## Addendum-02 CMRL/PHASE -II/SYS/CP22/ASA04/2021 03 February 2022

|    | U3 February 2022 |                              |   |  |  |  |  |  |
|----|------------------|------------------------------|---|--|--|--|--|--|
| SN | Part             | Section                      | Clause  | Original Bid condition   | Revised bid condition  |  |  |  |
| 1  | Part 2           | Appendix 2P-8                | 4.1.3.b   | The External ambient temperature shall be communicated by the ATS system to the TVS system, as obtained from the Rolling stock, for all trains inside the tunnel (including UG station platform) in a pre-defined interval (not more than 5 sec). This communication shall include the precise location, direction of travel, rake number, train number etc as a minimum. This shall work irrespective of the mode of working of the train or the mode of ATS for the train. | For trains under the fire affected cateogry (smoke alarm trigger or the Operator assigned Fire affected status): Location, direction, speed etc shall be communicated to the TVS SCADA on a realtime basis. TVS contractor shall incorporate the same in appropriate manner in the SCADA screen.   |  |  |  |
| 2  | Part 2           | Appendix 2P-8                | 4.1.3.c   | The link between the ATS and the TVS SCADA shall be redundant in nature. The communication protocol, polling cycles and other network parameters shall be decided by the Signalling contractor and the TVS contractor shall design their system to suit this interface.  | The link between the ATS and the TVS SCADA shall be redundant in nature. The details on communication protocol (MODBUS TCP IP), polling cycles and other network parameters shall be decided by the Signalling contractor and the TVS contractor to suit this interface.NoNO shall be obtained from the Engineer.  |  |  |  |
| 3  | Part 2           | Appendix 2P-8                | 4.1.4   |  | The Signalling contractor shall incorporate the details of work stations for the Auxillary System Controller for the desk design. The TVS contractor shall provide the details of the work stations in OCC and BOCC.   |  |  |  |
| 4  | Part 2           | Appendix 2P-8                | 5.<br>INTERFACEDivisio<br>n<br>of<br>Responsibility |  | Item: Display of TVS/E&M SCADA system feed in Video wall systems at OCC/BOCC ( HDMI input). STC contractor: Shall connect the feed and arrange for the display of TVS SCADA information TVS contractors: Shall extend the TVS/E&M SCADA system feeds in a format compatible with the displays, as HDMI input.  |  |  |  |
| 5  | Part 2           | Appendix 2P-8                | 4.1.3.d   |  | The signalling system shall provide trigger to the TVS SCADA system (centrally in OCC and BOCC level) for every entry and exit of a train into the platforms of underground stations.  The telegrams shall be addressed with a platform identifier. The entry telegram shall be provided approximately 30 to 45 sec before the entry. The exit telegram shall be provided immediatly at the departure. This trigger shall work irrespective of the mode of the train as well as scheduled or unscheduled. The exit telegram shall also have the estimated time for arrival of the next scheduled train on to that particular platform  This is a non-vital signal.  TVS system shall operate the track way exhaust fans appropriately. |  |  |  |
| 6  | Part 2           | Tender drawing               | NA  |  | The revised drawings are attached as a folder. The link of the folder for download is attached.  |  |  |  |
| 7  | Part 2           | Particular<br>Specifications | 5.8.9.5   | Main line point machines shall be used in conjunction with additional external mechanical toe locking arrangement.   | Main line point machines shall be used in conjunction with additional external mechanical toe locking arrangement. The point machine and the external locking arrangement (as an integrated product) shall be of proven type. Secondary drives shall be provided for turnouts of 1 in 9: 300 radius type. The second drive system design shall be able to meet the load requirement of each make of turnout. The signalling contractor shall Interface with track contractors for designing the second drive for each make of turnout.   |  |  |  |

## Addendum-02 CMRL/PHASE -II/SYS/CP22/ASA04/2021 03 February 2022

|    | US FEBRUARY 2022 |                                      |            |   |  |  |  |
|----|------------------|--------------------------------------|------------|---|--|--|--|
| SN | Part             | Section                              | Clause     | Original Bid condition  | Revised bid condition  |  |  |
| 8  | Part 2           | Particular<br>Specifications         | 5.8.8.1.h  | Remote operation (opening, closing and holding the door in open condition) of PSD and train doors for a docked train from OCC/SCR through ATS workstation.  Opening/closing of the PSDs when train is not properly aligned to the platform shall only be possible locally and not from ATS. | Remote operation (opening, closing and holding the door in open condition) of PSD and train doors for a docked train from OCC/SCR through ATS workstation.Remote Operation of PSD and Train doors shall be possible for train which are physically in the prescribed stopping point, but not docked because of any signalling failure, shall be possible. Opening/closing of the PSDs when train is not properly aligned to the platform ( stopping point) shall only be possible locally in PSD system and not remotely from ATS. |  |  |
| 9  | Part 2           | Appendix 2R                          | A.10       | lightning protection devices of each type   | Surge protection devices, lightning protection devices of each type  |  |  |
| 10 | Part 2           | Appendix 2R                          | D.4        | Track side equipments like Axle counter detection points, radio access point antennas, beacons, Balise, loops, Radio controllers etc with connectors and cables as applicable   | Track side equipments like Axle counter detection points, radio access point antennas, active beacons, Active Balise, loops, Radio controllers etc with connectors and cables as applicable  |  |  |
| 11 | Part 2           | Appendix 2R                          | D.13       |   | Balises and Beacons- Passive type<br>5% of used item   |  |  |
| 12 | Part 2           | Appendix 2R                          | A.13       | All type of indoor cables<br>10% of used item or 1000m of each type, which ever higher  | All type of indoor cables (except pre-fabricated/connectorised cables) 10% of used item or 1000m of each type, which ever smaller.   |  |  |
| 13 | Part 2           | Particular<br>Specifications         | 3.2.1.2.31 |   | All the statutory certifications, registrations, clearances for the products/spares, manfacturer, importer, seller for all the equipments and technology used in the execution of this work, as required by the Government of India and other statutory/Legal authorities (including the updated norms/rules as and when implemented). This includes BIS certification, TEC certification for communication equipments etc.  |  |  |
| 14 | Part 2           | PS-Appendix 2Q                       | 3.6.3      | The Axle counter track sections: platform track sections, reversible track sections etc shall be able to cater for 6 car operation. Depot stabling line track sections shall be 3 car length.   | The Axle counter track sections: platform track sections, reversible track sections etc shall be able to cater for 6 car operation. Depot stabling line track sections shall be 3 car length. Stabling lines/sidings/shunting necks in the mainline shall have track sections of 3 car length.   |  |  |
| 15 | Part 2           | PS-Appendix 2Q                       | 3.6.12     |   | The supply, installation and T&C shall meet the requirements.  |  |  |
| 16 | Part 2           | General Specification<br>Appendix 10 | 25         | A broad band internet connection shall be installed and maintained in working use at all times.   | A broad band internet connection ( with WiFi) shall be installed and maintained in working use at all times in main and sectional offices.   |  |  |

## Addendum-02 CMRL/PHASE -II/SYS/CP22/ASA04/2021 03 February 2022

|    | US FEBRUARY 2022 |                                      |             |  |   |  |  |  |
|----|------------------|--------------------------------------|-------------|--|---|--|--|--|
| SN | Part             | Section                              | Clause      | Original Bid condition   | Revised bid condition   |  |  |  |
| 17 | Part 2           | General Specification<br>Appendix 10 | 26          | The Contractor shall supply and maintain all necessary IT equipment, including server, desktop computers for each staff referred to in the above. Staff in offices shall each have their own A4 colour printer. High speed A3 colour printers shall be installed and maintained, 3 No in the Main office and 1 No in each of the Section offices. An A0 plotter shall also be supplied and maintained in the Main Office. In addition 20 No 14in screen laptops shall be provided.   | The Contractor shall supply and maintain Multi function machine printer one per office as a networked printer cum scanner. The printer shall have facility for printing A4 and A3 size papers, automatic two side, colour and grey scale. The printer shall also have facility for scanning of A4 and A3 size papers, automatic two side, colour and grey scale. An A0 plotter (colour) shall also be supplied and maintained in the Main Office.   |  |  |  |
| 18 | Part 2           | PS-Appendix 2P-2                     | 4.1.8       | PSD control from ATS: The operator shall be provided with facilities in the ATS workstation at OCC, BOCC and SCR for Opening and closing the doors of the PSD and the Train doors in a synchronized manner. The stoppage of a train in the stopping window and door authorization by the train borne signalling shall be ensured as a precondition for enabling this control. This control will be useful if the direct communication from the train borne to PSD system fails or when the Operator requires to open and close the Train doors and PSD to meet any operational requirements.                     | PSD control from ATS: The operator shall be provided with facilities in the ATS workstation at OCC, BOCC and SCR for Opening and closing the doors of the PSD and the Train doors in a synchronized manner. The stoppage of a train in the stopping window shall be ensured as a precondition for enabling this control. This control will be useful if the direct communication from the train borne to PSD system fails or when the Operator requires to open and close the Train doors and PSD to meet any operational requirements.   |  |  |  |
| 19 | Part 2           | PS-Appendix 2P-2                     | 4.1.53      | The PSD contactor shall provide the details of the PSD remote diagnostics workstation in OCC and BOCC. The signalling contractor shall incorporate the same in the layout, console design and ergonomic study.   | The PSD contactor shall provide the details of the PSD remote diagnostics workstation in OCC and BOCC. The signalling contractor shall incorporate the same in the layout, console design and ergonomic study. The network connectivity for this work station with the PSD system of each station shall be provided by Signalling system networks (eg: Non-CBTC radio's fibre network)  |  |  |  |
| 20 | Part 2           | PS-Appendix 2P-2                     | 4.1.44A     |  | The PSD system shall communicate to the ATS regarding the triggering of the Long stop request by a passenger using the long stop push buttons on the PSD. The identifier of the puhbbutton and platform shall be communicated to the ATS on a realtime basis.  ATS system shall process this data similar to that of the long stop request from the train. Necessary trigger to Station CCTV system shall be provided for auto-popup of the video stram covering the push button  |  |  |  |
| 21 | Part 2           | Particular<br>Specifications         | 5.20.24.7.4 | The long stop request from train or PSD shall increase the dwell time by an additional predefined time. The cumulative dwell time in a long stop scenario can be more than the predefined value in the timetable and the long stop request overrides all ATR dwell time optimization controls. Details shall be finalized in detail design phase. The long stop actuation in a train shall cause auto popup of the camera covering the push button area in the VMS system at OCC. The OCC/SCR/BOCC controller shall be provided with facility to override the long stop command with a single override function. | The long stop request from train or PSD shall increase the dwell time by an additional predefined time. The cumulative dwell time in a long stop scenario can be more than the predefined value in the timetable and the long stop request overrides all ATR dwell time optimization controls. Details shall be finalized in detail design phase. The long stop actuation in a train shall cause auto popup of the camera covering the push button area in the VMS system at OCC. The long stop actuation in a PSD shall cause autopopup of the platform camera covering the pushbutton area in station CCTV system. The OCC/SCR/BOCC controller shall be provided with facility to override the long stop command with a single override function. |  |  |  |