

|                                                                                   |                                                                                                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                        |  |  |  |  |  |  |  |  |  |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|------------------------|--|--|--|--|--|--|--|--|--|
|  | <b>FORMATO B7: HISTOGRAMA DE MANO DE OBRA Y EQUIPOS</b>                                             |  |  |  |  |  |  |  |  |  |  |  |  |  |  | CO-PE-1PE326-CM-HA-003 |  |  |  |  |  |  |  |  |  |
|                                                                                   |                                                                                                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Revisión 0             |  |  |  |  |  |  |  |  |  |
|                                                                                   | <b>“ENTREGA DE LAS DEFENSAS RIBEREÑAS EN SECTOR RÍO GRANDE PARTE ALTA Y BAJA (TRAMO 3) - CASMA”</b> |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Fecha: 09/03/2022      |  |  |  |  |  |  |  |  |  |
|                                                                                   |                                                                                                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Página 1 de 2          |  |  |  |  |  |  |  |  |  |

**HISTOGRAMA DE MANO DE OBRA**  
**DISTRIBUCIÓN MENSUAL DE MANO DE OBRA DIRECTA**

|                     |             |              | M1          | M2           | M3           | M4           | M5           | M6           | M7           | M8           | M9 | M10 | M11 | M12 | M13 |
|---------------------|-------------|--------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|----|-----|-----|-----|-----|
| <b>TOTAL</b>        | <b>Und.</b> | <b>1,555</b> | <b>22</b>   | <b>198</b>   | <b>240</b>   | <b>240</b>   | <b>240</b>   | <b>240</b>   | <b>240</b>   | <b>135</b>   |    |     |     |     |     |
| Operario            | Und.        | 26           | 1.0         | 4.0          | 4.0          | 4.0          | 4.0          | 4.0          | 4.0          | 1.0          |    |     |     |     |     |
| Operador de equipo  | Und.        | 650          | 6.0         | 97.0         | 97.0         | 97.0         | 97.0         | 97.0         | 97.0         | 62.0         |    |     |     |     |     |
| Oficial             | Und.        | 87           | 5.0         | 7.0          | 14.0         | 14.0         | 14.0         | 14.0         | 14.0         | 5.0          |    |     |     |     |     |
| Peón                | Und.        | 450          | 5.0         | 40.0         | 75.0         | 75.0         | 75.0         | 75.0         | 75.0         | 30.0         |    |     |     |     |     |
| Vigía               | Und.        | 342          | 5.0         | 50.0         | 50.0         | 50.0         | 50.0         | 50.0         | 50.0         | 37.0         |    |     |     |     |     |
| <b>PERSONAL MOD</b> | <b>Und.</b> | <b>1,555</b> | <b>22.0</b> | <b>198.0</b> | <b>240.0</b> | <b>240.0</b> | <b>240.0</b> | <b>240.0</b> | <b>240.0</b> | <b>135.0</b> |    |     |     |     |     |

**DISTRIBUCIÓN MENSUAL DE MANO DE OBRA INDIRECTA**

|                                |             |            | M1           | M2           | M3           | M4           | M5           | M6           | M7           | M8           | M9 | M10 | M11 | M12 | M13 |
|--------------------------------|-------------|------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|----|-----|-----|-----|-----|
| <b>TOTAL</b>                   | <b>Und.</b> | <b>968</b> | <b>121</b>   | <b>121</b>   | <b>121</b>   | <b>121</b>   | <b>121</b>   | <b>121</b>   | <b>121</b>   | <b>121</b>   |    |     |     |     |     |
| Conductor de Camioneta         | Und.        | 80         | 10.0         | 10.0         | 10.0         | 10.0         | 10.0         | 10.0         | 10.0         | 10.0         |    |     |     |     |     |
| Conductor de Minibus           | Und.        | 80         | 10.0         | 10.0         | 10.0         | 10.0         | 10.0         | 10.0         | 10.0         | 10.0         |    |     |     |     |     |
| <b>PERSONAL EMPLEADO - MOI</b> | <b>Und.</b> | <b>160</b> | <b>20.0</b>  | <b>20.0</b>  | <b>20.0</b>  | <b>20.0</b>  | <b>20.0</b>  | <b>20.0</b>  | <b>20.0</b>  | <b>20.0</b>  |    |     |     |     |     |
| Gerente de Proyecto            | Und.        | 8.0        | 1.0          | 1.0          | 1.0          | 1.0          | 1.0          | 1.0          | 1.0          | 1.0          |    |     |     |     |     |
| Administrador de contrato      | Und.        | 8.0        | 1.0          | 1.0          | 1.0          | 1.0          | 1.0          | 1.0          | 1.0          | 1.0          |    |     |     |     |     |
| Ingeniero jefe de obra         | Und.        | 16.0       | 2.0          | 2.0          | 2.0          | 2.0          | 2.0          | 2.0          | 2.0          | 2.0          |    |     |     |     |     |
| Supervisor Civil               | Und.        | 96.0       | 12.0         | 12.0         | 12.0         | 12.0         | 12.0         | 12.0         | 12.0         | 12.0         |    |     |     |     |     |
| Ingeniero SSOMA                | Und.        | 48.0       | 6.0          | 6.0          | 6.0          | 6.0          | 6.0          | 6.0          | 6.0          | 6.0          |    |     |     |     |     |
| Monitor SSOMA                  | Und.        | 48.0       | 6.0          | 6.0          | 6.0          | 6.0          | 6.0          | 6.0          | 6.0          | 6.0          |    |     |     |     |     |
| Jefe de Oficina Técnica        | Und.        | 32.0       | 4.0          | 4.0          | 4.0          | 4.0          | 4.0          | 4.0          | 4.0          | 4.0          |    |     |     |     |     |
| Ingeniero QA/QC Civil          | Und.        | 48.0       | 6.0          | 6.0          | 6.0          | 6.0          | 6.0          | 6.0          | 6.0          | 6.0          |    |     |     |     |     |
| Topógrafo                      | Und.        | 48.0       | 6.0          | 6.0          | 6.0          | 6.0          | 6.0          | 6.0          | 6.0          | 6.0          |    |     |     |     |     |
| Cadistas                       | Und.        | 48.0       | 6.0          | 6.0          | 6.0          | 6.0          | 6.0          | 6.0          | 6.0          | 6.0          |    |     |     |     |     |
| Almacenero                     | Und.        | 32.0       | 4.0          | 4.0          | 4.0          | 4.0          | 4.0          | 4.0          | 4.0          | 4.0          |    |     |     |     |     |
| Relacionista Comunitario       | Und.        | 8.0        | 1.0          | 1.0          | 1.0          | 1.0          | 1.0          | 1.0          | 1.0          | 1.0          |    |     |     |     |     |
| Asistente de Personal          | Und.        | 48.0       | 6.0          | 6.0          | 6.0          | 6.0          | 6.0          | 6.0          | 6.0          | 6.0          |    |     |     |     |     |
| Arqueólogo                     | Und.        | 8.0        | 1.0          | 1.0          | 1.0          | 1.0          | 1.0          | 1.0          | 1.0          | 1.0          |    |     |     |     |     |
| Ingeniero de Planeamiento      | Und.        | 32.0       | 4.0          | 4.0          | 4.0          | 4.0          | 4.0          | 4.0          | 4.0          | 4.0          |    |     |     |     |     |
| Especialista BIM               | Und.        | 8.0        | 1.0          | 1.0          | 1.0          | 1.0          | 1.0          | 1.0          | 1.0          | 1.0          |    |     |     |     |     |
| Enfermero                      | Und.        | 96.0       | 12.0         | 12.0         | 12.0         | 12.0         | 12.0         | 12.0         | 12.0         | 12.0         |    |     |     |     |     |
| Supervisor Logístico           | Und.        | 32.0       | 4.0          | 4.0          | 4.0          | 4.0          | 4.0          | 4.0          | 4.0          | 4.0          |    |     |     |     |     |
| Capataz movimiento de suelos   | Und.        | 48.0       | 6.0          | 6.0          | 6.0          | 6.0          | 6.0          | 6.0          | 6.0          | 6.0          |    |     |     |     |     |
| Mecánico GG                    | Und.        | 48.0       | 6.0          | 6.0          | 6.0          | 6.0          | 6.0          | 6.0          | 6.0          | 6.0          |    |     |     |     |     |
| Ayudante de mecánico           | Und.        | 48.0       | 6.0          | 6.0          | 6.0          | 6.0          | 6.0          | 6.0          | 6.0          | 6.0          |    |     |     |     |     |
| <b>PERSONAL STAFF - MOI</b>    | <b>m3</b>   | <b>808</b> | <b>101.0</b> | <b>101.0</b> | <b>101.0</b> | <b>101.0</b> | <b>101.0</b> | <b>101.0</b> | <b>101.0</b> | <b>101.0</b> |    |     |     |     |     |

\* Los cargos deben ser definidos por cada Postor de acuerdo a su organigrama. Es indispensable incluir las posiciones claves en el histograma de Mano de Obra Indirecta.

## HISTOGRAMA DE EQUIPOS

### DISTRIBUCIÓN MENSUAL DE EQUIPOS PESADOS MÓVILES

[illegible]

## DISTRIBUCIÓN MENSUAL DE PLANTAS DE CONCRETO Y AGREGADOS

[illegible]

| M1 | M2 | M3 | M4 | M5 | M6 | M7 | M8 | M9 | M10 | M11 | M12 | M13 |
|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|
|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|

[illegible]