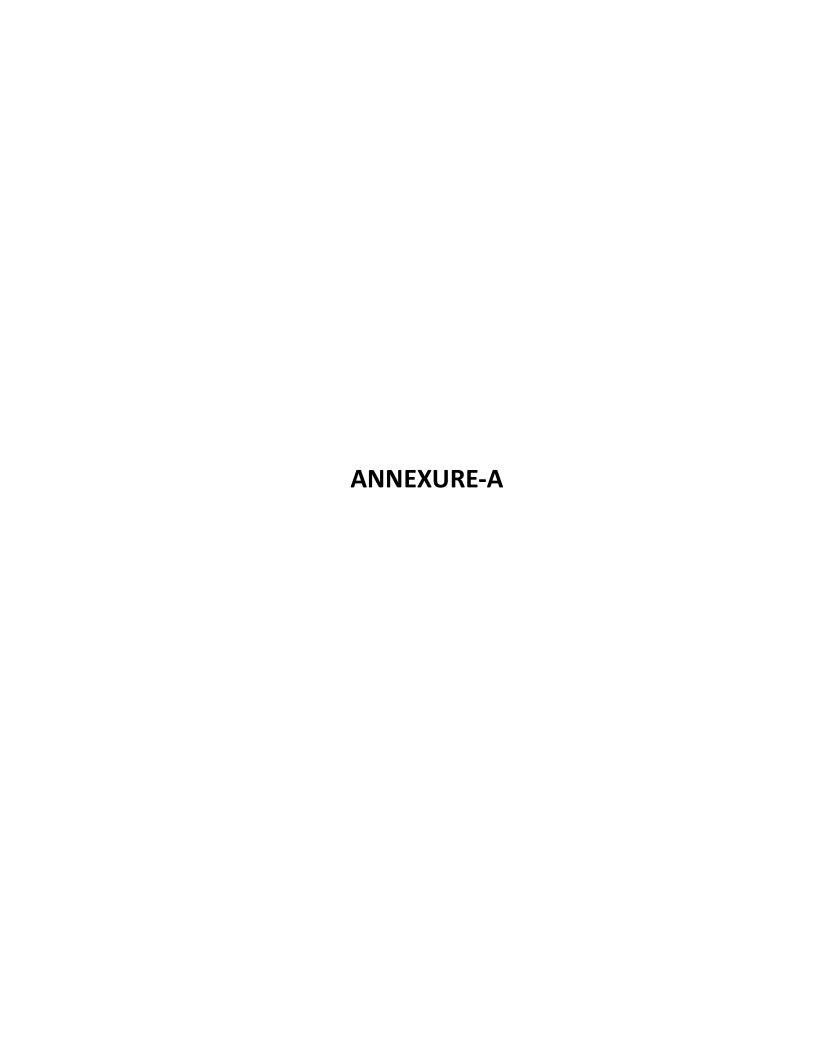
## ADDENDUM-01

# CMRL/PHASE-II/SYS/ASA12A/2022

## **27-07-2023**

S.No.	Part	Section	Clause	Original bid condition	Revised bid condition
1	II	VI-A	Appendix-1	Additional clause	Please click on the following link to access the drawings:  https://cmrlindia- my.sharepoint.com/:f:/r/personal/aswin_vishnu_cmrl_in/Documents/ASA- 12A_ADDENDUM%20-01%20DRAWINGS?csf=1&web=1&e=side8nm
2	II	VI-A	Appendix-19 page no.7 of 43	Replacement of page no.(7 of 43)	Page with duly updated table is enclosed as Annexure-A
3	III	VIII Part- A	Table-1 & Table-2	Replacement of Table-1 & Table-2	Table-1 & Table-2 for revised summary of key dates & site access dates is enclosed as Annexure-B

**Encl:** Annexure-A & Annexure-B



- 2.8.11 System availability and continuity
- 2.8.12 Physical security

### 3. Reference Documents and Standards

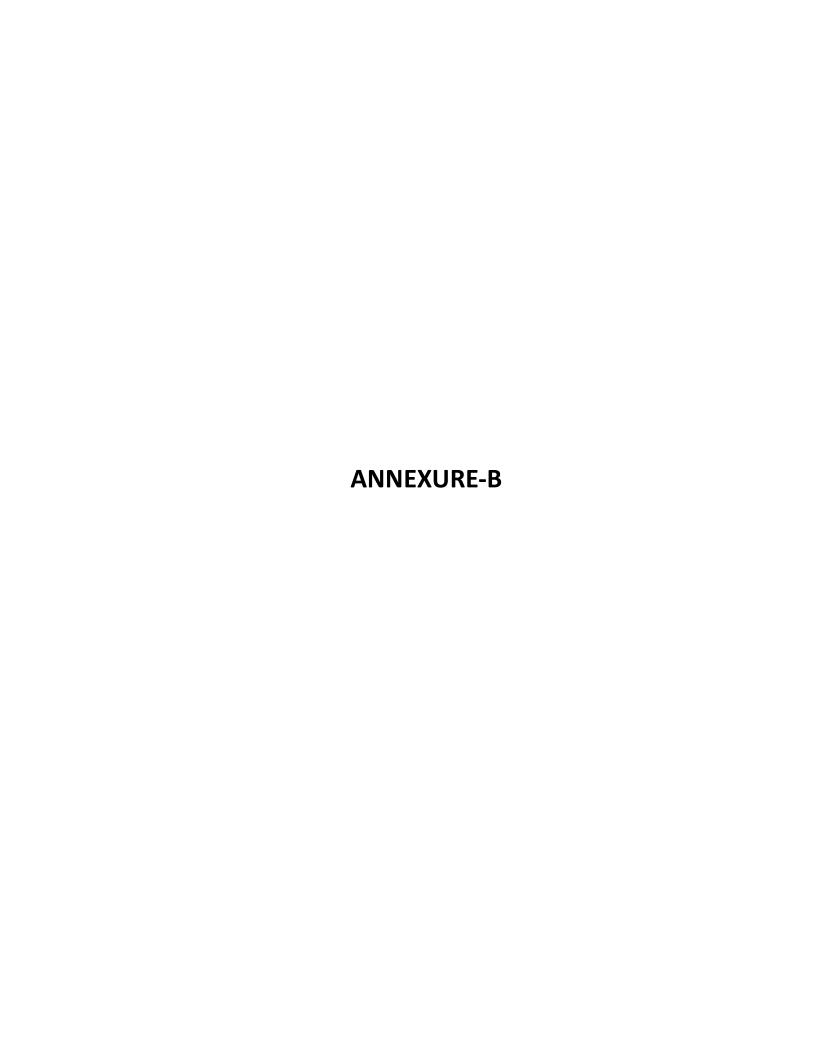
### 3.1 Applicable Laws and Standards

The Concessionaire shall design in compliance with all applicable laws and standards, including the standards specified below.

Standard	Description					
EN 50159	Railway applications communication, signalling and processing systems. Safety-related communication in transmission systems					
EN50125	Railway applications environmental conditions for rolling stockand on-board equipment.					
FIPS -140	J.S. government computer security standard for theaccreditation of ryptographic modules					
IEC 62443	Industrial Communication Network IT Security for Networks and Systems					
ISO 27001:2013	Information Technology - Security techniques - informationsecurity management systems					
NIST SP 800-125	Guide to Security for Full Virtualization Technologies					
NIST SP 800-30	Guide for Conducting Risk Assessments					
NIST SP 800-53	Recommended Security Controls for Federal InformationSystems and Organizations					
PCI DSS	Payment Card Industry Data Security Standard					
TS 50701	Railway Applications - Cyber Security					

The P-SCADA and F-SCADA shall comply with the following Information Security standards:

Standard	Meaning
ISO/IEC 17011	General requirements for accreditation bodies accrediting conformity assessment bodies
IEC 62443	Industrial Network and System Security
NIST SP 800-82	Guide to Industrial Control Systems (ICS) Security
CEA Guidelines 2021	Central Electric Authority Guidelines (Cyber Security in Power
	Sector), 2021
ISO/IEC 15408	Common Criteria Certification Standard
ISO/IEC 17025	General requirements for the competence of testing and calibration laboratories
ISO/IEC 21827	Systems Security Engineering
SSE-CMM	Capability Maturity Model
ISO/IEC 24748-1	Systems and software engineering — Life cycle management — Part 1: Guidelines for life cycle management.
ISO/ IEC 27019	Information technology — Security techniques — Information Security controls for the energy utility industry



## **Table 1: Summary of Key dates:**

Key Date Ref.	Key Date Description (Sub-Clause 1.1.5.6)	Calendar days from Commenc ement date	Associated Price Centres for purposes of Liquidated Damages
GENERAL			
KD-001	Complete Preliminary design of the PSD system	90	Price Centre A2
KD-002	Complete Final Detailed Design in accordance with Specifications	210	Price Centre BS2.1
KD-003	Prototype Assembly, Testing & Approval	360	Price Centre BS2.2.1
KD-004	Completion of Life cycle test	490	Price Centre BS2.2.2
STAGE-2	(Civil Package C5-ECV02 & C5-ECV03)	1	-
KD-005	1st lot delivery of PSD materials required for Stage-2 (to be planned as per earliest available Access Dates)	400	Price Centre BS2.2.3 to BS2.2.6
	Complete delivery of PSD materials required for Stage-2 (to be planned as per individual site Access Dates)	650	
KD-006	Complete installation and static testing of the PSD system	710	Price Centre BS2.3
KD-007	Complete System Acceptance Test (including interface testing with OCC) and integrated testing pf PSD with On-Board ATC	760	Price Centre BS2.4.1 & BS2.4.2
KD-008	Issue of Stand-alone Safety Case for Stage 2 PSD system	790	Price Centre BS2.4.5
KD-009	Issue of Completion Certificate for Stage2 PSD system	800	Price Centre BS2.4.3, BS2.4.4, BS2.4.5, BS2.4.6, BS2.4.7
KD-010	Achieve operational Acceptance for Stage 2 PSD system	1340	Price Centre BS2.4.8
STAGE-3	(Civil Package C3-ECV01)		
KD-011	Complete delivery of PSD materials required for Stage-3 (to be planned as per earliest available Access Dates)	650	Price Centre CS3.1
KD-012	Complete installation and static testing of the PSD system	710	Price Centre CS3.2
KD-013	Complete System Acceptance Test (including interface testing with OCC) and integrated testing pf PSD with On-Board ATC	760	Price Centre CS3.3.1, CS3.3.2
KD-014	Issue of Stand-alone Safety Case for Stage 3 PSD system	790	Price Centre CS3.3.5
KD-015	Issue of Completion Certificate for Stage 3 PSD system	800	Price Centre CS3.3.3, CS3.3.4, CS3.3.5, CS3.3.6, CS3.3.7
KD-016	Achieve operational Acceptance for Stage 3 PSD system	1340	Price Centre CS3.3.8

**Table 2: Site Access Dates** 

Package	Access Dates Ref	All Contracts		Civil Contrac	tor	Track	MEP Contractor				
No.		Station Name	Access to cable trunking supports beneath platform coping for full length of the platform	Access to PSD equipment room in D3 condition	Platform lower interface for PSD installation as per Schedule of Dimensions and as per mutually agreed interface drawings	Finished track with all critical welding and furnishing as- built rail levels & track centre locations in platform area	Cable trays linking SER-SCR till Platform Coping (elevated stations) and till header box cable entry (UG stations); additionally, cable trays till MSD& LCP locations in UG stations	Earth bars in SER-SCR and Platform ends for PSD earthing together with connectivity to Station Main Earth pit	Provision of UPS outlets for PSD loads & energizat ion of UPS	Provision of Air Conditio ning in Elevated Stations	
			Α	В	С	D	Е	F	G	Н	
	AD-01	Grain Market Station	422	332	377	407	422	422	450	450	
	AD-02	Sai Nagar Bus stop Station	422	332	377	407	422	422	450	450	
	AD-03	Elango Nagar Bus Stop	422	332	377	407	422	422	450	450	
	AD-04	Mugalivakkam School	422	332	377	407	422	422	450	450	
	AD-05	DLF IT SEZ	422	332	377	407	422	422	450	450	
C5-ECV	AD-06	Sathya Nagar	422	332	377	407	422	422	450	450	
02	AD-07	CTC Station	510	420	465	495	510	510	540	540	
	AD-08	BUTT Road	510	420	465	495	510	510	540	540	
	AD-09	Alandur Junction	510	420	465	495	510	510	540	540	
	AD-10	Adambakkam Station	510	420	465	495	510	510	540	540	
	AD-11	Vanumvampet Station	510	420	465	495	510	510	540	540	
	AD-12	Puzhuthivakkam Station	510	420	465	495	510	510	540	540	

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Package	Access Dates Ref	All Contracts		Civil Contract	tor	Track	MEP Contractor			
No.		Station Name	Access to cable trunking supports beneath platform coping for full length of the platform	Access to PSD equipment room in D3 condition	Platform lower interface for PSD installation as per Schedule of Dimensions and as per mutually agreed interface drawings	Finished track with all critical welding and furnishing as- built rail levels & track centre locations in platform area	Cable trays linking SER-SCR till Platform Coping (elevated stations) and till header box cable entry (UG stations); additionally, cable trays till MSD& LCP locations in UG stations	Earth bars in SER-SCR and Platform ends for PSD earthing together with connectivity to Station Main Earth pit	Provision of UPS outlets for PSD loads & energizat ion of UPS	Provision of Air Conditio ning in Elevated Stations
	AD-13	Madipakkam	<b>A</b> 510	<b>B</b> 420	<b>C</b> 465	<b>D</b> 495	<b>E</b> 510	<b>F</b> 510	<b>G</b> 540	<b>H</b> 540
	AD-14	Kilkattalai	510	420	465	495	510	510	540	540
	AD-15	Echangadu	510	420	465	495	510	510	540	540
	AD-16	Kovilambakkam	510	420	465	495	510	510	540	540
	AD-17	Vellakkal	510	420	465	495	510	510	540	540
C5-ECV 03	AD-18	Medavakkam Koot Road	510	420	465	495	510	510	540	540
03	AD-19	Kamraj Garden Street	510	420	465	495	510	510	540	540
	AD-20	Medavakkam Jn	510	420	465	495	510	510	540	540
	AD-21	Perumbakkam	510	420	465	495	510	510	540	540
	AD-22	Global Hospital	510	420	465	495	510	510	540	540
	AD-23	ELCOT	510	420	465	495	510	510	540	540
	AD-24	Sholinganallur Lake-l	578	548	593	623	638	638	650	650

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Package	Access	All Contracts		Civil Contract	tor	Track	MEP Contractor			
No.	Dates Ref	Station Name	Access to cable trunking supports beneath platform coping for full length of the platform	Access to PSD equipment room in D3 condition	Platform lower interface for PSD installation as per Schedule of Dimensions and as per mutually agreed interface drawings	Finished track with all critical welding and furnishing as- built rail levels & track centre locations in platform area	Cable trays linking SER-SCR till Platform Coping (elevated stations) and till header box cable entry (UG stations); additionally, cable trays till MSD& LCP locations in UG stations	Earth bars in SER-SCR and Platform ends for PSD earthing together with connectivity to Station Main Earth pit	Provision of UPS outlets for PSD loads & energizat ion of UPS	Provision of Air Conditio ning in Elevated Stations
			Α	В	С	D	Е	F	G	Н
	AD-25	Sholinganallur Lake-II	543	513	558	588	603	603	610	610
	AD-26	Semmancheri-I	529	499	544	574	589	589	600	600
	AD-27	Semmancheri-II	529	499	544	574	589	589	600	600
C3-ECV-	AD-28	Gandhi Nagar	543	513	558	588	603	603	610	610
01	AD-29	Navallur	578	548	593	623	638	638	650	650
	AD-30	Siruseri	529	499	544	574	589	589	600	600
	AD-31	SIPCOT 1	599	569	614	644	659	659	670	670
	AD-32	SIPCOT 2	599	569	614	644	659	659	670	670