

**SCHEDULE - 'B'**

**Tender for ARC Work for Laying, Testing & Commissioning of 11/22KV Underground XLPE cable(185 SQ MM XLPE cable by DGVCL) with cable end termination & straight jointing kits (by contractor) under ND scheme (SR No-10820603) in Bardoli Rural Sub Division under Bardoli Division.**

| Sr. No. | Item Code  | Details of works   | Unit    | Rate 2024-25 |
|---------|------------|--|---------|--------------|
| 1       | 9925000001 | Labour charge for excavation of cable trench of 400mm width x 1200mm depth, in any type of soil for laying of cable of size up to 240 mm2 (For additional cable 200 mm additional width shall be considered i.e. half trench length is to be considered)   | Meter   | 72           |
| 2       | 9925000002 | Labour charge for excavation of cable trench of 600mm width x 1200mm depth, in any type of soil for laying of cable of size up to 240 mm2 (For additional cable 200 mm additional width shall be considered i.e. half trench length is to be considered)   | Meter   | 109          |
| 3       | 9925000003 | Labour charge for excavation of cable trench of 400mm width x 1500mm depth, in any type of soil for laying of cable of size up to 240 mm2 (For additional cable 200 mm additional width shall be considered i.e. half trench length is to be considered)   | Meter   | 91           |
| 4       | 9925000004 | Labour charge for laying of 11kv / 22 kv XLPE Cable of size up to 240 mm2 & preparation of sand layer 100mm thick, in the cable trench & covering the cable with 150 mm dia (Inner), thickness 25 mm, 1.0 meter long RCC half round muffs and providing and fixing of 4inch width yellow colour polyethylene tape with printing "CAUTION ELECTRIC CABLE BELOW" at 0.75 m depth from ground surface after laying cable in trench. This will provide indication that electric cable is passing underground so as to protect cable from mechanical injuries, refilling the same, as per Instruction of Engineer in Charge (EIC).  | Meter   | 171          |
| 5       | 9925000005 | Labour charge for horizontal drilling using Auger machine without damage to surface road at max 2.0 mtrs depth & putting of 6.11 kg/cm2 , class-4, Green color, 110mm O.D. , 8.5mm thickness H.D.P.E. pipe confirms to IS 4984- 1987(3rd revision) and BIS certification and laying of 11KV/22KV XLPE cable of size up to 240 mm2 in HDPE pipe, as per Site Condition (excluding cost of pipe). The detail map obtained from HDD machine and excell sheet(hard and soft copy) indicating the respective depth and distance from adjacent landmark for each segment for HDD is must required to be submitted. HDD to be carried out at depth 1.5 mtrs to 2.0 mtrs as per site conditions and as per instruction of EIC.   | Meter   | 860          |
| 6       | 9925000006 | Labour charge for horizontal drilling manually without damage to surface road at max 2.0 mtrs depth & putting of 6.11 kg/cm2 , class-4, Green color, 110mm O.D. , 8.5mm thickness H.D.P.E. pipe confirms to IS 4984-1987(3rd revision) and BIS certification and laying of 11KV/22KV XLPE cable of size up to 240 mm2 size, as per Site Condition (excluding cost of pipe). The detail map and excell sheet(hard and soft copy) indicating the respective depth and distance from adjacent landmark for each segment of cable to be submitted. Drilling to be carried out at depth Minimum 1.2 mtrs to 2.0 mtrs as per site conditions as per instruction of EIC.  | Meter   | 615          |
| 7       | 9925000007 | Supply of 6.11kg/cm2 , class-4, Green color, 110mm O.D. , 8.5 mm thickness H.D.P.E. pipe confirms to IS 4984 and BIS certification for laying of underground 11KV / 22KV XLPE cable up to 240 mm2 size.  | Meter   | 430          |
| 8       | 9925000008 | Labour work for RCC concreting on disputed location and repairing of damage portion of road crossing for the work carried out for roads crossing as well as concreting & muffing of plocs including all materials (1:2:4)  | CMT     | 3189         |
| 9       | 9925000009 | Providing & fixing concrete stone route marker of 300 mm width x 150 mm thick x 650 mm height embedded in earth at least 300 mm below & 350 mm above ground level respectively at distance approx 50 meters along the length of cable. The RCC concreting (1:2:4)(all necessary maaterials will be in bidder's scope) of route marker is to be carried out 300 mm width x 150 mm thick x 300 mm below ground level as per instruction of EIC. The route marker should be with name of company with approved yellow colour-DGVCL. The distance from marker to cable and cable depth with feeder name etc., marked with arrow sign is to be painted on it.The route marker is to be fixed at location near to any fixed permanent location (not necessary to fix exact on top of cable) as per instruction of EIC. | No.     | 446          |
| 10      | 9925000010 | Erection of D.P. (double pole) structure using 9 / 11 Mtr. RSJ pole with cable connection arrangement along with fitting of necessary fabrication for 11KV cable including excavation of pit & refilling of earth as per instruction of EIC. (Exclusive of concreting & muffing of poles)  | No.     | 2026         |
| 11      | 9925000011 | Erection of Single pole structure using 9 / 11 Mtr RSJ pole with cable connection arrangement along with fitting of necessary fabrication for 11KV/22 KV cable including excavation of pit & refilling of earth as per instruction of EIC. (Exclusive of concreting & muffing of poles)  | No.     | 1047         |
| 12      | 9925000012 | Erection of D.P. (double pole) structure using 8.0 Mtr. PSC pole with cable connection arrangement along with fitting of necessary fabrication for 11KV cable including excavation of pit & refilling of earth as per instruction of EIC. (Exclusive of concreting & muffing of poles)   | No.     | 1416         |
| 13      | 9925000013 | Erection of Single pole structure using 8.0 Mtr PSC pole with cable connection arrangement along with fitting of necessary fabrication for 11KV/22 KV cable including excavation of pit & refilling of earth as per instruction of EIC. (Exclusive of concreting & muffing of poles)   | No.     | 613          |
| 14      | 9925000014 | Labour charge for erecting of 11kv / 22 kv XLPE cable of size up to 240 mm2 on DP Structure with fixing of 02 Nos polymer cleats on top and middle part.Polymer cleats, nut bolts etc. fixing material to be provided by contractor.   | Per Job | 591          |
| 15      | 9925000015 | Providing & fixing of 6.11kg/cm2 , class-4, Green color, 110mm O.D. , 8.5mm thickness H.D.P.E. pipe confirms to IS 4984 and BIS certification on the erected DP structure for the mechanical protection of cable by inserting the cable inside HDPE pipe. The HDPE pipe shall be erected in such a way that 300mm shall be below the ground level and the rest 2700 mm shall be supported on the DP Structure with 01 No Polymer cleat.All materials including polymer cleat and Nut bolt to be provided by contractor.  | Per Job | 1461         |
| 16      | 9925000016 | Providing and fixing of pipe type earthing from 80 mm dia class-B GI pipe with pit to be filled with salt & coke and construction of chamber as per DGVCL Drg. No. dg /100 for DP and cable. The earthing pit should be joined with cable by G.I. strip of size 1" width & 2 mm thick. All material GI pipe, Coke, Salt etc will be supplied by bidder.  | No.     | 3635         |
| 17      | 9925000017 | Supply & fixing of heat shrink type end terminations (outdoor) for upto 11kv 3C x 185 mm2 size XLPE cable as per DGVCL technical specification   | No.     | 3635         |
| 18      | 9925000018 | Supply & fixing of heat & shrinkable end terminations (outdoor) for upto 22 kv 3C x 185 mm2 size XLPE cable as per DGVCL technical specification)  | No.     | 6231         |
| 19      | 9925000019 | Supply & fixing of heat shrink type end terminations (indoor) for upto 11kv 3C x 185 mm2 size XLPE cable as per DGVCL technical specification)   | No.     | 3635         |
| 20      | 9925000020 | Supply & fixing of heat & shrinkable end terminations (indoor) for upto 22 kv 3C x 185 mm2 size XLPE cable as per DGVCL technical specification  | No.     | 6231         |
| 21      | 9925000021 | Supply & fixing of heat shrinkable straight through joint for upto 11kv 3C x 185 mm2 size XLPE cables as per DGVCL technical specification.  | No.     | 6774         |
| 22      | 9925000022 | Supply & fixing of heat shrinkable straight through joint type for upto 22kv 3C x 185 mm2 size XLPE cable as per DGVCL technical specification   | No.     | 11590        |

|    |            |  |     |       |
|----|------------|--|-----|-------|
| 23 | 9925000023 | Labour charge for excavation of 2100mm long x 1200mm wide x 1200 mm deep joint pits for installation of 11kV / 22kV Straight through joints as per instruction of engineer-in-charge & covering the cable with 150 mm dia (Outer), thickness 25 mm, 1.0 meter long RCC half round muffs & refilling same as per instruction of EIC.  | No. | 399   |
| 24 | 9925000024 | Providing and fixing of insulating bus bar, made from 11KV/22KV XLPE cable after removal of semi conducting layer and applying of PVC heat shrinkable anti-tracking core insulating tubing (1.1KV), on both end terminal using Aluminium long barrel heavy duty up to 240 sq mm lugs, Aluminium bus connector. Taping with PG- clamp for bus conductor as per drawing and as per instruction of EIC. The Aluminium lugs and PG clamp shall be covered with 11KV/22KV HT insulating tapes.(11KV/22KV XLPE cable will be in scope of DGVCL while all other materials will be in bidder's scope)  | No. | 1661  |
| 25 | 9925000025 | Testing of cable at various points and commissioning the feeder as per instruction of engineer-in-charge. Test result shall be submitted by contractor with bill.  | No. | 2125  |
| 26 | 9925000026 | Preparation and submission of 6 (six) copies, of complete layout drawings with GIS mapping as per actual cable routing showing road crossing, HDPE pipe sleeving, jointing locations, markers etc. Signed by: JAYES  | Set | 2338  |
| 27 | 9925000027 | Providing and fixing of Sign Board at junction point Made out of 2 mm aluminium sheet size 750x300 mm (2.5 x 1ft) rectangle, as per design, pre treated with phosphate process and acid etching coated with one coat of epoxy primer and two coats of best quality paints, reflectorised with Hi-Intensity retro – reflective sheeting as per the latest and frame fabricated from suitable size iron angle. The Sign Board is to be fixed on the base prepared from channel and bracing angles which is grouted by means of cement concreting of 1:2:4 for size of 300 mm dia x 800 mm height (500 mm to be grouted in ground). The details to be displayed on sign board will be given by In-charge Engineer. (a) Hi intensity Micro prismatic Grade | No. | 10023 |
| 28 | 9925000028 | Providing and fixing of Sign Board (Danger Board) on Distribution Transformer Centers Made out of 2mm aluminium sheet size 300x300mm (1x1ft) as per design, pre treated with phosphate process and acid etching coated with one coat of epoxy primer and two coats of best quality paints, reflectorised with Hi-Intensity retro- reflective sheeting as per the latest and frame fabricated from suitable size iron angle. The Sign Board (Danger Board is to be fixed at the location as per instruction of In-charge Engineer. (a) Hi intensity Micro prismatic Grade   | No. | 2805  |
| 29 | 9925000029 | Providing & fixing of aluminium tag of size 250 mm (L) x 75 mm (W) from 3 mm aluminium sheet along with 1.0 mm dia aluminium binding wire for fixing of aluminium tag near end termination joint at DP structure for identifying the cable. The details of feeder i.e. 11 / 22 KV with feeder name should be punched on the tag by letter punch of size 16 mm as per instruction of In-charge Engineer.  | No. | 83    |
| 30 | 9925000030 | Supply & fixing of heat shrink type end terminations (outdoor) for 11kV 3C x 240 mm2 size XLPE cable as per DGVCL technical specification  | No. | 4427  |
| 31 | 9925000031 | Supply & fixing of heat & shrinkable end terminations (outdoor) for 22 kV 3C x 240 mm2 size XLPE cable as per DGVCL technical specification)   | No. | 6231  |
| 32 | 9925000032 | Supply & fixing of heat shrink type end terminations (indoor) for 11kV 3C x 240 mm2 size XLPE cable as per DGVCL technical specification)  | No. | 4338  |
| 33 | 9925000033 | Supply & fixing of heat & shrinkable end terminations (indoor) for 22 kV 3C x 240 mm2 size XLPE cable as per DGVCL technical specification   | No. | 6231  |
| 34 | 9925000034 | Supply & fixing of heat shrinkable straight through joint for 11kV 3C x 240 mm2 size XLPE cables as per DGVCL technical specification.   | No. | 6829  |
| 35 | 9925000035 | Supply & fixing of heat shrinkable straight through joint type for 22kV 3C x 240 mm2 size XLPE cable as per DGVCL technical specification  | No. | 11590 |
| 36 | 9925000038 | Installation, Testing and commissioning of 11 KV,630 A SCADA Compatible, RRL type- 3 Way RMU including Two numbers of earthings as per Drawing (material is in bidder's scope) and as per DGVCL Technical specification.   | No. | 42000 |
| 37 | 9925000039 | Installation, Testing and commissioning of 11 KV,630 A SCADA Compatible, RRL type- 4 Way RMU including Two numbers of earthings as per Drawing (material is in bidder's scope) and as per DGVCL Technical specification.   | No. | 42000 |

|    |            |   |                   |                |
|----|------------|---|-------------------|----------------|
| 38 | 9925000040 | Installation, Testing and commissioning of 22KV,630 A SCADA Compatible, RRL type-3 Way, RMU including Two numbers of earthings as per Drawing (material is in bidder's scope) and as per DGVCL Technical specification.   | No.               | 53000          |
| 39 | 9925000041 | Installation, Testing and commissioning of 22KV,630 A SCADA Compatible, RRL type-4 Way, RMU including Two numbers of earthings as per Drawing (material is in bidder's scope) and as per DGVCL Technical specification.   | No.               | 54500          |
| 40 | 9925000042 | Construction of plinth for 11KV, RRL type- 3 Way (i.e Two numbers of Isolator & One number of Breaker) Ring Main Unit as per DGVCL's technical specification mentioned in drawing no: Drg. 11kv-01. All required material will be supplied by contractor.   | No.               | 28043.22       |
| 41 | 9925000043 | Construction of plinth for 11KV, RRL type- 4 Way (i.e Two numbers of Isolator & Two number of Breaker) Ring Main Unit as per DGVCL's technical specification mentioned in drawing no: Drg. 11kv-02. All required material will be supplied by contractor.   | No.               | 32345.76       |
| 42 | 9925000044 | Construction of plinth for 22KV, RRL type- 3 Way (i.e Two numbers of Isolator & One number of Breaker) Ring Main Unit as per DGVCL's technical specification mentioned in drawing no: Drg. 22kv-01. All required material will be supplied by contractor.<br>Signed by: JAYESH SHANKERLAL KE  | No.               | 32345.76       |
| 43 | 9925000045 | Construction of plinth for 22KV, RRL type- 4 Way (i.e Two numbers of Isolator & Two number of Breaker) Ring Main Unit as per DGVCL's technical specification mentioned in drawing no: Drg. 22kv-02. All required material will be supplied by contractor.   | No.               | 37090.68       |
| 44 | 9925000046 | Modifications e.g. Providing and fixing of Terminal protectors i.e. Re-use able boot (HT Side 11/22KV, LT Side 1.1KV) including 11/22 KV insulating taps and L.T.(1.1 KV) insulating taps ,Busbar, Tapping from Bus Bar (11/22 KV XLPE cable) through P.G. Clamp for H.T. Jumper to D.O. Fuse to bushings of Transformer Center, providing & Fixing of jumper and providing & fixing of Heat Shrinkable Anti Tracking Core Insulating Tubing (Insulation Level 11/22 KV) in H.T. jumper , Clamping arrangement of cable support frame on both side of existing Over Head type Distribution Transformer to utilize in Under Ground cable network as per drawing & as per instruction of Engineer incharge. All live parts i.e. PG-Clamp, connections of D.O.fuses, HT bushings etc . shall be covered with fixing of 11/22 KV HT insulating tapes. ( 11/22 KV XLPE cable will be in scope of DGVCL while all other materials will be in bidder's scope ) . | No.               | 10152          |
| 45 | 9925000047 | Laying of any size of 11/ 22 KV XLPE /PILC Cable in redaymade trench or in open space   | Per Cable Per Mtr | 27             |
| 46 | 9925000060 | Labour charges for Lying of O/H XLPE cable pole to pole   | KM                | 70320          |
| 47 | 9925000064 | Supply of 150 mm dia (Inner), thickness 25 mm, 1.0 meter long RCC half round pipe   | No.               | 135            |
|    |            | To Attend the cable fault side within three hours from receiving message from DE of concern subdivision and locating the fault UG cable   | No                | 15000          |
|    |            |   | No                |                |
|    |            | <b>ESTIMATE COST: Ninety Lakh Rupees Only.</b>  | <b>ESTIMATE</b>   | <b>9000000</b> |

Note :

- 1 The rates are inclusive of PF and work contract tax and exclusive of Service Tax/GST.
- 2 DGVCL will provide 1 ph. & 3 ph. LT Aerial Bunch Cable / 11 & 22 KV HT Aerial Bunch Cable with necessary accessories to the contractor.
- 3 on ABC by insulated pierce connectors through service connection box.
- 4 The contractor has to collect all the required materials from DGVCL store as well as credit the dismantle material to the DGVCL store at their cost.
- 5 Whatever steel material removed after replacement should be credited to store.

EXECUTIVE ENGINEER [O&M];  
DGVCL DIVISION.