



**Government of Pakistan  
Revenue Division  
Federal Board of Revenue  
(Pakistan Raises Revenue Program Office)**

Re. No. 3(7)/2026-Addl-Dir(P&F) / 565389

Dated: 18<sup>th</sup> September 2026

**Subject: MINUTES OF PRE-BID MEETING AND RESPONSES TO THE CLARIFICATION - FRAMEWORK AGREEMENT FOR THE PROCUREMENT AND INSTALLATION OF EXTERNAL ELECTRIFICATION SYSTEMS FOR DIGITAL ENFORCEMENT STATIONS (DES) AT INDUS SITES, PHASE-I (10 SITES).**

The Federal Board of Revenue (FBR), Pakistan has received financing from the World Bank toward the cost of the Pakistan Raises Revenue Program (PPRP) and intends to apply part of the proceeds toward payments under the contract for Framework Agreement for the Procurement and Installation of External Electrification Systems for Digital Enforcement Stations (Des) at Indus Sites, Phase-I (10 Sites). The Specific Procurement Notice (SPN) was published vide PID No.1850/26 on 26<sup>th</sup> August 2026 and the Request for Bids (RFB) was published on the official website of FBR. As per the details provided in the SPN and RFB, the Pre-bid meeting was held on 1<sup>st</sup> September 2026, attendance sheets of the participant Firms is attached at **Annex-A**.

2. The meeting was attended by the members of Centralized Procurement / Evaluation Committee constituted for all procurement activities related to Digital Enforcement Stations and prospective bidders. The purpose of the Pre-bid Meeting was to provide clarifications on queries/questions raised by the representatives of the prospective bidders on the RFB Document for subject procurement activity, to facilitate them in preparation of effective technical and financial bids.

3. The FBR team gave a brief overview of the World Bank Procurement Guidelines and appraised the structure of the RFB Document. The prospective bidder representatives were thereafter invited to share their queries for clarification. In view of the queries raised by the bidder's representative during the meeting, the FBR team clarified the same in the light of the relevant clauses of the bidding document and Procuring Agency's requirements.

4. In addition, the representatives were also requested to share their queries in writing in order to avoid any confusion. In this regard, it was clarified that the Federal Board of Revenue

would reply to all the queries of the prospective bidders in the form of Minutes of Pre-Bid Meeting. The Minutes of Pre-Bid Meeting would be shared with all the prospective bidders who have participated in the Pre-Bid Meeting and/or would have asked for clarifications subsequent to the meeting. Besides, the Minutes would also be uploaded on the website of the Federal Board of Revenue [www.fbr.gov.pk/tenders](http://www.fbr.gov.pk/tenders) in addition to the addendum in light of approved amendments.

5. Accordingly, the following table responds to the queries received in writing during and / or after Pre-bid Meeting, by the prospective bidders and replies thereof by FBR:

| <b>LOT # 01 - Site 01: DI KHAN HAKLA MOTORWAY M-14(CPEC) (BOQ-01)</b> |                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                              |
|-----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                       | <b>QUERIES</b>                                                                                                                              | <b>RESPONSE</b>                                                                                                                                                                                                                                                                                                                                              |
| <b>Poles<br/>1(a) to 1(d)</b>                                         | <b>1.</b> Please share Drawing (12m Single bent)                                                                                            | <b>1.</b> Attached at <b>Annex-1</b>                                                                                                                                                                                                                                                                                                                         |
|                                                                       | <b>2.</b> Please share Drawing (12m Double bent)                                                                                            | <b>2.</b> Attached at <b>Annex-1</b> (Included)                                                                                                                                                                                                                                                                                                              |
|                                                                       | <b>3.</b> Please share Drawing (15 m high conical octagonal)                                                                                | <b>3.</b> Attached at <b>Annex-2</b><br><br>All the drawings shall be read together with the relevant BOQ and Technical Specifications.                                                                                                                                                                                                                      |
|                                                                       | <b>4.</b> Road Lighting Pole Foundation                                                                                                     | <b>4.</b> Foundation details for the applicable road-lighting poles are included in the respective pole drawings provided at Annexes 1 and 2. The Bidder shall follow the applicable drawing together with the BOQ and Technical Specifications.                                                                                                             |
| <b>Road Lights<br/>2(a) 2(b) &amp;<br/>3(a)</b>                       | <b>5.</b> Road Lighting LED Luminaries 120W                                                                                                 | <b>5.</b> SLD Not needed                                                                                                                                                                                                                                                                                                                                     |
|                                                                       | <b>6.</b> Surface mounted Batten LED                                                                                                        | <b>6.</b> SLD Not needed                                                                                                                                                                                                                                                                                                                                     |
|                                                                       | <b>7.</b> Junction box size 12"x08"x06" (for Flood Light connection) with angle iron Frame.                                                 | <b>7.</b> The detailed fabrication/shop drawing for the junction box and supporting frame shall be prepared by the Supplier in accordance with the dimensions, IP rating, material, workmanship and other requirements specified in the BOQ/Technical Specifications and submitted to the Engineer-in-Charge for approval prior to fabrication/installation. |
| <b>Wiring &amp;<br/>Accessories<br/>4(a) &amp; 4 (b)</b>              | <b>8.</b> Please Clear this scope of all Lots as where this will be applicable because as per Pre BID there is no scope inside the building | <b>8.</b> The gang box is for lighting operation purposes to be installed for poles mentioned (Sr#.1) Installation shall be at the applicable external locations in                                                                                                                                                                                          |

|                                                                        |                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                            |
|------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                        |                                                                                                                                                                                                                                                                  | accordance with the approved layout/shop drawings.                                                                                                                                                                                                                         |
|                                                                        | <b>9.</b> Please Clear this scope of all Lots as where this will be applicable because as per Pre BID there is no scope inside the building                                                                                                                      | <b>9.</b> Circuit wiring from junction box (Sr#3(a).) to Gang Box                                                                                                                                                                                                          |
| <b>Low Voltage Power Cables 5(a) &amp; 5(b)</b>                        | <b>10.</b> Please clarify as Transformer rating is 630KVA and 400KVA on this site and if we assume this cable 50mm 4 core for Transformer output then its size is not correct. Please clarify for which purpose this Cable will be used. SLD + Drawing required. | <b>10. Every size is correct</b> , SLD is attached <b>Annex-3</b> .                                                                                                                                                                                                        |
|                                                                        | <b>11.</b> Pls share SLD + Drawing for all types of cables                                                                                                                                                                                                       | <b>11. SLD Attached at Annex-3</b><br><br>Cable applications/connections shall be in accordance with the SLD, BOQ and Technical Specifications. Detailed routing/shop drawings shall be prepared by the Supplier and submitted for approval as required under Section VII. |
| <b>Main Panel Board</b>                                                | <b>12.</b> As here is Two Panels one is 800 Amp and Second 1250Amp SLD + Drawing required cum O/G Supply with the following specs:<br>Will One panel install with 400KVA and Second Panel with 630KVA Transformer                                                | <b>12.</b> Yes,<br>SLD Attached at <b>Annex-3</b> ,<br>Placement Layout (substation room is already shared in RFP)                                                                                                                                                         |
|                                                                        | <b>13.</b> Placement Layout Required                                                                                                                                                                                                                             | <b>13.</b> Placement Layout (substation room is already shared in RFP)                                                                                                                                                                                                     |
| <b>Lighting Control Panel</b>                                          | <b>14.</b> Road lighting control panel with angle iron frame cladded 14 SWG,<br>Pls share SLD + Drawing of All lots                                                                                                                                              | <b>14.</b> To be designed by Bidder in accordance with the BOQ, Technical Specifications, applicable SLD/layout and specified ratings/components as per RFB.                                                                                                               |
| <b>Power Factor Improvement (PFI) Panel (85 KVAR) &amp; (125 KVAR)</b> | <b>15. (85 kVAR)</b> Will this be install with 400KVA Transformer                                                                                                                                                                                                | <b>15. Yes.</b>                                                                                                                                                                                                                                                            |
|                                                                        | <b>16. (125 kVAR)</b> Will this be install with 630KVA Transformer, shifting, or installation of the generators.                                                                                                                                                 | <b>16. Yes.</b>                                                                                                                                                                                                                                                            |
| <b>Earthing</b>                                                        | <b>17.</b> Earthing Specifications as available in Tender document not clear please share Readable Specifications                                                                                                                                                | <b>17.</b> The readable earthing specifications are attached at <b>Annex-4</b>                                                                                                                                                                                             |
| <b>Transformer (As Per WAPDA Specs)</b>                                | <b>18.</b> As per Pre-Bid 400KVA Transformer will just provide but no need to install this please clear do we need to install and provide connectivity                                                                                                           | <b>18.</b> This will be installed in this or a nearby site on the same pattern with compatible equipment and accessories.                                                                                                                                                  |
|                                                                        | <b>19.</b> Is PEL/ Transfopower/ Climax are acceptable                                                                                                                                                                                                           | <b>19.</b> No particular manufacturer/brand is being pre-approved through this clarification.                                                                                                                                                                              |

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|------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                      |                                                                                                                                                                                                                                     | Any offered transformer shall be acceptable subject to full compliance with the technical specifications, applicable standards, documentary requirements and other provisions of the RFB. The Bidder remains responsible for demonstrating conformity in accordance with ITB 16.                                                                                                                                                                                                                                                                                                                                           |
|                                                      | <b>20.</b> Drawing + SLD required                                                                                                                                                                                                   | <b>20.</b> Attached at Annex-3, shall be read together with the BOQ and Technical Specifications.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>MV Cable and Termination Kits</b>                 | <b>21.</b> How to Bring 11KV Cable up to Transformer as Poles scope not define to lay cable from HT to Transformer Input                                                                                                            | The Supplier shall coordinate with the relevant DISCO/utility for obtaining the permanent 11 kV electrical connection and complete the formalities required under the RFB. Actual connection charges raised by the DISCO/utility shall be dealt with in accordance with the Provisional Sum provision of the BOQ/Contract. The Supplier shall execute the MV cable, termination and associated works expressly included in the BOQ, SLD and Technical Specifications. Any requirement outside the priced BOQ/Call-off scope shall not be assumed by the Bidder unless formally instructed in accordance with the Contract. |
| <b>LOT # 01 - Site 02: KALA BAGH BRIDGE (BOQ-02)</b> |                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Low Voltage Power Cables</b>                      | <b>22.</b> Transformer rating is 630KVA on this site and if we assume this cable 50mm 4 core for Transformer output then it's size is not correct. Please clarify for which purpose this Cable will be used. SLD + Drawing required | <b>22.</b> Every size is correct, SLD is attached <b>Annex-3</b> ,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Questions form ser#.5(b) to 12.</b>               | Drawing + SLD required                                                                                                                                                                                                              | Similar query has already been clarified                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>5 &amp; 6</b>                                     | <b>Main Panel Board</b><br>As here is Two Panels one is 800 Amp and Second 1250Amp SLD + Drawing required as do we need to connect two incoming with one 630KVA Transformer<br>Please share SLD + Drawing of this site              | Similar query has already been clarified                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

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|-----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|
| 8                                                   | Pls confirm this scope as here are two PFI one 85KVAR and Second 125KVAR<br>Please Share SLD + Drawing of this site                                                                                                      | Similar query has already been clarified |
| 9                                                   | <b>Power Factor Improvement (PFI) Panel (125 KVAR)</b><br>Pls confirm this scope as here are two PFI one 85KVAR and Second 125KVAR<br>Please Share SLD + Drawing of this site                                            | Similar query has already been clarified |
| 12                                                  | <b>MV Cable and Termination Kits</b><br>How to Bring 11KV Cable up to Transformer as Poles scope not define to lay cable from HT to Transformer Input                                                                    | Similar query has already been clarified |
| <b>LOT # 01 - Site 03: JINNAH BRIDGE (BOQ-03)</b>   |                                                                                                                                                                                                                          |                                          |
| 5(a)                                                | Transformer rating is 630KVA on this site and if we assume this cable 50mm 4 core for Transformer output then its size is not correct. Please clarify for which purpose this Cable will be used. SLD + Drawing required  | Similar query has already been clarified |
| 5(b)                                                | Please share SLD + Drawing of this site                                                                                                                                                                                  | Similar query has already been clarified |
| 6                                                   | Please share SLD + Drawing of this site                                                                                                                                                                                  | Similar query has already been clarified |
| 8                                                   | <b>Power Factor Improvement (PFI) Panel (125 KVAR)</b>                                                                                                                                                                   | Similar query has already been clarified |
| 12                                                  | <b>MV Cable and Termination Kits</b><br>How to Bring 11KV Cable upto Transformer as Poles scope not define to lay cable from HT to Transformer Input share SLD + Drawing                                                 | Similar query has already been clarified |
| <b>LOT # 01 - Site 04: CHASHMA BARRAGE (BOQ-04)</b> |                                                                                                                                                                                                                          |                                          |
| 5                                                   | Transformer rating is 630KVA on this site and if we assume this cable 50mm 4 core for Transformer output then it,s size is not correct. Please clarify for which purpose this Cable will be used. SLD + Drawing required | Similar query has already been clarified |
| 5(a) & 5(b)                                         | Please Share SLD + Drawing of this site                                                                                                                                                                                  | Similar query has already been clarified |
| 6                                                   | <b>Main Panel Board (MPB)</b><br>SLD + Drawing required                                                                                                                                                                  | Similar query has already been clarified |
| 8                                                   | In this Lot Scope is clear as asking for one Panel of 1250 Amp<br>SLD + Drawing required                                                                                                                                 | Similar query has already been clarified |
| 11                                                  | How to Bring 11KV Cable up to Transformer as Poles scope not define to lay cable from HT to Transformer Input                                                                                                            | Similar query has already been clarified |
| <b>LOT # 02 (GUDDU BARRAGE &amp; KOTRI BRIDGE):</b> |                                                                                                                                                                                                                          |                                          |

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| <b>5 (i to vi)</b>                                                                                         | Transformer rating is 630KVA on this site and if we assume this cable 50mm 4 core for Transformer output then its size is not correct. Please clarify for which purpose this Cable will be used. SLD + Drawing Required | Similar query has already been clarified |
| <b>6</b>                                                                                                   | Main Panel Board (MPB)<br>Scope is clear one Panel<br>Please share SLD + Drawing                                                                                                                                        | Similar query has already been clarified |
| <b>8</b>                                                                                                   | <b>Power Factor Improvement (PFI) Panel (125 KVAR)</b><br>Scope is clear one Panel<br>Please share SLD + Drawing                                                                                                        | Similar query has already been clarified |
| <b>11</b>                                                                                                  | <b>MV Cable and Termination Kits</b><br>How to Bring 11KV Cable up to Transformer as Poles scope not define to lay cable from HT to Transformer Input                                                                   | Similar query has already been clarified |
| <b>LOT # 02 - Site 02: KOTRI BRIDGE (BOQ-06)</b>                                                           |                                                                                                                                                                                                                         |                                          |
| <b>5</b>                                                                                                   | Transformer rating is 630KVA on this site and if we assume this cable 50mm 4 core for Transformer output then its size is not correct. Please clarify for which purpose this Cable will be used. SLD + Drawing Required | Similar query has already been clarified |
| <b>6</b>                                                                                                   | <b>Main Panel Board (MPB)</b><br>Please share SLD + Drawing                                                                                                                                                             | Similar query has already been clarified |
| <b>11</b>                                                                                                  | <b>MV Cable and Termination Kits</b><br>How to Bring 11KV Cable up to Transformer as Poles scope not define to lay cable from HT to Transformer Input<br>Please share SLD + Drawings                                    | Similar query has already been clarified |
| <b>LOT # 03 (SEHWAN (ARAL BIDGE), SEHWAN BHAN SAEED ABAD, KHUKERA &amp; HUB MYGARHI OR CHLEGHEZI CUT):</b> |                                                                                                                                                                                                                         |                                          |
| <b>5</b>                                                                                                   | Transformer rating is 630KVA on this site and if we assume this cable 50mm 4 core for Transformer output then its size is not correct. Please clarify for which purpose this Cable will be used. SLD + Drawing Required | Similar query has already been clarified |
| <b>6</b>                                                                                                   | <b>Main Panel Board (MPB)</b><br>Please share SLD + Drawing                                                                                                                                                             | Similar query has already been clarified |
| <b>11</b>                                                                                                  | <b>MV Cable and Termination Kits</b><br>How to Bring 11KV Cable up to Transformer as Poles scope not define to lay cable from HT to Transformer Input<br>Please share SLD + Drawings                                    | Similar query has already been clarified |
| <b>LOT # 03 - Site 02: SEHWAN BHAN SAEED ABAD (BOQ-08)</b>                                                 |                                                                                                                                                                                                                         |                                          |
| <b>5</b>                                                                                                   | Transformer rating is 630KVA on this site and if we assume this cable 50mm 4 core for Transformer output then its size is not correct. Please clarify for                                                               | Similar query has already been clarified |

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|                                                                    | which purpose this Cable will be used. SLD + Drawing Required                                                                                                                                                           |                                          |
| <b>6</b>                                                           | <b>Main Panel Board (MPB)</b><br>Scope is clear. Please share SLD + Drawing                                                                                                                                             | Similar query has already been clarified |
| <b>11</b>                                                          | <b>MV Cable and Termination Kits</b><br>How to Bring 11KV Cable up to Transformer as Poles scope not define to lay cable from HT to Transformer Input<br>Please share SLD + Drawings                                    | Similar query has already been clarified |
| <b>LOT # 03 - Site 03: KHUKERA (BOQ-9)</b>                         |                                                                                                                                                                                                                         |                                          |
| <b>5</b>                                                           | Transformer rating is 630KVA on this site and if we assume this cable 50mm 4 core for Transformer output then its size is not correct. Please clarify for which purpose this Cable will be used. SLD + Drawing Required | Similar query has already been clarified |
| <b>5(a) &amp; (b)</b>                                              | Please Share SLD + Drawing of this site                                                                                                                                                                                 | Similar query has already been clarified |
| <b>6</b>                                                           | <b>Main Panel Board (MPB)</b><br>Please share SLD + Drawing                                                                                                                                                             | Similar query has already been clarified |
| <b>7</b>                                                           | <b>Lighting Control Panel</b>                                                                                                                                                                                           | Similar query has already been clarified |
| <b>8</b>                                                           | <b>Power Factor Improvement (PFI) Panel (125 KVAR)</b><br>Please share SLD + Drawing                                                                                                                                    | Similar query has already been clarified |
| <b>11</b>                                                          | <b>MV Cable and Termination Kits</b><br>How to Bring 11KV Cable up to Transformer as Poles scope not define to lay cable from HT to Transformer Input.<br>Please share SLD + Drawings                                   | Similar query has already been clarified |
| <b>LOT # 03 - Site 04: HUB (MYGARHI OR CHLEGHEZI CUT) (BOQ-10)</b> |                                                                                                                                                                                                                         |                                          |
| <b>5</b>                                                           | Transformer rating is 630KVA on this site and if we assume this cable 50mm 4 core for Transformer output then its size is not correct. Please clarify for which purpose this Cable will be used. SLD + Drawing Required | Similar query has already been clarified |
| <b>5(a) &amp; (b)</b>                                              | Please Share SLD + Drawing of this site                                                                                                                                                                                 | Similar query has already been clarified |
| <b>6</b>                                                           | <b>Main Panel Board (MPB)</b><br>Please share SLD + Drawing                                                                                                                                                             | Similar query has already been clarified |
| <b>7</b>                                                           | <b>Lighting Control Panel</b>                                                                                                                                                                                           | Similar query has already been clarified |
| <b>8</b>                                                           | <b>Power Factor Improvement (PFI) Panel (125 KVAR)</b><br>Please share SLD + Drawing                                                                                                                                    | Similar query has already been clarified |
| <b>11</b>                                                          | <b>MV Cable and Termination Kits</b><br>How to Bring 11KV Cable up to Transformer as Poles scope not define to lay cable from HT to Transformer Input.                                                                  | Similar query has already been clarified |

|                        |                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                        | Please share SLD + Drawings                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>GENERAL QUERIES</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Site Survey</b>     | We would to conduct site survey on Kalabagh site and Chashma Site so please give us contact person name, Phone number to coordinate with <b>whom</b> for details survey. Concern person should have site info and brief us as where transformer will be installed, from where we will take 11KV, how to bring to Transformer, Cable distribution and how many Buildings will be connected with supplied panels as per RFP. It is necessary | <ul style="list-style-type: none"> <li>• Contact person details will be provide separately on request via email.</li> <li>• Civil Site contractors / Consultant (RE) are also deputed at site.</li> <li>• All info is clear in layout as number of buildings are same and SLD is also given at <b>Annex-03</b></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Warranty 3 Year</b> | Please clarify the warranty Terms as normally on Electrical items warranty is one Year like Lights, Breakers, Transformer Etc.                                                                                                                                                                                                                                                                                                             | The Bidder's attention is drawn to the distinction between after-sales service under BDS ITB 17.2(b), warranty obligations, and Performance Security. BDS ITB 17.2(b) states that after-sales service is not required; however, this does not waive or modify the Supplier's warranty/defects-remedy obligations under the Framework Agreement and applicable Call-off Contract. The warranty shall remain as specified in the RFB, i.e., 36 months after delivery and acceptance at the final destination, or 42 months after shipment from the port/place of loading in the country of origin, whichever period concludes earlier. The Performance Security requirement under ITB 48 also remains applicable independently and shall be 10% of the accepted Framework Agreement price of the respective awarded Lot, excluding fixed Provisional Sums. No separate three-year O&M obligation shall be inferred unless expressly specified elsewhere in the RFB." |
|                        | <p>Burning of Cable, Breaker, Light will not cover under warranty as per manufacturer.</p> <p>How to warranty will be proceed because as per RFP ITB 17.2 (b) After sales service is not required. So 10% Performance Guarantee will not be applicable</p>                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Accommodation</b>   | Accommodation Will Customer provide accommodation with necessary requirements on site or not                                                                                                                                                                                                                                                                                                                                               | <b>No.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| -                      | -                                                                                                                                                                                                                                                                                                                                                                                                                                          | The bidder must have <b>“Electrical contractors register under the EE (Electrical/Electronic) discipline</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

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|  |  | <p><b>in PEC (Pakistan Engineering Council)”</b><br/> <b>in the following categories:</b></p> <p><b>EE04 Low Voltage Installation:</b><br/> Low voltage distribution and wiring.</p> <p><b>EE05 High Voltage Installation:</b><br/> Substations and high-tension lines.</p> <p><b>EE06 Specialized Lighting System:</b> Stadium, theatrical, or complex architectural lighting.</p> <p><b>EE07 Telecommunication Installation:</b> Network cabling and telecom infrastructure.</p> <p><b>EE11 General Electrical Works Only:</b> General power installations, solar, and street lighting.</p> |
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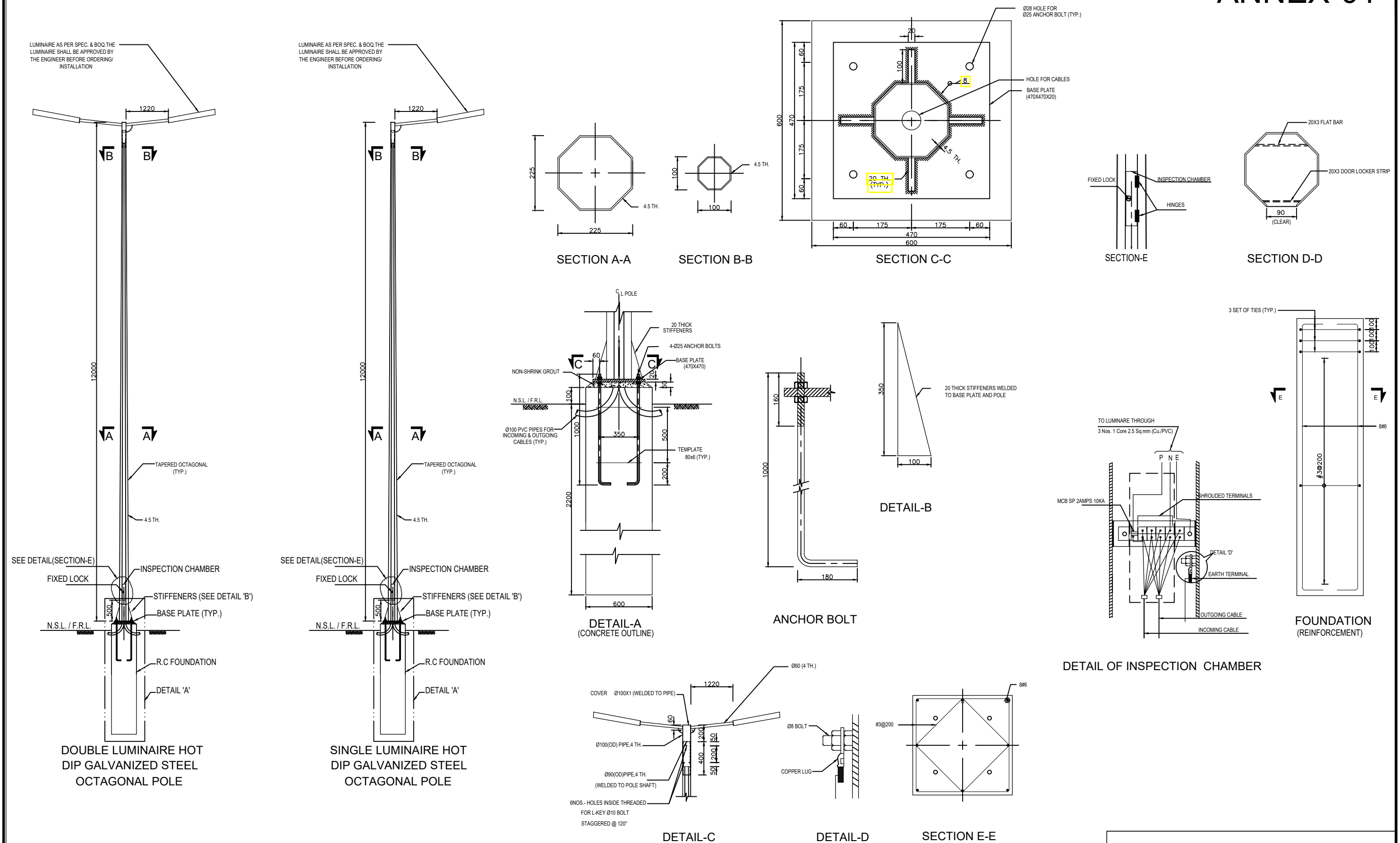
6. The remaining terms and conditions of the RFB shall remain the same except for those included in the subsequently issued corrigendum/ addendum (if any) and these clarifications and responses shall be deemed as part of the Request for Bids (RFB).

***Note:***

*These clarifications/ amendments are issued with the approval of the concerned committee.*

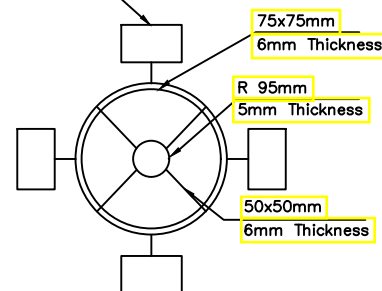
| Attendance Sheet of Firms (Pre-Bid Meeting) |                              |                     |                                                                                                                                            |              |                                  |           |
|---------------------------------------------|------------------------------|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------|--------------|----------------------------------|-----------|
| Title:                                      |                              |                     | Procurement and Installation of External Electrification Systems for Digital Enforcement Stations (DES) at Indus Sites, Phase-I (10 Sites) |              |                                  |           |
| Ref No.                                     |                              |                     | 3(7)/2026-Addl-Dir(P&F) / PK-FBR-565389-GO-RFB                                                                                             |              |                                  |           |
| Program:                                    |                              |                     | Pakistan Raises Revenue Program (PRRP)                                                                                                     |              |                                  |           |
| Venue:                                      |                              |                     | FBR Headquarter, Constitution Avenue, Islamabad                                                                                            |              |                                  |           |
| Date of Bid Opening                         |                              |                     | Tuesday, September 1, 2026                                                                                                                 |              | Time                             | 11:30 a.m |
| Sr No                                       | Firm Name                    | Representative Name | Designation                                                                                                                                | Contact      | Email                            | Signature |
| 1                                           | SIMCO Shoukat Iqbal Mir & Co | Zakir Khan          |                                                                                                                                            | 0332-5037420 | Zakir.Khan @ simcodevelopers.com | online    |
| 2                                           | CMC                          | Amjad Shakoor       |                                                                                                                                            | 0331-4575463 | cmcupps@cmc-net.pk               | online    |
| 3                                           | CMC                          | Souhaib Safdar      | Sr. Sales Mgr                                                                                                                              | 0300-8665247 | SouhaibSafdar@cmc.NET.PK         | as        |
| 4                                           | Babar Ishtiaq & Co           | Farhan Babar        | Director                                                                                                                                   | 0302-8888930 | Farhan.Babar-bire@hotmail.com    |           |
| 5                                           |                              |                     |                                                                                                                                            |              |                                  |           |
| 6                                           |                              |                     |                                                                                                                                            |              |                                  |           |
| 7                                           |                              |                     |                                                                                                                                            |              |                                  |           |

# ANNEX-01

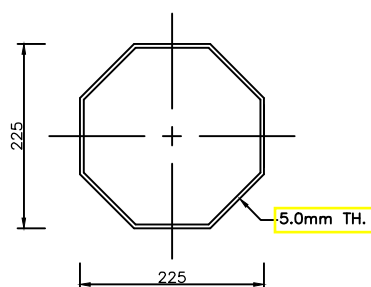


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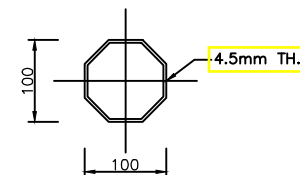
|                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                             |      |      |             |          |             |                                                                                       |                                                                                                  |                                                                                        |                                  |                                                                                                          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------|-------------|----------|-------------|---------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|----------------------------------|----------------------------------------------------------------------------------------------------------|
| CLIENT<br><div><p><b>GOVERNMENT OF PAKISTAN</b><br/>REVENUE DIVISION<br/>FBR (CUSTOMS WING)</p></div> | <div><p><b>NATIONAL ENGINEERING SERVICES</b><br/>PAKISTAN (PVT.) LTD.</p></div> <div>ARCHITECTURE &amp; PLANNING DIVISION KARACHI.<br/>4th Floor, N.I.C.L Building, Abbasi Shaheed Road, Karachi, Tel: 99225430-34</div> | 04   |      |             |          | DRAWN       |  | PROJECT<br><div><b>KOTRI BRIDGE HYDERABAD</b><br/>PLOT AREA = 218948 SQ.FT.<br/>( 5 ACRE )</div> | TITLE: DETAILS OF 12M CONICAL OCTAGONAL LIGHTING POLE WITH SINGLE & DOUBLE ARM BRACKET |                                  | SCALE                                                                                                    |
|                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                             | 03   |      |             |          | SUBMITTED   |  |                                                                                                  | DATE<br>JULY, 2025                                                                     | DRAWING NO.<br>----/161/CD/5E002 | REV.<br><div></div> |
|                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                             | 02   |      |             |          | RECOMMENDED |  |                                                                                                  |                                                                                        |                                  |                                                                                                          |
|                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                             | 01   |      |             |          | CHD./VER.   |  |                                                                                                  |                                                                                        |                                  |                                                                                                          |
|                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                             | REV. | DATE | DESCRIPTION | APPROVED | APPROVED    |  |                                                                                                  |                                                                                        |                                  |                                                                                                          |



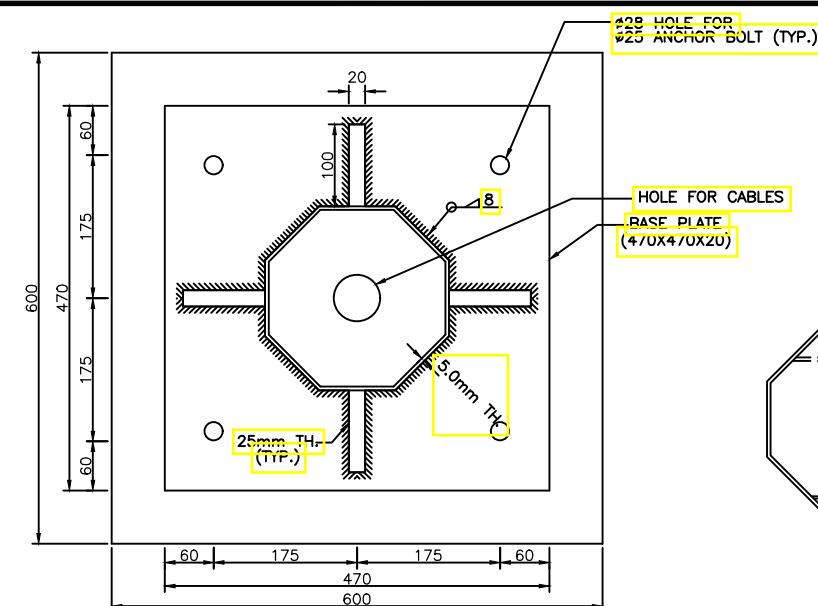
TOP VIEW WITH LIGHTS  
CIRCULAR ANGULAR SECTION  
(4Nos. LIGHTS)



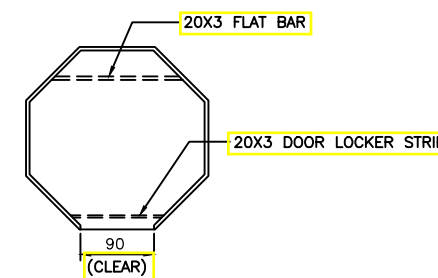
SECTION A-A



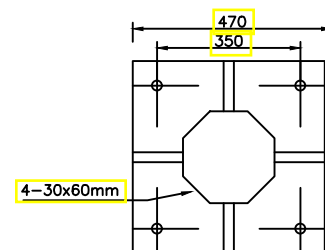
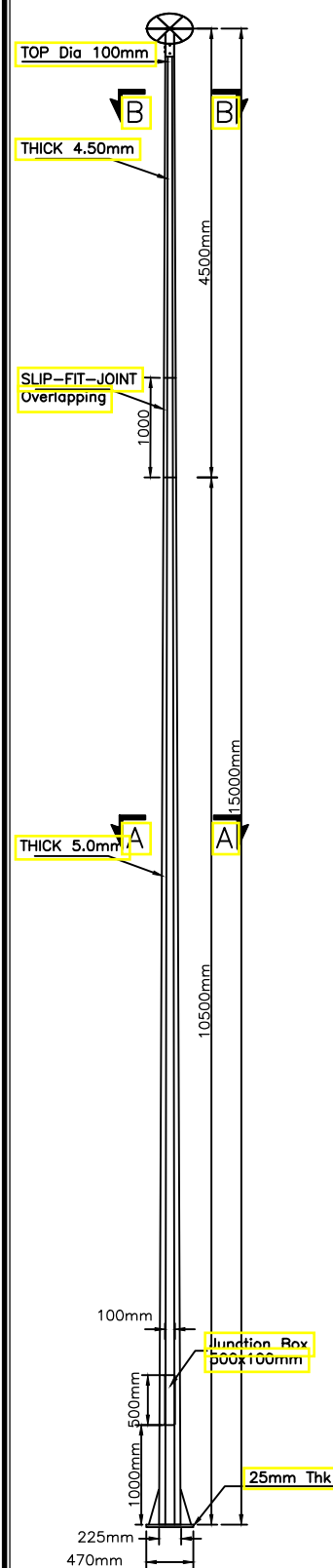
SECTION B-B



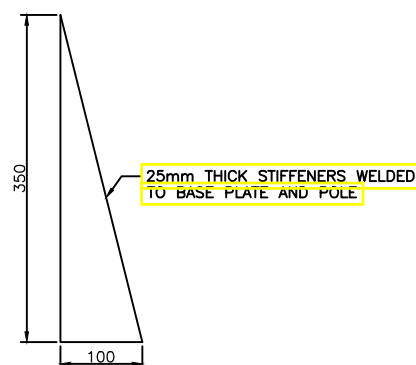
SECTION C-C



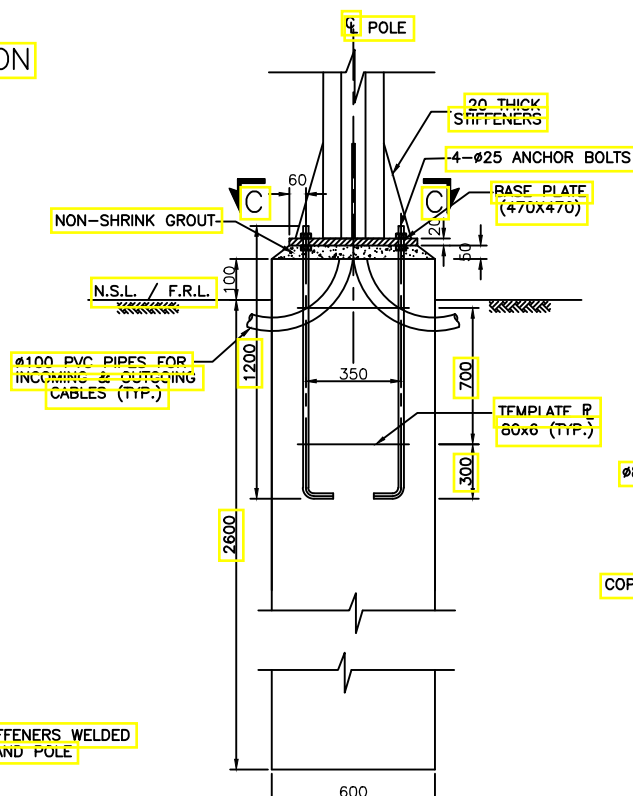
SECTION D-D



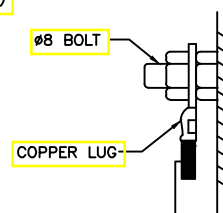
BASE PLATE



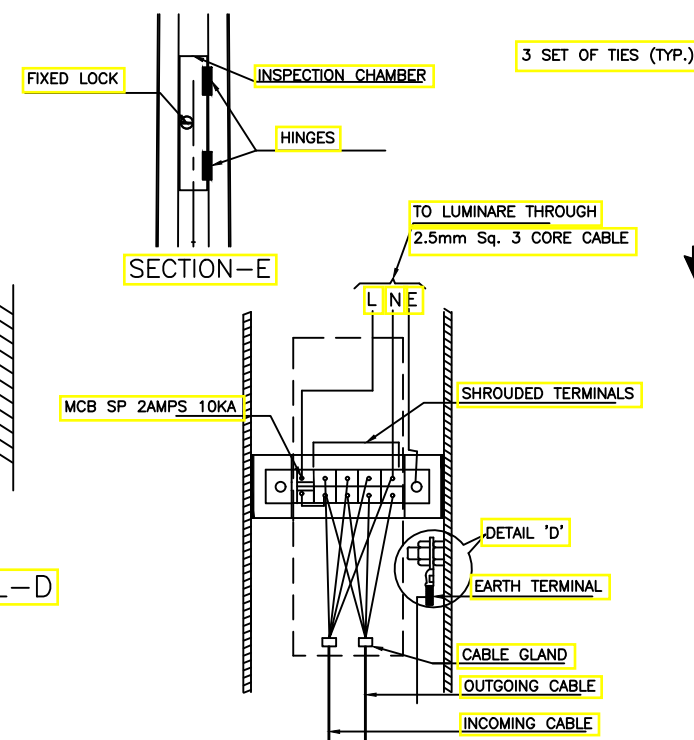
DETAIL-B



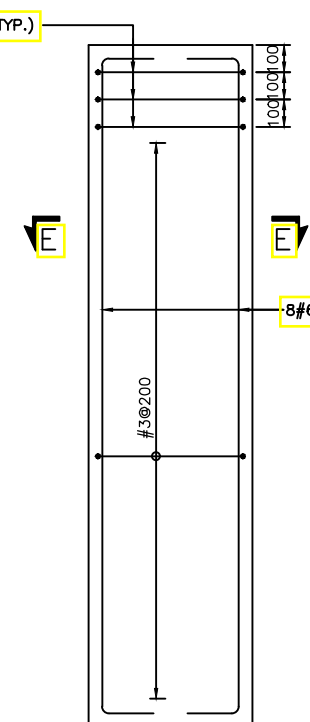
DETAIL – A  
(CONCRETE OUTLINE)



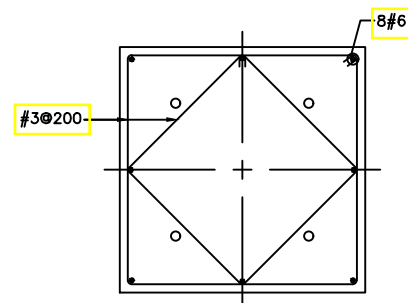
DETAIL-D



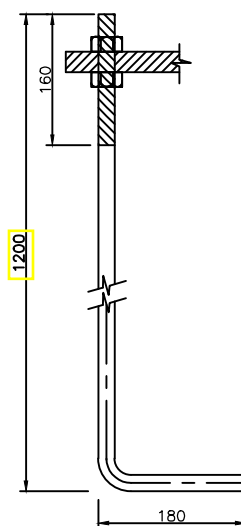
## DETAIL OF INSPECTION CHAMBER



FOUNDATION  
(REINFORCEMENT)



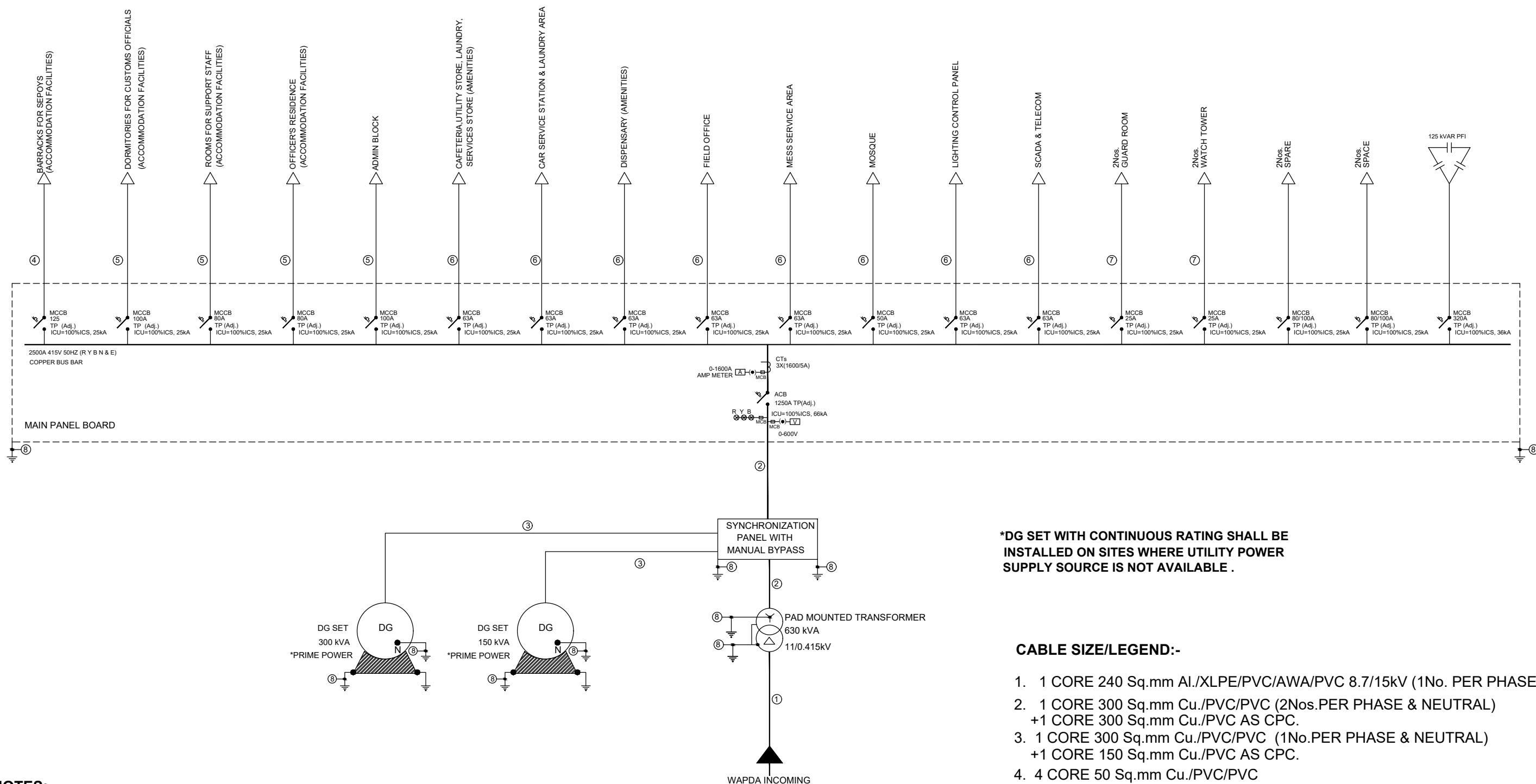
SECTION E-E



ANCHOR BOLT

1. FOR GENERAL NOTES REFER DRAWING NO. G01.
2. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
3. UNLESS OTHERWISE NOTED, CONCRETE SHALL BE CLASSIFIED AS FOLLOWS.  
CONCRETE CLASS 28 DAYS (15x30 CM) CYLINDER STRENGTH Kg/sq. Cm  
REINFORCED A 210 (3000 psi)
4. THE STEEL FOR POLE SHALL BE OF YIELD STRENGTH OF 350MPa(50Ksi).
5. THE STEEL FOR BASE PLATE AND STIFFENERS ETC. SHALL CONFORM  
TO ASTM A36 (250 MPa) STEEL.
6. THE ANCHOR BOLTS SHALL CONFORM TO ASTM A307.
7. ALL WELDING SHALL CONFORM TO THE APPLICABLE PROVISIONS OF A.W.S  
(AMERICAN WELDING SOCIETY) CODE.
8. THE BASE PLATE OF THE COLUMN SHALL BE LEVELED AND THEN GROUTED WITH  
NON SHRINK GROUT USING STANDARD APPROVED PROCEDURE.
9. ALL POLES, BASE PLATES AND ANCHOR BOLTS SHALL BE HOT DIPPED GALVANIZED.
10. LAYING DEPTH/PLACEMENT OF THE PVC PIPE INSIDE THE FOUNDATION CLASS "D"  
SHOULD BE ALIGNED THE PVC PIPE LAID AT GRADE ALONG THE ROAD.

ISSUED FOR CONSTRUCTION



**\*DG SET WITH CONTINUOUS RATING SHALL BE INSTALLED ON SITES WHERE UTILITY POWER SUPPLY SOURCE IS NOT AVAILABLE .**

#### CABLE SIZE/LEGEND:-

- 1 CORE 240 Sq.mm Al./XLPE/PVC/AWA/PVC 8.7/15kV (1No. PER PHASE )
- 1 CORE 300 Sq.mm Cu./PVC/PVC (2Nos.PER PHASE & NEUTRAL)  
+1 CORE 300 Sq.mm Cu./PVC AS CPC.
- 1 CORE 300 Sq.mm Cu./PVC/PVC (1No.PER PHASE & NEUTRAL)  
+1 CORE 150 Sq.mm Cu./PVC AS CPC.
- 4 CORE 50 Sq.mm Cu./PVC/PVC  
+1 CORE 25 Sq.mm Cu./PVC AS CPC.
- 4 CORE 35 Sq.mm Cu./PVC/PVC  
+1 CORE 16 Sq.mm Cu./PVC AS CPC.
- 4 CORE 25 Sq.mm Cu./PVC/PVC  
+1 CORE 16 Sq.mm Cu./PVC AS CPC.
- 4 CORE 10 Sq.mm Cu./PVC/PVC  
+1 CORE 10 Sq.mm Cu./PVC AS CPC.
- 1 CORE 70 Sq.mm Cu./PVC AS ECC.

#### NOTES:-

- THIS DRAWING IS FOR INDICATIVE DESIGN MODEL AND SHALL BE READ IN CONJUNCTION WITH ALL OTHER DRAWINGS, SPECIFICATIONS AND ITEMS OF BILL OF QUANTITIES.
- THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS, & VOLTAGE DROP CALCULATION TO THE ENGINEER AT THE TIME OF CONTRACT AWARD AND BEFORE THE WORK COMMENCES AT SITE.

CLIENT



**GOVERNMENT OF PAKISTAN  
REVENUE DIVISION  
FBR (CUSTOMS WING)**

CONSULTANT



**NATIONAL ENGINEERING SERVICES  
PAKISTAN (PVT.) LTD.**

ARCHITECTURE & PLANNING DIVISION KARACHI.  
4th Floor, N.I.C.L Building, Abbasi Shaheed Road, Karachi, Tel: 99225430-34

|      |      |             |          |             |  |
|------|------|-------------|----------|-------------|--|
| 04   |      |             |          | DRAWN       |  |
| 03   |      |             |          | SUBMITTED   |  |
| 02   |      |             |          | RECOMMENDED |  |
| 01   |      |             |          | CHD./VER.   |  |
| REV. | DATE | DESCRIPTION | APPROVED | APPROVED    |  |

PROJECT

**YAROO Custom Site  
PLOT AREA : 248861 SFT.  
(5.71 ACRE)**

TITLE:

**MAIN SINGLE LINE DIAGRAM**

SCALE

DATE

FEB, 2025

DRAWING NO.

----/161/TD/5E005

REV.

0

SYMBOLS AND DESCRIPTIONS

GENERAL NOTES

| ELECTRICAL WORKS |        |                                                                                                                                          |        |
|------------------|--------|------------------------------------------------------------------------------------------------------------------------------------------|--------|
| S. #             | SYMBOL | DESCRIPTION                                                                                                                              | STATUS |
| 1                |        | MSB --- MAIN SWITCH BOARD                                                                                                                |        |
| 2                |        | DB --- DISTRIBUTION BOARD                                                                                                                |        |
| 3                |        | TRIPLE POLE, 500 VOLTS, MOULDED CASE CIRCUIT BREAKER (RUPTURING CAPACITY INDICATED ON THE DRAWINGS & MENTIONED IN THE RELEVANT BOQ ITEM) |        |
| 4                |        | SINGLE POLE, 250 VOLTS, MINIATURE CIRCUIT BREAKER (RUPTURING CAPACITY INDICATED ON THE DRAWINGS & MENTIONED IN THE RELEVANT BOQ ITEM)    |        |
| 5                |        | SURGE PROTECTION DEVICE CLASS-2 40KA RATED                                                                                               |        |
| 6                |        | INSTRUMENTS PROTECTION FUSE (ONE NO.)                                                                                                    |        |
| 7                |        | INSTRUMENTS PROTECTION FUSES (THREE NOS.)                                                                                                |        |
| 8                |        | VSS - VOLTMETER SELECTOR SWITCH (RY-YB-BR-OFF-RN)                                                                                        |        |
| 9                |        | ASS - AMMETER SELECTOR SWITCH (R-Y-B-OFF)                                                                                                |        |
| 10               |        | DIGITAL AC AMMETER                                                                                                                       |        |
| 11               |        | DIGITAL AC VOLTMETER                                                                                                                     |        |
| 12               |        | THREE NOS. SINGLE PHASE CURRENT TRANSFORMERS (TRANSFORMATION RATIOS INDICATED ON DRAWINGS)                                               |        |
| 13               |        | PHASE INDICATION LAMPS<br>R - RED      Y - YELLOW      B - BLUE                                                                          |        |
| 14               |        | 56" CEILING FAN                                                                                                                          |        |
| 15               |        | EXHAUST FAN                                                                                                                              |        |
| 16               |        | WALL BRACKET FAN                                                                                                                         |        |
| 17               |        | LIGHT CONTROL SWITCHES AND FAN DIMMERS                                                                                                   |        |
| 18               |        | 13amp SOCKET WIRED WITH 2.5 Sq.mm PVC COPPER CABLE                                                                                       |        |
| 19               |        | 15amp SOCKET WIRED WITH 4 Sq.mm PVC COPPER CABLE                                                                                         |        |
| 20               |        | 20amp SOCKET WIRED WITH 6 Sq.mm PVC COPPER CABLE                                                                                         |        |

| LIGHTING FIXTURES |        |                                                                  |
|-------------------|--------|------------------------------------------------------------------|
| S. #              | SYMBOL | DESCRIPTION                                                      |
| 1                 |        | TUBE LIGHT FIXTURE WITH WITH 1x28W T-5 LAMP & PRISMATIC DIFFUSER |
| 2                 |        | 7W CEILING MOUNTED DOWN LIGHTER                                  |
| 3                 |        | 12W CEILING MOUNTED DOWN LIGHTER                                 |
| 4                 |        | 15W CEILING MOUNTED DOWN LIGHTER                                 |
| 5                 |        | 4' LENGTH LED PANEL LIGHT                                        |
| 6                 |        | BULKHEAD WITH 18W LED BULB                                       |
| 7                 |        | WALL BRACKET LIGHT                                               |
| 8                 |        |                                                                  |
| 9                 |        |                                                                  |
| 10                |        |                                                                  |
| 11                |        |                                                                  |
| 12                |        |                                                                  |
| 13                |        |                                                                  |
| 14                |        |                                                                  |
| 15                |        |                                                                  |
| 16                |        |                                                                  |
| 17                |        |                                                                  |
| 18                |        |                                                                  |
| 19                |        |                                                                  |

| COMMUNICATIONS SYSTEMS |        |                          |
|------------------------|--------|--------------------------|
| S. #                   | SYMBOL | DESCRIPTION              |
| 1                      |        | RJ 45 OUTLET FOR DATA    |
| 2                      |        | TELEPHONE POINT          |
| 3                      |        | TV ANTENA POINT          |
| 4                      |        | SMOKE DETECTOR           |
| 5                      |        | HEAT DETECTOR            |
| 6                      |        | MANUAL CALL POINT        |
| 7                      |        | FIRE ALARM CONTROL PANEL |
| 8                      |        |                          |
| 9                      |        |                          |
| 10                     |        |                          |
| 11                     |        |                          |
| 12                     |        |                          |
| 13                     |        |                          |
| 14                     |        |                          |
| 15                     |        |                          |
| 16                     |        |                          |
| 17                     |        |                          |
| 18                     |        |                          |
| 19                     |        |                          |

ELECTRICAL SYSTEMS

1. FOLLOWING NOTES SHALL IN GENERAL APPLY TO ALL ELECTRICAL SYSTEMS DRAWINGS. THE INSTRUCTIONS IN THESE NOTES SHALL BE FOLLOWED UNLESS STATED OTHERWISE.

2. THESE NOTES SHALL BE APPLICABLE TO THE ENTIRE ELECTRICAL WORKS. IF THE SITE CONDITIONS NECESSITATE ANY ALTERATIONS OR DEVIATIONS THE DIRECTIONS OF THE ENGINEER SHALL BE OBSERVED AS FINAL INSTRUCTIONS.

3. ALL ELECTRICAL DRAWINGS SHALL BE READ IN CONJUNCTION WITH BOQ, TECHNICAL SPECIFICATIONS, ARCHITECTURAL, STRUCTURAL, PLUMBING AND HVAC DRAWINGS & ALL OTHER RELEVANT DETAILS.

4. DIMENSIONS/MEASUREMENTS GIVEN IN LAYOUT AND DETAILED DRAWINGS ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE TO CALCULATE THE ACTUAL DIMENSIONS/ MEASUREMENTS ACCORDING TO STRUCTURAL AND ARCHITECTURAL DRAWINGS.

5. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS WITH ALL RELEVANT DETAILS TO THE ENGINEER FOR APPROVAL ACCORDING TO THE GENERAL CONDITIONS OF CONTRACT WELL IN TIME BEFORE COMMENCEMENT OF THAT WORK.

6. PROPER CO-ORDINATION OF ELECTRICAL WORKS WITH OTHER SERVICES SHALL BE CARRIED OUT AT SITE.

7. ALL NON - CURRENT CARRYING PARTS i.e. OUTER CASINGS OF EQUIPMENT SUCH AS HT & LT PANELS, DISTRIBUTIONS BOARDS, CABLE TRAYS, AUXILIARY CONSTRUCTIONS FOR EQUIPMENT ETC. SHALL BE CONNECTED TO THE GROUNDING/ EARTHING SYSTEM AT REQUIRED NUMBER OF POINTS WITH SPECIFIED SIZES OF CONDUCTORS. WATER PIPES ALONG ELECTRICAL LINE SHALL BE BONDED TO THE EARTHING SYSTEM WITH 10 sq.mm. SINGLE CORE, COPPER CONDUCTOR PVC CABLE.

8. ELECTRICAL POINTS FOR EQUIPMENT SHALL BE INSTALLED IN CO-ORDINATION WITH THE RELEVANT DRAWINGS OF OTHER SERVICES, SUCH AS COMMUNICATION SYSTEMS, HVAC, PLUMBING ETC. THE LOCATION ON ELECTRICAL DRAWINGS IS ONLY INDICATIVE.

9. ARRANGEMENT OF ELECTRICAL EQUIPMENTS ON ELECTRICAL DRAWINGS ARE TENTATIVE. EXACT ARRANGEMENT OF EQUIPMENTS SHALL BE MADE IN VIEW OF ITS PHYSICAL DIMENSIONS AND EASE OF MAINTENANCE.

10. LOADS ON ALL PHASES SHALL BE BALANCED AT THE TESTING/ COMMISSIONING STAGE.

11. CONDUIT/DUCT RUN UNDER FLOOR SHALL HAVE A MINIMUM COVER OF 100 INCHES FROM TOP OF CONDUIT/DUCT TO FINISH FLOOR LEVEL.

12. RUN GREEN-YELLOW OR GREEN SINGLE CORE PVC INSULATED COPPER CONDUCTOR CABLE OF SPECIFIED SIZES AS PROTECTIVE EARTH CONDUCTOR (ECC) ALL ALONG LIGHT AND POWER WIRING. WHEREVER THE SIZE IS NOT SPECIFIED THE FOLLOWING CRITERIA SHALL BE OBSERVED TO DETERMINE MINIMUM CROSS SECTIONAL AREA OF EARTH CONTINUITY CONDUCTOR (ECC) IN RELATION TO THE AREA OF ITS PHASE CONDUCTORS. RUN SEPARATE ECC FOR EACH CIRCUIT.

- ECC & PHASE CONDUCTOR OF SAME SIZE FOR UP TO AND INCLUDING 16 SQMM CABLES
- 16 SQMM ECC FOR PHASE CONDUCTOR OF 16 SQMM, 25SQMM & 35 SQMM CABLES
- FOR CABLES OF 50 SQMM AND ABOVE SIZES, ECC IS HALF SIZE OF PHASE CONDUCTOR.
- MAXIMUM SIZE OF ECC IS 70 SQMM.

13. THE MAXIMUM CAPACITY OF PVC CONDUITS FOR SIMULTANEOUS DRAWING OF PVC INSULATED CABLES SHALL BE DETERMINED AS PER BS 4607. THE FOLLOWING TABLE SHALL BE USED TO DETERMINE THE MAXIMUM NUMBER OF CABLES.

| S. # | NOMINAL CONDUCTOR SIZE (mm) | NO. & DIA OF WIRES | NOMINAL OVERALL DIA (mm) | 20 MM DIA (3/4" DIA) | 25 MM DIA (1" DIA) | 32 MM DIA (1 1/4" DIA) |
|------|-----------------------------|--------------------|--------------------------|----------------------|--------------------|------------------------|
| 1    | 1.5                         | 1/1.38             | 3.1                      | 10                   | 18                 | 30                     |
| 2    | 2.5                         | 1/1.78             | 3.5                      | 8                    | 14                 | 23                     |
| 3    | 2.5                         | 7/0.67             | 3.8                      | 7                    | 12                 | 20                     |
| 4    | 4                           | 7/0.85             | 4.3                      | 5                    | 9                  | 15                     |
| 5    | 6                           | 7/1.04             | 4.9                      | 4                    | 7                  | 12                     |
| 6    | 10                          | 7/1.35             | 6.2                      | 2                    | 4                  | 7                      |
| 7    | 16                          | 7/1.70             | 7.3                      | -                    | 3                  | 5                      |
| 8    | 25                          | 7/2.14             | 9.0                      | -                    | 2                  | 3                      |
| 9    | 35                          | 19/1.53            | 10.3                     | -                    | -                  | 2                      |

14. NORMAL & EMERGENCY CIRCUITS SHALL RUN IN SEPARATE CONDUITS.

15. ALL WIRING FOR CONTROLS SHALL BE CARRIED OUT WITH 1 CORE PVC CABLES OF SPECIFIED VOLTAGE GRADE AND SIZES.

16. THE WIRING SHALL BE CONTINUOUS LOOPING-IN TYPE AND NO JOINT IN WIRES SHALL BE ALLOWED.

17. THE WIRING SYSTEM SHALL BE CARRIED OUT ONLY AFTER THE CONDUIT SYSTEM IS COMPLETELY INSTALLED AND ALL OUTLET BOXES, ETC. ARE FIXED IN POSITION.

18. MOUNTING HEIGHTS OF ELECTRICAL FITTINGS WHEN MEASURED FROM FINISHED FLOOR LEVEL (F.F.L.) TO THE BOTTOM OF FITTINGS SHALL BE AS UNDER, UNLESS OTHERWISE SHOWN OR INSTRUCTED.

|                                                |                   |
|------------------------------------------------|-------------------|
| MAIN SWITCH BOARD                              | 48 INCHES         |
| DISTRIBUTION BOARD                             | 48 INCHES         |
| CONTROL PANEL                                  | 48 INCHES         |
| ON/OFF PUSH BUTTON STATION                     | 48 INCHES         |
| DIMMER CONTROL UNIT                            | 48 INCHES         |
| LIGHT CONTROL SWITCH (ONE WAY/TWO WAY)         | 48 INCHES         |
| 5A SOCKET OUTLETS IN GENERAL AREAS             | 10 INCHES         |
| 15A SOCKET OUTLETS IN GENERAL AREAS            | 10 INCHES         |
| 20A SOCKET OUTLETS IN GENERAL AREAS            | 10 INCHES         |
| 15A SOCKET OUTLETS IN KITCHEN (ABOVE COUNTER)  | 10 INCHES         |
| 15A SOCKET OUTLETS IN TOILETS                  | 66 INCHES         |
| 16A TP 5PIN INDUSTRIAL SOCKET OUTLETS IN LABS. | 48 INCHES         |
| 32A TP 5PIN INDUSTRIAL SOCKET OUTLETS IN LABS  | 48 INCHES         |
| 63A TP 5PIN INDUSTRIAL SOCKET OUTLETS IN LABS. | 48 INCHES         |
| CEILING FAN                                    | 96 INCHES         |
| WALL FAN                                       | 84 INCHES         |
| EXHAUST FAN                                    | REFER ARCH. DRGS. |

COMMUNICATION SYSTEMS

1.

FOLLOWING NOTES SHALL IN GENERAL APPLY TO ALL COMMUNICATION SYSTEMS DRAWINGS. THE INSTRUCTIONS IN THESE NOTES SHALL BE FOLLOWED UNLESS STATED OTHERWISE.

2.

THESE NOTES SHALL BE APPLICABLE TO THE ENTIRE COMMUNICATION SYSTEMS WORKS. IF THE SITE CONDITIONS NECESSITATE ANY ALTERATIONS OR DEVIATIONS THE DIRECTIONS OF THE ENGINEER SHALL BE OBSERVED AS FINAL INSTRUCTIONS.

3.

ALL COMMUNICATION SYSTEMS DRAWINGS SHALL BE READ IN CONJUNCTION WITH TECHNICAL SPECIFICATIONS, ITEMS OF B.O.Q., ARCHITECTURAL, STRUCTURAL, HVAC, PLUMBING DRAWINGS AND ALL OTHER RELEVANT DETAILS.

4.

DIMENSIONS/MEASUREMENTS GIVEN IN LAYOUT AND DETAILED DRAWINGS ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE TO CALCULATE THE ACTUAL DIMENSIONS/MEASUREMENTS ACCORDING TO STRUCTURAL AND ARCHITECTURAL DRAWINGS.

5.

THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS WITH ALL RELEVANT DETAILS TO THE ENGINEER FOR APPROVAL ACCORDING TO THE GENERAL CONDITIONS OF CONTRACT WELL IN TIME BEFORE COMMENCEMENT OF THAT WORK.

6.

PROPER CO-ORDINATION OF COMMUNICATION SYSTEMS WORKS WITH OTHER SERVICES SHALL BE CARRIED OUT AT SITE.

7.

TELEPHONE SYSTEM SHALL BE COMPLETE WITH INSTRUMENTS, EQUIPMENT AND INTERCONNECTING WIRING. TELEPHONE EXCHANGE, TELEPHONE OUTLETS, JUNCTION BOXES, CONDUITS OF SPECIFIED SIZES IN THE BUILDING, AND UNDERGROUND PIPES OF SPECIFIED SIZES SHOWN ON DRAWINGS SHALL BE PROVIDED. WHERE SIZE OF CONDUIT/PIPE IS NOT SPECIFIED SUITABLE SIZE SHALL BE INSTALLED AS DIRECTED BY THE ENGINEER.

8.

POINTS FOR COMMUNICATION SYSTEMS EQUIPMENT SHALL BE INSTALLED IN CO-ORDINATION WITH THE RELEVANT DRAWINGS OF OTHER SERVICES, SUCH AS ELECTRICAL, HVAC, PLUMBING ETC. THE LOCATION ON COMMUNICATION SYSTEMS DRAWINGS IS ONLY INDICATIVE.

9.

ARRANGEMENT OF COMMUNICATION SYSTEMS EQUIPMENTS ON DRAWINGS ARE TENTATIVE. EXACT ARRANGEMENT OF EQUIPMENTS SHALL BE MADE IN VIEW OF ITS PHYSICAL DIMENSIONS AND EASE OF MAINTENANCE.

10.

CONDUIT/DUCT RUN UNDER FLOOR SHALL HAVE A MINIMUM COVER 2 INCHES FROM TOP OF CONDUIT/DUCT TO FINISH FLOOR LEVEL.

11.

RUN GREEN-YELLOW OR GREEN SINGLE CORE PVC INSULATED COPPER CONDUCTOR CABLE OF SPECIFIED SIZES AS PROTECTIVE EARTH CONDUCTOR (ECC) ALL ALONG COMMUNICATION SYSTEMS WIRING.

12.

ALL WIRING FOR CONTROLS SHALL BE CARRIED OUT WITH 1 CORE PVC CABLES OF SPECIFIED VOLTAGE GRADE AND SIZES.

13.

THE WIRING SHALL BE CONTINUOUS LOOPING-IN TYPE AND NO JOINT IN WIRES SHALL BE ALLOWED.

14.

THE WIRING SYSTEM SHALL BE CARRIED OUT ONLY AFTER THE CONDUIT SYSTEM IS COMPLETELY INSTALLED AND ALL OUTLET BOXES, ETC. ARE FIXED IN POSITION.

15.

MOUNTING HEIGHTS OF ELECTRICAL FITTINGS WHEN MEASURED FROM FINISHED FLOOR LEVEL (F.F.L.) TO THE BOTTOM OF FITTINGS SHALL BE AS UNDER, UNLESS OTHERWISE SHOWN OR INSTRUCTED.

TELEPHONE JUNCTION BOX

10 INCHES

TELEPHONE OUTLET

10 INCHES

INTERCOM CONTROL PACK

10 INCHES

INTERCOM STATION (WALL MOUNTED)

36 INCHES

FA SYSTEM CONTROL PANEL

36 INCHES

FA SYSTEM JUNCTION BOX

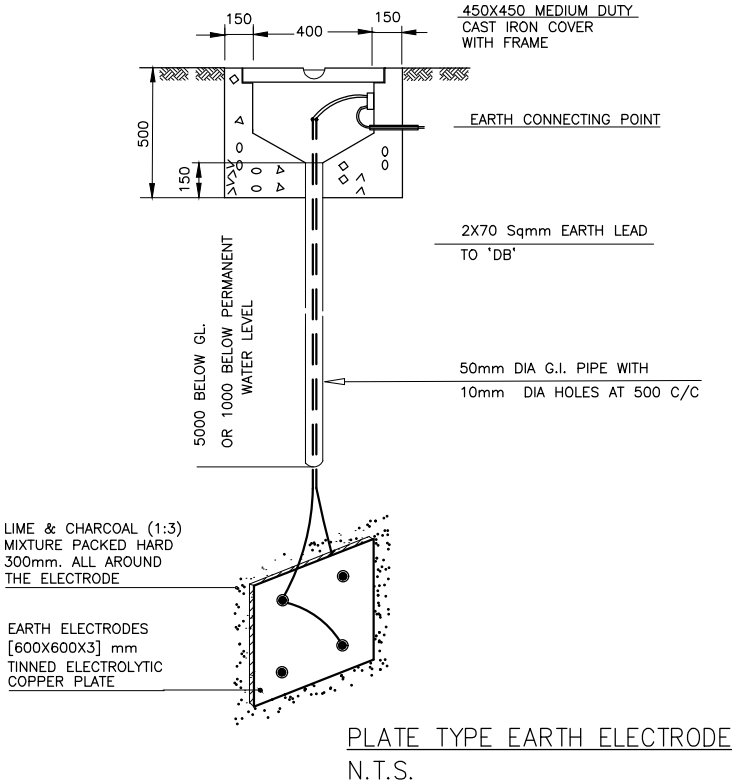
10 INCHES

MANUAL CALL STATION

42 INCHES

AUDIO ALARM

100 INCHES



GOVERNMENT OF PAKISTAN  
REVENUE DIVISION  
FBR (CUSTOMS WING)

CONSULTANT  
**NES** NATIONAL ENGINEERING SERVICES  
**PAK** PAKISTAN (PVT.) LTD.  
ARCHITECTURE & PLANNING DIVISION KARACHI.  
4th Floor, N.I.C.I Building, Abbasi Shaheed Road, Karachi, Tel: 99225120-21

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| 04   |      |             |          | DRAWN       |  |
| 03   |      |             |          | SUBMITTED   |  |
| 02   |      |             |          | RECOMMENDED |  |
| 01   |      |             |          | CHD./VER.   |  |
| REV. | DATE | DESCRIPTION | APPROVED | APPROVED    |  |

PROJECT  
**FIELD OFFICE**

| TITLE:<br><b>LEGEND &amp; GENERAL NOTES</b> |                                            | SCALE<br>N.T.S |
|---------------------------------------------|--------------------------------------------|----------------|
| DATE<br>FEBRUARY, 2025                      | DRAWING NO.<br><b>P-43079/08/C/12/E001</b> | REV.<br>0      |