Department of Agriculture
**PHILIPPINE CARABAO CENTER**
CERTIFIED:ISO 9001 | ISO 14001 | ISO 45001

*PROJECT:* ***CONSTRUCTION OF COMMUNAL PEN FOR CHBU/PCC-USM***
*LOCATION:* ***Kabacan North, Cotabato***
*SUBJECT:* ***Bill of Materials***

| ***B. P R O G R A M  O F  W O R K S*** | | | | | | |
|---|---|---|---|---|---|---|
| | | *Particulars* | *Quantity* | *Unit* | *Unit Rate* | *Total Cost* |
| ***ITEM*** | ***QTY/L QTY/PARTICULARS*** | ***Unit/Blank*** | ***QTY/DAYS*** | ***UNIT*** | ***UNIT RATE*** | ***TOTAL COST*** |
| ***I. GENERAL REQUIREMENTS*** | | | | | | |
| *Quantity =* | *1.00* | *lot* | | | | |
| *O1* | *Mobilization/Demobilization* | | *1.00* | *lot* | | |
| *O1* | *Permits, Clearances, Material Testing* | | *1.00* | *lot* | | |
| *O2* | *Temfacil* | | *1.00* | *lot* | | |
| *O2* | *Safety and Health* | | *1.00* | *lot* | | |
| *O2* | *Project Billboard with Frame(COA Format and Size)* | | *1.00* | *lot* | | |
| *O2* | *Cad Asbuilt of Project/Variation Shopdrawings* | | *1.00* | *lot* | | |
| *O1* | *-* | *Not Subjected to OCM and Profit Mark-up* | | | | |
| *O2* | *-* | *Not Subjected to OCM Mark-up* | | | | |
| | | | | | ***Total Cost*** | |
| | | | | | ***Unit Cost*** | ***/lot*** |
| ***II. Clearing, Sub Grade and Leveling Preparation*** | | | | | | |
| *Quantity =* | *1,100.00* | *sq.m.* | | | | |
| *1) Labor* | | | | | | |
| *1* | *Skilled* | | *4.00* | *days* | | |
| *3* | *Laborers* | | *4.00* | *days* | | |
| *2) Material* | | | | | | |
| *1* | *Grader Rental* | | *8.00* | *hrs* | | |
| *1* | *Vibratory Roller Rental* | | *8.00* | *hrs* | | |
| *1* | *Watering Truck Rental* | | *3.00* | *hrs* | | |
| | | | | | ***Total Cost*** | |
| | | | | | ***Unit Cost*** | ***/sq.m.*** |
| ***III. EARTHWORKS*** | | | | | | |
| *Quantity =* | *1.00* | *lot* | | | | |
| *1) Labor* | | | | | | |
| ***Excavation*** | | | | | | |
| | *Skilled Labor* | | *6.00* | *days* | | |
| | *Unskilled Labor* | | *6.00* | *days* | | |
| ***Select Fill*** | | | | | | |
| *1) Materials* | | | | | | |
| *Earthfill* | | | *35.00* | *cu.m.* | | |
| *Gravel (G-3/4)* | | | *110.00* | *cu.m.* | | |
| *2) Labor* | | | | | | |
| | *Skilled Labor* | | *8.00* | *days* | | |
| | *Unskilled Labor* | | *8.00* | *days* | | |
| | | | | | ***Total Cost*** | |
| | | | | | ***Unit Cost*** | ***/lot*** |

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| B. PROGRAM OF WORKS | | | | |
|---|---|---|---|---|
| *Particulars* | *Quantity* | *Unit* | *Unit Rate* | *Total Cost* |
| ***IV REINFORCED CONCRETE WORKS*** | | | | |
| *Quantity = 158.71 cu.m.* | | | | |
| *1) Materials* | | | | |
| *Portland Cement (40KG)* | *1,450* | *bags* | | |
| *Sand (S1)* | *82* | *cu.m.* | | |
| *Gravel (G-3/4)* | *160* | *cu.m.* | | |
| *Rebars* | | | | |
| *16 mm Ø x 6.0 m* | *2388* | *kgs.* | | |
| *12 mm Ø x 6.0 m* | *392.00* | *kgs.* | | |
| *10 mm Ø x 6.0 m* | *3,681.00* | *kgs.* | | |
| | *6,461.00* | *kgs.* | | |
| *G.I. Tie Wire #16* | *33.00* | *kgs.* | | |
| *1/4" Plywood Form Board* | *29.00* | *pcs.* | | |
| *Form Lumber (coco)* | *605.00* | *bd.ft.* | | |
| *Assorted CWN* | *27.00* | *kgs.* | | |
| *Equipment* | | | | |
| *2-Bagger Concrete Mixer* | *20.00* | *days* | | |
| *2- Concrete Vibrator* | *20.00* | *days* | | |
| *2) Labor* | | | | |
| *a. Pouring of Concrete* | | | | |
| *Skilled Labor* | *31.00* | *days* | | |
| *Unskilled Labor* | *31.00* | *days* | | |
| *b. Rebars ( cut, bend & place )* | | | | |
| *Skilled Labor* | *22.00* | *days* | | |
| *Unskilled Labor* | *22.00* | *days* | | |
| *c. Forms ( fab.,installation & removal )* | | | | |
| *Skilled Labor* | *12.00* | *days* | | |
| *Unskilled Labor* | *12.00* | *days* | | |
| | | | ***Total Cost*** | |
| | | | ***Unit Cost*** | ***/cu.m.*** |
| ***V. MASONRY WORKS*** | | | | |
| *Quantity = 178.20 sqm* | | | | |
| *1) Materials* | | | | |
| *4" thk. Chb* | *2,450* | *pcs.* | | |
| *Sand (S1)* | *19* | *cu.m.* | | |
| *Portland Cement (40KG)* | *178* | *bags* | | |
| *10 mm x 6.0 m rebars* | *518* | *kgs.* | | |
| *No. 16 G.I Tie wire* | *16* | *kgs.* | | |
| *2) Labor* | | | | |
| *Skilled Labor* | *12.00* | *days* | | |
| *Unskilled Labor* | *12.00* | *days* | | |
| | | | ***Total Cost*** | |
| | | | ***Unit Cost*** | ***/sqm*** |

**B. PROGRAM OF WORKS**

| Particulars | Quantity | Unit | Unit Rate | Total Cost |
|---|---|---|---|---|
| **VI. METAL STRUCTURE** | | | | |
| Quantity = 1.00 lot | | | | |
| 1) Materials | | | | |
| **Trusses** | | | | |
| 50X150X6mx6mm thk Channel Bar | 44.00 | pcs | | |
| 50X200X6mx6mm thk Channel Bar | 29.00 | pcs | | |
| 50x50x3mm Angular bar | 253.00 | kgs. | | |
| 1.5x 50x 150mm C- Purlins | 143.00 | pcs. | | |
| 10mm sagrods, tension rods | 97.00 | kgs. | | |
| 12mm cross bracing | 250.00 | kgs. | | |
| 12mm turn buckle | 45.00 | pcs. | | |
| Welding Rod | 105.00 | kgs. | | |
| Red Oxide | 10.00 | gals | | |
| Paint Thinner | 6.00 | gals | | |
| **Steel Column** | | | | |
| 300 x 300 x 16mm base plate | 383.00 | kgs. | | |
| 200 x 300 x 16mm base plate support | 765.00 | kgs. | | |
| 20mm diameter anchor bolts w/ nuts and washer | 135.00 | kgs. | | |
| 300 x 300 x16mm thk MS plate | 288.00 | kgs. | | |
| 150mm diam.x 6mm thk G.I. Pipe | 10.00 | pcs. | | |
| **Steel Railing and Gate** | | | | |
| 50mm diam.G.I Pipe sched. 40 | 203.00 | pcs. | | |
| Welding Rod | 96.00 | kgs. | | |
| Hinges | 51.00 | pcs. | | |
| 2) Labor | | | | |
| Skilled Labor | 26.00 | days | | |
| Unskilled Labor | 26.00 | days | | |
| | | | **Total Cost** | |
| | | | **Unit Cost** | **/lot** |
| **VII. PRE-PAINTED METAL SHEET** | | | | |
| Quantity = 588.00 sq.m. | | | | |
| 1) Materials | | | | |
| Pre-painted Metal Roofing Sheet | 618.00 | sq.m | | |
| Pre-painted Ridge Roll | 20.00 | pcs | | |
| Pre-painted Gutter | 40.00 | pcs. | | |
| Teck Screw Metal | 1500.00 | pcs. | | |
| Roof Sealant | 4.00 | qrtz | | |
| Blind Rivets | 5.00 | boxes | | |
| 2) Labor | | | | |
| Skilled Labor | 17.00 | days | | |
| Unskilled Labor | 17.00 | days | | |
| | | | **Total Cost** | |
| | | | **Unit Cost** | **/sq.m.** |

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|---|---|---|---|---|
| Particulars | Quantity | Unit | Unit Rate | Total Cost |
| **VIII. PLUMBING** | | | | |
| Quantity = 1.00 lot | | | | |
| 1) Materials | | | | |
| **WATER LINES** | | | | |
| **Drinking Trough** | | | | |
| PPR Elbow 3/4" | 25.00 | pcs | | |
| PPR Tee 1 x 3/4" | 3.00 | pcs | | |
| PPR Gate valve 1" | 1.00 | pc | | |
| PPR Tee 3/4" | 10.00 | pcs. | | |
| **Shower Sprinkler** | | | | |
| PPR Tee 1 x 3/4" | 3.00 | pcs | | |
| PPR Gate valve 3/4" | 2.00 | pcs | | |
| PPR Elbow adopter 3/4" | 10.00 | pcs | | |
| PPR Tee 3/4" x 1/2" | 20.00 | pcs | | |
| Shower Head with Ball valve 1/2" | 20.00 | pcs | | |
| PPR Coupling 3/4" | 31.00 | pcs | | |
| PPR Coupling 1" | 5.00 | pcs | | |
| Teflon Tape big | 10.00 | pcs | | |
| Metal C Clamp 3 x 20mm | 20.00 | pcs | | |
| PPR Pipe1" Pn40 | 12.00 | pcs | | |
| PPR Pipe 3/4" Pn40 | 26.00 | pcs | | |
| Floaterswitch | 10.00 | pcs | | |
| 3/4 x 1/2" bushing | 10.00 | pcs | | |
| 2) Labor | | | | |
| Skilled Labor | 8.00 | days | | |
| Unskilled Labor | 8.00 | days | | |
| | | | **Total Cost** | |
| | | | **Unit Cost** | **/lot** |
| **IX. ELECTRICAL** | | | | |
| Quantity = 1.00 lot | | | | |
| 1) Materials | | | | |
| **Panel Board, 50Amp 220 V, 2P, main CB** | 1 | unit | | |
| 4 Holes branches, Nema Closure branches circuit breaker | | | | |
| 20 AT Ckt breaker | 2 | pair | | |
| 30 AT Ckt breaker | 2 | pairs | | |
| **Wires** | | | | |
| 8.0 mm2 THHN Wires | 40 | meters | | |
| 3.5 mm2 THHN Wires | 1 | rolls | | |
| 2.0 mm2 THHN Wires | 3 | rolls | | |
| **Pipes and Fittings** | | | | |
| PVC Pipe1/2" | 150.00 | pcs | | |
| PVC Pipe3/4" | 2.00 | pcs | | |
| Entrance Cap 3/4" | 1.00 | pcs | | |
| Utility Box | 6.00 | pcs | | |
| 4 x 4 Junction Box | 6.00 | bag | | |

| B. P R O G R A M  O F  W O R K S | | | | |
|---|---|---|---|---|
| Particulars | Quantity | Unit | Unit Rate | Total Cost |
| Devices | | | | |
| 15 Watts LED bulb | 15.00 | pcs | | |
| Three Gang Switch | 3.00 | sets | | |
| Duplex Convenience Outlet (weather proof) | 8.00 | sets | | |
| Duplex Convenience Outlet (drop type) | 4.00 | sets | | |
| E-27 Receptacle 4" | 15.00 | pcs | | |
| Electrical Tape | 5.00 | pcs | | |
| 2) Labor | | | | |
| Skilled Labor | 7.00 | days | | |
| Unskilled Labor | 7.00 | days | | |
| | | | Total Cost | |
| | | | Unit Cost | /lot |

| | | |
|---|---|---|
| DIRECT COST | | |
| a. MATERIAL COST | | |
| b. LABOR COST | | |
| c. GENERAL REQUIREMENTS 01 | | |
| d. GENERAL REQUIREMENTS 02 | | |
| **e. TOTAL DIRECT COST** | **(a+b+c+d)** | |
| **INDIRECT COST** | | |
| f. O.C.M. | 10% (a+b) | |
| g. PROFIT | 10% (a+b+d) | |
| h. TAX | 5% (e+f+g) | |
| **i. TOTAL INDIRECT COST** | **(f+g+h)** | |
| **TOTAL ESTIMATED COST** | **(e+i)** | |