>D.N.I. 300mm<br>(MAT.TRAN.INST) | m      | 260.00   | \$37.84    | \$9,838.40   |            |            |            | 9,838.40   |  |  |
|                                                                                     |        |          |            |              |            |            |            |            |  |  |
|                                                                                     |        |          |            |              |            |            |            | 100.00%    |  |  |

| CRONOGRAMA VALORADO DE TRABAJOS                                                                          |        |           |            |              |           |           |           |           |
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| OBRA: SISTEMA PLUVIAL PARA LA CABECERA PARROQUIAL DE ISLA DE BEJUCAL, CANTÓN BABA, PROVINCIA DE LOS RÍOS |        |           |            |              |           |           |           |           |
| UBICACION: Parroquia Isla de Bejuca                                                                      |        |           |            |              |           |           |           |           |
| DESCRIPCION                                                                                              | UNIDAD | CANTIDAD  | P.UNITARIO | TOTAL        | Mes 1     | Mes 2     | Mes 3     | Mes 4     |
| ENCOFRADO Y<br>DESENCOFRADO<br>METALICO PARA<br>CUNETAS                                                  | m2     | 16,562.00 | \$5.58     | \$92,415.96  | 18,483.19 | 27,724.79 | 27,724.79 | 18,483.19 |
|                                                                                                          |        |           |            |              |           |           |           |           |
|                                                                                                          |        |           |            |              | 20.00%    | 30.00%    | 30.00%    | 20.00%    |
| MALLA<br>ELECTROSOLDADA<br>6.10                                                                          | m2     | 19,990.70 | \$6.96     | \$139,135.27 | 27,827.05 | 41,740.58 | 41,740.58 | 27,827.05 |
|                                                                                                          |        |           |            |              |           |           |           |           |
|                                                                                                          |        |           |            |              | 20.00%    | 30.00%    | 30.00%    | 20.00%    |
| DESALOJO DE<br>MATERIAL DE<br>EXCAVACIÓN                                                                 | m3-km  | 3,348.00  | \$0.25     | \$837.00     |           | 418.50    | 334.80    | 83.70     |
|                                                                                                          |        |           |            |              |           |           |           |           |
|                                                                                                          |        |           |            |              |           | 50.00%    | 40.00%    | 10.00%    |
| DESCARGA<br>PLUVIAL                                                                                      | u      | 43.00     | \$451.36   | \$19,408.48  | 2,911.27  | 6,792.97  | 6,792.97  | 2,911.27  |
|                                                                                                          |        |           |            |              |           |           |           |           |
|                                                                                                          |        |           |            |              | 15.00%    | 35.00%    | 35.00%    | 15.00%    |
| TUBERIA<br>ESTRUCTURADA<br>PVC<br>ALCANTARILLADO<br>D.N.I. 250mm<br>(MAT/TRANS/INST<br>)                 | m      | 14.00     | \$26.09    | \$365.26     | 54.79     | 127.84    | 127.84    | 54.79     |
|                                                                                                          |        |           |            |              |           |           |           |           |
|                                                                                                          |        |           |            |              | 15.00%    | 35.00%    | 35.00%    | 15.00%    |

| CRONOGRAMA VALORADO DE TRABAJOS                                                                          |        |          |            |             |          |          |          |          |
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| OBRA: SISTEMA PLUVIAL PARA LA CABECERA PARROQUIAL DE ISLA DE BEJUCAL, CANTÓN BABA, PROVINCIA DE LOS RÍOS |        |          |            |             |          |          |          |          |
| UBICACION: Parroquia Isla de BejucaI                                                                     |        |          |            |             |          |          |          |          |
| DESCRIPCION                                                                                              | UNIDAD | CANTIDAD | P.UNITARIO | TOTAL       | Mes 1    | Mes 2    | Mes 3    | Mes 4    |
| TOBERIA<br>ESTRUCTURADA<br>PVC<br>ALCANTARILLADO<br>D.N.I. 300mm<br>(MAT.TRAN.INST)                      | m      | 76.76    | \$37.84    | \$2,904.60  | 435.69   | 1,016.61 | 1,016.61 | 435.69   |
|                                                                                                          |        |          |            |             |          |          |          |          |
|                                                                                                          |        |          |            |             | 15.00%   | 35.00%   | 35.00%   | 15.00%   |
| TOBERIA<br>ESTRUCTURADA<br>PVC<br>ALCANTARILLADO<br>D.N.I. 400MM<br>(MAT.TRAN.INST)                      | m      | 37.44    | \$63.75    | \$2,386.80  | 358.02   | 835.38   | 835.38   | 358.02   |
|                                                                                                          |        |          |            |             |          |          |          |          |
|                                                                                                          |        |          |            |             | 15.00%   | 35.00%   | 35.00%   | 15.00%   |
| TOBERIA<br>ESTRUCTURADA<br>PVC<br>ALCANTARILLADO<br>D.N.I. 450MM<br>(MAT.TRAN.INST)                      | m      | 118.60   | \$101.06   | \$11,985.72 | 1,797.86 | 4,195.00 | 4,195.00 | 1,797.86 |
|                                                                                                          |        |          |            |             |          |          |          |          |
|                                                                                                          |        |          |            |             | 15.00%   | 35.00%   | 35.00%   | 15.00%   |
| TOBERIA<br>ESTRUCTURADA<br>PVC<br>ALCANTARILLADO<br>D.N.I. 500MM<br>(MAT.TRAN.INST)                      | m      | 65.50    | \$101.53   | \$6,650.22  | 997.53   | 2,327.58 | 2,327.58 | 997.53   |
|                                                                                                          |        |          |            |             |          |          |          |          |
|                                                                                                          |        |          |            |             | 15.00%   | 35.00%   | 35.00%   | 15.00%   |

| CRONOGRAMA VALORADO DE TRABAJOS                                                                          |        |          |            |             |          |          |          |          |
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| OBRA: SISTEMA PLUVIAL PARA LA CABECERA PARROQUIAL DE ISLA DE BEJUCAL, CANTÓN BABA, PROVINCIA DE LOS RÍOS |        |          |            |             |          |          |          |          |
| UBICACION: Parroquia Isla de BejucaI                                                                     |        |          |            |             |          |          |          |          |
| DESCRIPCION                                                                                              | UNIDAD | CANTIDAD | P.UNITARIO | TOTAL       | Mes 1    | Mes 2    | Mes 3    | Mes 4    |
| TUBERIA<br>ESTRUCTURADA<br>PVC<br>ALCANTARILLADO<br>D.N.I. 800MM<br>(MAT.TRAN.INST)                      | m      | 55.74    | \$253.64   | \$14,137.89 | 2,120.68 | 4,948.26 | 4,948.26 | 2,120.68 |
|                                                                                                          |        |          |            |             |          |          |          |          |
|                                                                                                          |        |          |            |             | 15.00%   | 35.00%   | 35.00%   | 15.00%   |
| REPOSICION DE<br>ASFALTO                                                                                 | m3     | 4.00     | \$140.70   | \$562.80    |          |          |          | 562.80   |
|                                                                                                          |        |          |            |             |          |          |          |          |
|                                                                                                          |        |          |            |             |          |          |          | 100.00%  |
| MITIGACION<br>IMPACTO<br>AMBIENTAL                                                                       |        |          |            |             |          |          |          |          |
| Senalización de<br>seguridad tipo<br>pedestal<br>0,60*0,60*1,80<br>PELIGRO - PARE                        | u      | 6.00     | \$98.53    | \$591.18    | 147.80   | 147.80   | 147.80   | 147.80   |
|                                                                                                          |        |          |            |             |          |          |          |          |
|                                                                                                          |        |          |            |             | 25.00%   | 25.00%   | 25.00%   | 25.00%   |
| Senalización tipo<br>caballete<br>1,20*0,60m<br>DESVÍO -<br>HOMBRES<br>TRABAJANDO                        | u      | 6.00     | \$188.66   | \$1,131.96  | 282.99   | 282.99   | 282.99   | 282.99   |
|                                                                                                          |        |          |            |             |          |          |          |          |
|                                                                                                          |        |          |            |             | 25.00%   | 25.00%   | 25.00%   | 25.00%   |

| CRONOGRAMA VALORADO DE TRABAJOS                                                                          |        |          |            |          |         |        |       |         |
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| UBICACION: Parroquia Isla de Bejuca                                                                      |        |          |            |          |         |        |       |         |
| DESCRIPCION                                                                                              | UNIDAD | CANTIDAD | P.UNITARIO | TOTAL    | Mes 1   | Mes 2  | Mes 3 | Mes 4   |
| Conos reflectivos para trabajo de vía (h=0,70-0,90 m)                                                    | u      | 12.00    | \$20.65    | \$247.80 | 123.90  |        |       | 123.90  |
|                                                                                                          |        |          |            |          |         |        |       |         |
|                                                                                                          |        |          |            |          | 50.00%  |        |       | 50.00%  |
| Parante de PVC h=1,20 m con base de hormigón y cinta reflectiva                                          | u      | 60.00    | \$8.53     | \$511.80 | 255.90  | 255.90 |       |         |
|                                                                                                          |        |          |            |          |         |        |       |         |
|                                                                                                          |        |          |            |          | 50.00%  | 50.00% |       |         |
| Paso peatonal de madera para zanja, L= 2m x A= 1m, pasamano lateral h= 1m                                | u      | 10.00    | \$46.27    | \$462.70 | 462.70  |        |       |         |
|                                                                                                          |        |          |            |          |         |        |       |         |
|                                                                                                          |        |          |            |          | 100.00% |        |       |         |
| Tanque protector vial de polietileno (h=1,00 m; d=0,60 m)                                                | u      | 6.00     | \$75.01    | \$450.06 | 450.06  |        |       |         |
|                                                                                                          |        |          |            |          |         |        |       |         |
|                                                                                                          |        |          |            |          | 100.00% |        |       |         |
| Medición ruido ambiente (hora)                                                                           | u      | 4.00     | \$52.80    | \$211.20 |         |        |       | 211.20  |
|                                                                                                          |        |          |            |          |         |        |       |         |
|                                                                                                          |        |          |            |          |         |        |       | 100.00% |

| CRONOGRAMA VALORADO DE TRABAJOS                                                                          |        |          |            |            |              |              |              |              |
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| UBICACION: Parroquia Isla de Bejucal                                                                     |        |          |            |            |              |              |              |              |
| DESCRIPCION                                                                                              | UNIDAD | CANTIDAD | P.UNITARIO | TOTAL      | Mes 1        | Mes 2        | Mes 3        | Mes 4        |
| Tratamiento de escombrera (Perfilado y tendido del material)                                             | m3     | 3,000.00 | \$0.85     | \$2,550.00 |              |              |              | 2,550.00     |
|                                                                                                          |        |          |            |            |              |              |              |              |
|                                                                                                          |        |          |            |            |              |              |              | 100.00%      |
| Agua para control de polvo                                                                               | m3     | 400.00   | \$3.72     | \$1,488.00 |              |              |              | 1,488.00     |
|                                                                                                          |        |          |            |            |              |              |              |              |
|                                                                                                          |        |          |            |            |              |              |              | 100.00%      |
| \$944,682.13                                                                                             |        |          |            |            |              |              |              |              |
| MONTO PARCIAL                                                                                            |        |          |            |            | \$176,780.59 | \$294,629.81 | \$289,965.53 | \$183,306.19 |
| PORCENTAJE PARCIAL                                                                                       |        |          |            |            | 18.71        | 31.19        | 30.69        | 19.40        |
| MONTO ACUMULADO                                                                                          |        |          |            |            | \$176,780.59 | \$471,410.40 | \$761,375.93 | \$944,682.13 |
| PORCENTAJE ACUMULADO                                                                                     |        |          |            |            | 18.71        | 49.90        | 80.60        | 100.00       |

Ing. Hugo Rodríguez

**CONSULTOR**