

Annex 5-C

# Construction Plant Inventory

## Annex 5-C - Preliminary Construction Plant Inventory

### SOUTH SOKO OPTION

#### LAND BASED WORKS

| Activity                                 | Plant Required                       | No. of PME | CNP / BS5228 Ref. | SWL                    | Overall SWL            |
|--|--------------------------------------|------------|-------------------|------------------------|------------------------|
| <b>Earthwork</b>                         |                                      |            |                   |                        |                        |
| - Site Clearance                         | Bulldozer / Excavator                | 2          | CNP 030           | 115                    | 118                    |
|  | Backactor mounted with Breaker       | 3          | CNP 027           | 122                    | 127                    |
|  | Truck                                | 1          | CNP 067           | 117                    | 117                    |
|  | Mobile Crane                         | 4          | CNP 048           | 112                    | 118                    |
|  | Water Pump                           | 2          | CNP 282           | 103                    | 106                    |
|  |                                      |            |                   | <i>Sub-total SWL =</i> | <b>128</b>             |
| - Soil Compaction                        | Pneumatic Roller                     | 1          | CNP 185           | 108                    | 108                    |
|  | Mobile Crane                         | 4          | CNP 048           | 112                    | 118                    |
|  | Water Pump                           | 2          | CNP 282           | 103                    | 106                    |
|  |                                      |            |                   | <i>Sub-total SWL =</i> | <b>119</b>             |
| - Blasting and Excavation                | Bulldozer / Excavator                | 10         | CNP 030           | 115                    | 125                    |
|  | Backactor mounted Drilling Rig       | 10         | CNP 027           | 122                    | 132                    |
|  | Backactor mounted with Breaker       | 4          | CNP 027           | 122                    | 128                    |
|  | Truck                                | 18         | CNP 067           | 117                    | 130                    |
|  | Electric Generator                   | 4          | CNP 101           | 108                    | 114                    |
|  | Concrete crushers, excavator mounted | 2          | .. <sup>(1)</sup> | 103                    | 106                    |
|  | Mobile Crane                         | 1          | CNP 048           | 112                    | 112                    |
|  | Air Compressor                       | 2          | CNP 003           | 104                    | 107                    |
|  | Water Pump                           | 2          | CNP 282           | 103                    | 106                    |
|  | Derrick Lighter                      | 14         | CNP 061           | 104                    | 115                    |
|  |                                      |            |                   |                        | <i>Sub-total SWL =</i> |
| - Slope Stabilization and Drainage Works | Backactor mounted Drilling Rig       | 3          | CNP 027           | 122                    | 127                    |
|  | Water Pump                           | 2          | CNP 282           | 103                    | 106                    |
|  | Backactor mounted with Breaker       | 3          | CNP 027           | 122                    | 127                    |
|  | Concrete Pumps                       | 2          | CNP 047           | 109                    | 112                    |
|  | Grout Pump w/Mixer                   | 2          | .. <sup>(1)</sup> | 105                    | 108                    |
|  |                                      |            |                   | <i>Sub-total SWL =</i> | <b>130</b>             |

#### RECLAMATION

| Activity                    | Plant Required                     | No. of PME | CNP / BS5228 Ref. | SWL                    | Overall SWL |
|-----------------------------|------------------------------------|------------|-------------------|------------------------|-------------|
| <b>Dredging</b>             |                                    |            |                   |                        |             |
|                             | Dredger - Grab                     | 1          | CNP 063           | 112                    | 112         |
|                             | Tug Boat / Motor Boat              | 1          | CNP 221           | 110                    | 110         |
|                             | Split Bottom Barge                 | 1          | CNP 061           | 104                    | 104         |
|                             |                                    |            |                   | <i>Sub-total SWL =</i> | <b>115</b>  |
| <b>Seawall Construction</b> |                                    |            |                   |                        |             |
| Placing Seawall Core        | Tug Boat / Motor Boat              | 2          | CNP 221           | 110                    | 113         |
|                             | Derrick Ligher                     | 2          | CNP 061           | 104                    | 107         |
|                             |                                    |            |                   | <i>Sub-total SWL =</i> | <b>114</b>  |
| Placing Seawall Rock Armour | Derrick Lighter                    | 1          | CNP 061           | 104                    | 104         |
|                             | Backactor                          | 1          | CNP 027           | 122                    | 122         |
|                             |                                    |            |                   | <i>Sub-total SWL =</i> | <b>122</b>  |
| <b>Placing Fill</b>         |                                    |            |                   |                        |             |
|                             | Derrick Lighter / Pelican Barge    | 1          | CNP 061           | 104                    | 104         |
|                             | Water Pump                         | 2          | CNP 282           | 103                    | 106         |
|                             |                                    |            |                   | <i>Sub-total SWL =</i> | <b>108</b>  |
| <b>Drainage Works</b>       |                                    |            |                   |                        |             |
| Install of Temporary Work   | Backactor mounted with Vibrator    | 2          | CNP 027           | 122                    | 125         |
|                             | Cutter, circular, steel (electric) | 2          | .. <sup>(1)</sup> | 112                    | 115         |
|                             | Grinding Machine                   | 2          | CNP 065           | 98                     | 101         |
|                             | Water Pump                         | 1          | CNP 282           | 103                    | 103         |
|                             |                                    |            |                   | <i>Sub-total SWL =</i> | <b>125</b>  |
| Laying of Drainage Pipes    | Backactor                          | 2          | CNP 081           | 112                    | 115         |
|                             | Truck                              | 1          | CNP 067           | 117                    | 117         |
|                             | Water Pump                         | 1          | CNP 282           | 103                    | 103         |
|                             |                                    |            |                   | <i>Sub-total SWL =</i> | <b>119</b>  |
| Backfilling                 | Pneumatic Roller                   | 1          | CNP 185           | 108                    | 108         |
|                             | Backactor                          | 2          | CNP 081           | 112                    | 115         |
|                             | Water Pump                         | 1          | CNP 282           | 103                    | 103         |
|                             |                                    |            |                   | <i>Sub-total SWL =</i> | <b>116</b>  |

**Main Jetty**

| Activity  | Plant Required                         | No. of PME                      | CNP / BS5228 Ref.      | SWL                          | Overall SWL |     |
|---|--|---------------------------------|------------------------|------------------------------|-------------|-----|
| <b>Ground Investigation</b>                           | SI Barge + Generator                   | 2                               | CNP 061+CNP 101        | 109                          | 112         |     |
|   | Split Bottom Barge                     | 2                               | CNP 061                | 104                          | 107         |     |
|   |  |                                 | <i>Sub-total SWL =</i> |                              | <b>113</b>  |     |
| <b>Jetties and Access Bridge</b>                      |  |                                 |                        |                              |             |     |
| - Steel Piles Construction                            | Crawler Crane                          | 2                               | CNP 048                | 112                          | 115         |     |
|   | 900 CFM Air Compressor                 | 1                               | CNP 002                | 102                          | 102         |     |
|   | Mobile Crane                           | 1                               | CNP 048                | 112                          | 112         |     |
|   | 350 CFM Air Compressor                 | 1                               | CNP 001                | 100                          | 100         |     |
|   | Tugboat                                | 4                               | CNP 221                | 110                          | 116         |     |
|   | Truck                                  | 1                               | CNP 067                | 117                          | 117         |     |
|   | Generator                              | 2                               | CNP 101                | 108                          | 111         |     |
|   | SI Barge + Generator                   | 5                               | CNP 061+CNP 101        | 109                          | 116         |     |
|   | Water Pump                             | 3                               | CNP 282                | 103                          | 108         |     |
|   | Derrick Ligher                         | 7                               | CNP 061                | 104                          | 112         |     |
|   | Automatic Grinder Machine              | 2                               | CNP 065                | 98                           | 101         |     |
|   | Poker, vibratory                       | 2                               | CNP 170                | 113                          | 116         |     |
|   | Piling, earth auger                    | 3                               | CNP 167                | 114                          | 119         |     |
|   |  |                                 |                        | <i>Sub-total SWL =</i>       | <b>125</b>  |     |
|   | - Concrete Caps, Slabs and Foundations | Crawler Crane                   | 2                      | CNP 048                      | 112         | 115 |
| 900 CFM Air Compressor                                |  | 2                               | CNP 002                | 102                          | 105         |     |
| Mobile Crane  |  | 1                               | CNP 048                | 112                          | 112         |     |
| 350 CFM Air Compressor                                |  | 2                               | CNP 001                | 100                          | 103         |     |
| Tugboat   |  | 7                               | CNP 221                | 110                          | 118         |     |
| Truck   |  | 1                               | CNP 067                | 117                          | 117         |     |
| Generator   |  | 8                               | CNP 101                | 108                          | 117         |     |
| Water Pump  |  | 11                              | CNP 282                | 103                          | 113         |     |
| Derrick Ligher  |  | 7                               | CNP 061                | 104                          | 112         |     |
| Concrete Pump   |  | 2                               | CNP 047                | 109                          | 112         |     |
| Bar bender and cutter                                 |  | 4                               | CNP 021                | 90                           | 96          |     |
|   |  |                                 |                        | <i>Sub-total SWL =</i>       | <b>124</b>  |     |
| <b>Dredging of Approach Channel and Turning Basin</b> |  |                                 |                        |                              |             |     |
| - Dredging of Approach Channel and Turning Basin      |  | Dredger - Grab                  | 3                      | CNP 063                      | 112         | 117 |
|   |  | Trailing Suction Hopper Dredger | 1                      | Penny Bay EIA <sup>(2)</sup> | 109         | 109 |
|   | 25 Ton Mobile Crane                    | 1                               | CNP 048                | 112                          | 112         |     |
|   | Tugboat                                | 4                               | CNP 221                | 110                          | 116         |     |
|   | Generator                              | 1                               | CNP 101                | 108                          | 108         |     |
|   | Dredger, chain bucket                  | 2                               | CNP 062                | 118                          | 121         |     |
|   | Derrick Ligher                         | 2                               | CNP 061                | 104                          | 107         |     |
|   |  |                                 | <i>Sub-total SWL =</i> | <b>124</b>                   |             |     |
| <b>Intake and Outfall Construction</b>                |  |                                 |                        |                              |             |     |
| - Intake and Outfall Construction                     | Dredger - Grab                         | 1                               | CNP 063                | 112                          | 112         |     |
|   | Tug Boat / Motor Boat                  | 1                               | CNP 221                | 110                          | 110         |     |
|   | Split Bottom Barge                     | 1                               | CNP 061                | 104                          | 104         |     |
|   | Derrick Ligher                         | 1                               | CNP 061                | 104                          | 104         |     |
|   |  |                                 | <i>Sub-total SWL =</i> | <b>115</b>                   |             |     |

**LNG TERMINAL CIVIL, M&E WORK**

| Activity            | Plant Required                    | No. of PME | CNP / BS5228 Ref.                    | SWL                    | Overall SWL |
|---------------------|-----------------------------------|------------|--------------------------------------|------------------------|-------------|
| Terminal Civil Work | Machanich & Lub. Service Truck    | 3          | CNP 141                              | 112                    | 117         |
|                     | Derrick Barge                     | 9          | CNP 061                              | 104                    | 114         |
|                     | Tugboat                           | 5          | CNP 221                              | 110                    | 117         |
|                     | Crawler Crane                     | 15         | CNP 048                              | 112                    | 124         |
|                     | Drill Rig                         | 3          | Table C.10 Ref No. 2 <sup>(3)</sup>  | 112                    | 117         |
|                     | Backhoe – Track                   | 2          | CNP 081                              | 112                    | 115         |
|                     | Forklift                          | 11         | Penny Bay EIA <sup>(2)</sup>         | 113                    | 123         |
|                     | Dump truck, with grab             | 1          | -- <sup>(1)</sup>                    | 105                    | 105         |
|                     | Track Drill                       | 1          | Table C.3 Ref No. 123 <sup>(3)</sup> | 128                    | 128         |
|                     | Generator                         | 18         | CNP 101                              | 108                    | 121         |
|                     | Air Compressor 375 cfm, Portable  | 13         | CNP 001                              | 100                    | 111         |
|                     | Air Compressor 900 cfm, Portable  | 1          | CNP 002                              | 102                    | 102         |
|                     | Air Compressor 1200 cfm, Portable | 2          | CNP 003                              | 104                    | 107         |
|                     | Winch – Hoist 2 Drum              | 1          | CNP 263                              | 102                    | 102         |
|                     | Pump – Submersible                | 2          | CNP 283                              | 85                     | 88          |
|                     | Water jetting unit                | 1          | -- <sup>(1)</sup>                    | 107                    | 107         |
|                     | Pump – Concrete                   | 4          | CNP 047                              | 109                    | 115         |
|                     | Grout Pump w/Mixer                | 1          | -- <sup>(1)</sup>                    | 105                    | 105         |
|                     | Tractor with Trailer              | 2          | CNP 222                              | 118                    | 121         |
|                     | Tower Crane                       | 2          | CNP 049                              | 95                     | 98          |
|                     | Automatic Grinder Machine         | 8          | CNP 065                              | 98                     | 107         |
|                     | Air blower                        | 3          | -- <sup>(1)</sup>                    | 95                     | 100         |
|                     | Winch (Power & Pneumatic/3 ton)   | 8          | CNP 261                              | 110                    | 119         |
|                     | Discharging Pump                  | 4          | CNP 282                              | 103                    | 109         |
|                     | Batching Plant 60 CM/HR           | 2          | CNP 022                              | 108                    | 111         |
|                     | Concrete Mixer                    | 10         | CNP 046                              | 96                     | 106         |
|                     | Water Pump                        | 14         | CNP 282                              | 103                    | 114         |
|                     | Bar bender and cutter             | 8          | CNP 021                              | 90                     | 99          |
|                     | Poker, vibratory                  | 8          | CNP 170                              | 113                    | 122         |
|                     |                                   |            |                                      | <i>Sub-total SWL =</i> | <b>133</b>  |

**Installation of Water Main & Cable**

| Activity                     | Plant Required         | No. of PME | CNP / BS5228 Ref.                   | SWL                    | Overall SWL |
|------------------------------|------------------------|------------|-------------------------------------|------------------------|-------------|
| Dredging                     | Dredger - Grab         | 1          | CNP 063                             | 112                    | 112         |
|                              | hydraulic rock breaker | 1          | Table C.8 Ref No. 12 <sup>(3)</sup> | 106                    | 106         |
|                              |                        |            |                                     | <i>Sub-total SWL =</i> | <b>113</b>  |
| Water Pipeline Installation  | Derrick Barge          | 1          | CNP 061                             | 104                    | 104         |
|                              |                        |            |                                     | <i>Sub-total SWL =</i> | <b>104</b>  |
| Post Trenching Jetting       | Derrick Barge          | 1          | CNP 061                             | 104                    | 104         |
|                              |                        |            |                                     | <i>Sub-total SWL =</i> | <b>104</b>  |
| Backfilling                  | Dredger - Grab         | 1          | CNP 063                             | 112                    | 112         |
|                              |                        |            |                                     | <i>Sub-total SWL =</i> | <b>112</b>  |
| Submarine Cable Installation | Derrick Barge          | 1          | CNP 061                             | 104                    | 104         |
|                              |                        |            |                                     | <i>Sub-total SWL =</i> | <b>104</b>  |

**Installation of Submarine Gas Pipeline**

| Activity                          | Plant Required                  | No. of PME | CNP / BS5228 Ref.            | SWL                    | Overall SWL |
|-----------------------------------|---------------------------------|------------|------------------------------|------------------------|-------------|
| Pipeline Installation by Dredging | Trailing Suction Hopper Dredger | 1          | Penny Bay EIA <sup>(2)</sup> | 109                    | 109         |
|                                   |                                 |            |                              | <i>Sub-total SWL =</i> | <b>109</b>  |

**Installation of Gas Receiving Station**

| Activity                    | Plant Required        | No. of PME | CNP / BS5228 Ref. | SWL                    | Overall SWL |
|-----------------------------|-----------------------|------------|-------------------|------------------------|-------------|
| <b>Dredging</b>             | Dredger - Grab        | 1          | CNP 063           | 112                    | 112         |
|                             | Tug Boat / Motor Boat | 1          | CNP 221           | 110                    | 110         |
|                             | Split Bottom Barge    | 1          | CNP 061           | 104                    | 104         |
|                             |                       |            |                   | <i>Sub-total SWL =</i> | <b>115</b>  |
| <b>Seawall Construction</b> | Placing Seawall Core  | 2          | CNP 221           | 110                    | 113         |
|                             |                       |            |                   | Derrick Lighter        | 2           |
|                             |                       |            |                   | <i>Sub-total SWL =</i> | <b>114</b>  |
| Placing Seawall Rock Armour | Derrick Lighter       | 1          | CNP 061           | 104                    | 104         |
|                             |                       |            |                   | Backactor              | 1           |
|                             |                       |            |                   | <i>Sub-total SWL =</i> | <b>122</b>  |
| <b>Placing Fill</b>         | Derrick Lighter       | 1          | CNP 061           | 104                    | 104         |
|                             |                       |            |                   | <i>Sub-total SWL =</i> | <b>104</b>  |

(1) SWL refer to the document prepared by the Noise Control Authority ([http://www.epd.gov.hk/epd/english/application\\_for\\_licences/guidance/files/OtherSWLe.pdf](http://www.epd.gov.hk/epd/english/application_for_licences/guidance/files/OtherSWLe.pdf))

(2) SWL refer to the approved EIA Report for the Construction of an International Theme Park in Penny's Bay of North Lantau and its Essential Associated Infrastructures

(3) SWL refer to the BS 5228 : Part 1: 1997