

GOVERNMENT OF INDIA
MINISTRY OF HOUSING AND
URBAN AFFAIRS



ANNUAL REPORT 2022-23



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OF
HOUSING
AND
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सत्यमेव जयते

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16.01 Central Public Works Department, an attached office in the Ministry of Housing and Urban Affairs, is a principal engineering organization and technical advisor to the Government of India with a proven track record of over 168 years and has expertise in all facets of built environment. CPWD is a total service provider, capable of giving single window service for all facets of built environment with complete accountability and responsibility.

16.02 CPWD renders most comprehensive services in the field of planning, designing and construction from concept to completion for all building & infrastructure projects with total quality assurance including post construction maintenance management. It is involved in execution of wide range of projects catering to all spheres of human activities such as housing, office space, hospitals, educational institutions, roads, bridges, flyovers, airports, tourism and culture, environmental and other utility services. It also executes road projects, fencing and flood lighting in difficult terrain under hostile conditions along borders.

16.03 With the implementation of revised organizational structure of CPWD in March 2019, CPWD has undergone a paradigm shift in its functioning and has spearheaded the construction industry in all facets of built environment by enhancing its efficiency, effectiveness, quality, better client services, accountability and optimal utilization of the human resource. Based on the experiences and complexities of working under revised organizational structure of CPWD, a revised jurisdictional rationalization of reorganization of CPWD was subsequently implemented on August, 2022. CPWD has now transformed itself into a modern, efficient and delivery-oriented organization by keeping its vision and mission clear and focused. CPWD has become the most coveted destination for the Government Departments / PSUs / Autonomous Bodies for catering to their built requirements.

16.04 The achievements and activities of CPWD during the year 2022-23 have been significant in terms of human resource management, completion of projects mostly on time with quality and economy, adding new clients, signing new MoUs, implementing new policy and reform initiatives, research, development and innovations for the growth of department. CPWD has also been the forerunner and trend setter in the repository of skills and knowledge and bench marking of construction standards for infrastructure sector.

16.05 Functions

- i. Major functions of CPWD are construction and maintenance of built environment. Construction projects are of various types such as residential, office, schools, laboratories, hospitals, stadia, gymnasia, auditoria, storages etc. and infrastructure works such as highways, flyovers, tunnels, bridges, jetties, sports facilities, border fencing, airports, runways etc.
- ii. CPWD maintains large building stock of General Pool Residential Accommodation and Central Government Office Buildings. CPWD is maintaining around 1.55 lakh Residential units and 75 lakh square metres office space.

- iii. CPWD is also involved in discharge of multiple other functions e.g., Technical Advice to Government, Custody of Estates, Valuation, Rent Assessment, Standardization and benchmarking of construction activities through issue of Schedule of Rates, Specifications etc., processing of DPRs for Border Works and other ministries for centrally funded works. CPWD also assists in organizing public and ceremonial functions, upkeep of historical and important monuments, structures and Samadhis etc.

16.06 Vision and Mission of CPWD

- i. Central Public Works Department strives to position itself with global presence and to become the most coveted destination for the Central and State Governments and other clients/ stakeholders.
- ii. Endeavor is to achieve 25% annual growth in the workload by taking works of Ministry of External Affairs, Roads & Highways and State Governments.
- iii. Adopt best construction practices and new technologies in construction and expand the Technical Advisory Role of the Department.
- iv. Make presence of CPWD Engineers/Architects in various Ministries/ Departments of Government of India for rendering technical advice and works management.
- v. Discharge regulatory functions for the construction sector on behalf of the Central Government.
- vi. Create and maintain the built environment by attaining highest standards of sustainability, quality and client's satisfaction.
- vii. Construct all buildings as green and barrier free.
- viii. Implement ERP in CPWD for complete digitization and real time monitoring of all activities.
- ix. Establish a dedicated research, development and innovation centre at National CPWD Academy.
- x. Establish Green Rating, Energy Rating and Heritage Conservation Cell in the Department.
- xi. Comprehensive career development and HR up-gradation through global exposure to enable Engineers and Architects to imbibe state of the art construction and management practices.
- xii. Periodic Updation of CPWD Works Manual, General Conditions of Contract, Delhi Schedule of Rates, Specifications and other publications of CPWD.
- xiii. 100% Comprehensive outsourcing of maintenance to provide highest user satisfaction.
- xiv. CPWD resolves to achieve customer satisfaction through quality, timely delivery and transparency in effective execution of works and delivery of services while adhering to the principles of sustainable development.

Organizational structure of CPWD

16.07 Central Public Works Department is headed by the Director General who is also the Principal Technical Advisor to the Government of India. DG, CPWD is assisted by Special Director General (SDGs) / Additional Director General (ADGs). Project Units are headed by the Chief Engineer cum Executive Director / Superintending Engineer cum Project Director. Zone and Circle under field Regions are also headed by Chief Engineer and Superintending Engineer respectively. Field Division and Sub-Division are headed by the Executive Engineer and Assistant Engineer respectively.

16.08 Cadres in CPWD

- CPWD has three organized Group 'A' Services which are controlled by the Ministry of Housing and Urban Affairs. These are Central Engineering Service (Civil), Central Electrical & Mechanical Service and Central Architects Service.
- There are also a few Group 'A' posts in the Horticulture Cadre. There are Group 'B' & 'C' subordinate services for Engineers, Architects, Horticulturist, Ministerial staff, Engineering Drawing Staff, Stenographers and Rajbhasha staff. CPWD also has a large strength of workmen in various categories, called Work Charged cadre.
- To ensure that the accounting procedures of CPWD are seamless with the accounting line of the Government of India, Director (Finance), Officials from Central Government Accounting Service (Sr. Accounts Officer, Assistant Accounts Officer and Accountant) controlled by Controller General of Accounts, Government of India are posted in different units of CPWD.
- Similarly, for administrative functions, Ministerial staff from Central Secretariat Service Cadre, Central Rajbhasha cadre and a Law Officer from the cadre of Ministry of Law & Justice are posted in Central Office and in most Zonal Offices apart from CPWD Staff. A contingent from NIC cadre also assists in IT related functions. Officers drawn from the Ministry of Labour are posted to various field locations for Labour Welfare functions.
- CPWD Cadres, both Technical and Non-Technical, are encadred in various organizations such as Delhi PWD, Income Tax Department and Ministry of Environment & Forest etc. In addition to this, many CPWD personnel are deployed on deputation to a host of Government Ministries / Departments, autonomous and public sector entities.
- Total employees' strength of CPWD is 16962 which includes 1169 Group 'A' officers, 5482 Group B officers and 10311 Group C staff including work-charge staff.

Functional units

16.09 Division is the basic unit of execution of work and headed by Executive Engineer. Division is further divided into Sub-divisions and Sections, which are headed by Assistant Engineer/Assistant Executive Engineer and Junior Engineer respectively.

16.10 One or more Division(s) are placed under the control of a Circle/Zone headed by Superintending Engineer/ Chief Engineer and circles and zones are placed under the control of a Region headed by Additional Director General (ADG).

16.11 For focussed execution and better client satisfaction, projects costing over Rs 150 crore are executed by deploying work centric project units. A Project Unit consists of Executive Engineer cum Senior Manager of one or more streams and headed by Superintending Engineer cum Project Director or Chief Engineer cum Executive Director under respected regional Special DGs/Additional DGs.

16.12 The basic unit of architectural planning is either Architect or Senior Architect. Senior Architect and Chief Architect report to ADG / SDG of the region and are supported by Architects, Dy. Architects and Assistant Architects. Architects are in-charge of architectural wing in zones and report directly to Chief Engineer and are supported by Technical Officers / Assistants (AD).

Specialized Units of CPWD

16.13 Design and Disaster Mitigation Unit: Design and Disaster Mitigation (D&DM), a specialized unit of CPWD, is involved in the field of structural design, new construction techniques, materials testing, soil investigations, repairs and rehabilitation of structure in distress, development of software etc. The unit is also actively involved in Disaster Management and Mitigation activities of NDMA.

16.14 Contract, Specifications and Quality Assurance (CSQ) Civil unit

- i. Contract and Manual Unit: This unit issues technical circulars in respect of General Conditions of Contracts, Works Manual, Maintenance Manual and Contractor Enlistment Rules. This unit is also responsible for registration and revalidation of Class- I(A), I(AA), I(AAA) & I (Super) of contractors.
- ii. Techno-Legal & Quality Assurance Unit: This unit is responsible for issuing guidelines for quality assurance of works. This unit is also responsible for dealing with the arbitration cases, court cases, and approval of counter statement of facts in the arbitration cases, other litigation matters and issue of circulars regarding all the above activities.
- iii. Technology Application & Specification Unit: This unit is responsible for updating the specifications of works, issue of circulars from time to time, laying down specifications for new materials, approval of cost index, revision and updating of schedule of rates etc.

16.15 **Contract, Specifications and Quality Assurance (CSQ) Electrical unit:** This unit is responsible for implementation of energy efficiency measures of the government buildings maintained by CPWD, framing of Enlistment Rules for Category-Lifts, review of Enlistment Rules, preparation of DSR & AOR (E&M). CPWD General Specifications for Electrical Works, Automatic Fire Alarm System, Wet Riser System, Lifts, Sub-station, DG sets and HVAC etc.

16.16 **Enterprise Resource Planning (ERP) Unit:** e-NIRMIT (Nationwide Intelligent Resource Management with Information Technology) is being implemented in CPWD in mission mode for digitization, real time monitoring and control of all activities of CPWD. The e-Governance unit under ADG (Works) has now been merged with ERP Unit for smooth transition from legacy system to ERP in a time bound and hassle-free manner. Many initiatives in line with Digital India Program and many web-based applications have been developed and implemented for prompt and efficient reporting and management.

16.17 National CPWD Academy and Regional Training Institutes: CPWD has its main Training Academy at Ghaziabad and four Regional Training Institutes each at Delhi, Mumbai, Kolkata and Chennai. These Institutes conduct number of courses for officers and staff of all disciplines. The training programs of the Institute include foundation courses for direct recruit officers, orientation program for newly promoted officers and other staff etc. and mid-career training to officers at different stages.

16.18 Vigilance Unit: Vigilance Unit of CPWD is responsible for maintaining probity, integrity and efficiency in the organization under the general superintendence of Central Vigilance Commission. A special campaign has been launched by the vigilance unit of CPWD and all out efforts are being made to expedite the investigations and dispose-off old pending complaints.

Work Performance of CPWD

16.19 Actual Work Load of CPWD for the year 2022-23

(₹ in Crore)

Sl. No.	Description	Workload of Construction & Maintenance
1	Actual expenditure (January 2022 - December 2022)	₹ 17,931
2	Projected expenditure (January 2023 - March 2023)	₹ 7,795

16.20 Some of the large single value projects entrusted recently to CPWD

- Staff Quarters, Hostel & Academic Block for RBI at Navi Mumbai - ₹ 532 crore
- 350 bedded Hospital + 50 bedded Super speciality Hospital for ESIC at Sheela Nagar, Visakhapatnam - ₹ 384 crore
- Permanent Campus for IIPE at Visakhapatnam - ₹ 257 crore
- 150 Bedded Super Specialty Hospital for ESIC at Bhubaneswar - ₹ 321 crore
- 150 Bedded Critical Care Hospital Block at AIIMS Jodhpur - ₹ 116 crore
- 200 Bedded Advance Trauma and Emergency Centre at AIIMS Jodhpur - ₹ 191 crore
- Student Hostels & Mess Building at BHU - ₹ 199 crore
- Inter Disciplinary Centre for Science and Human Sciences Block at Hyderabad Central University - ₹ 116 crore
- Central University Campus (Phase-I), Ananthapuramu, Andhra Pradesh - ₹ 350 crore
- Homi Bhabha Cancer Hospital & Research Centre, SKMCH Campus at Muzaffarpur - ₹ 196 crore

16.21 Overseas works assigned to CPWD

- Work of National Police Academy, Nepal
- Works of Women Police Academy, Myanmar
- Works of Mental Hospital, South Sudan

Works Completed

16.22 Some of the major works completed and inaugurated by the VVIPs are as under:



Hon'ble President of India inaugurated the 'Arogya Vanam' at Rashtrapati Estate, New Delhi on March 01, 2022



Trainee Officers Hostel at LBSNAA, Mussoorie



Hon'ble President of India inaugurated 28 Type III quarters at President Estate, New Delhi on July 08, 2022



Kartavya Path at India Gate, New Delhi



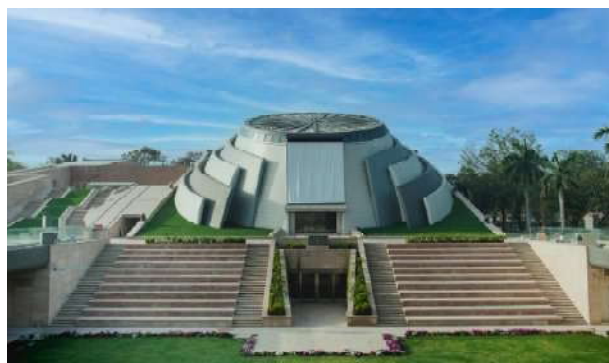
Hon'ble Prime Minister of India inaugurated Kartavya Path at India Gate, New Delhi on September 08, 2022



Centre of Excellence Building for All India Institute of Speech and Hearing at Mysuru



Hon'ble Prime Minister of India inaugurated Indian Institute of Information Technology Una (HP) on October 13, 2022



Pradhanmantri Sangrahalaya at New Delhi

16.23 Some of new works for which foundation stone have been laid

- **WHO Global Centre for Traditional Medicines at Jamnagar, Gujarat**



Hon'ble Prime Minister of India laid foundation stone for the construction of WHO Global Centre for Traditional Medicines at Jamnagar, Gujarat on April 19, 2022



Proposed WHO Global Centre for Traditional Medicines at Jamnagar, Gujarat

- **Nepal Police Academy (NPA) at Kavrepalanchok, Nepal**



- **National Academy of Customs, Indirect Taxes and Narcotics (NACIN) at Palasamudram, Andhra Pradesh**



Smt. Nirmala Sitharaman, Hon'ble Minister of Finance and Corporate Affairs laid foundation stone for the construction of National Academy Of Customs, Indirect Taxes and Narcotics (NACIN) at Palasamudram, Andhra Pradesh on March 05, 2022

Proposed Academic Block (Training Halls) for NACIN at Palasamudram, Andhra Pradesh

Activities of CPWD in North East Region

16.24 CPWD is actively engaged in executing a number of projects for various Central Government Departments, Central Police Departments, JNVs, EMRS, many Autonomous Bodies and other institutions in all Seven States of North East namely Assam, Arunachal Pradesh, Meghalaya, Nagaland, Mizoram, Manipur and Tripura.

16.25 'Region Guwahati' is headed by Additional Director General. This was done keeping in view to keep close monitoring of progress of works being executed in North Eastern states. CPWD Engineers and staffs have successfully delivered many projects in this region to the entire satisfaction of clients despite the limited accessibility, shortage of workers in some parts, tough working conditions and reduced working season. CPWD has to its credit, the development of permanent capital of the State of Arunachal Pradesh at Itanagar, large number of campuses of Central Police Organizations, Educational Institutes, various Central Government Department and aviation infrastructure in the Region. During last financial year 2021-22 CPWD achieved the work load of Rs. 744.58 Crore and during this financial year i.e., 2022-23 CPWD is likely to achieve a work load of Rs. 797.13 Crore.

16.26 Some of the completed works in the year 2022-23

- Administrative block of BSF at Frontier head quarter, Umpling, Shillong.
- 120 men barrack at Bn. Headquarter, BSF campus at Umpling, Shillong.
- 15.517 Km inter-state road between Meghalaya (13.397 Km approx.) to Assam (2.120 Km approx.) from Mukroh Umspar linking Jirkyndeng road under North East Road sector development Scheme (NERSDS).

- Non-residential building for CTC, SSB, Salonibari (Quarter guard and GO's Mess).
- Quarters for ATS, ITBP at Lohitpur, Arunachal Pradesh.
- 45 Rooms for ASI Accommodation at 25th Bn. ITBP Tezu, Arunachal Pradesh.
- Non-residential building for SHQ, ITBP at Likhabali, Arunachal Pradesh.
- 2 Nos. 120 men Barrack for 25th. Battalion ITBP at Tezu, Arunachal Pradesh.
- Residential quarters for 25th. Battalion ITBP at Tezu, Arunachal Pradesh.
- Non-residential building for SHQ, ITBP at Likhabali Arunachal Pradesh.
- Administrative, Academic & Library Block at Ekalavya Campus, Central Sanskrit University, Lembucherra, Agartala Tripura.
- CGST Commissionerate Customs Division and Agartala Audit Circle, Tripura.
- Office building for Khadi and Village Industries Commission at Agartala.
- Building for National Skill Training Institute for Women, NSTI(W) at Agartala, Tripura.
- 38 Nos Residential Quarters for SHQ, BSF Campus at Bagma, Udaipur, Tripura.
- Up-gradation of Agartala Government Medical College, Tripura under PMSSY Ph-III.
- GO's Mess with 07 Suites for Bn. HQ, BSF at Tura (New Location), Bawegre.
- 120 Men Barrack at Bn. HQ BSF, Tura (New Location), Bawegre.
- 24 Nos. Type-II Residential Qtrs SHQ, BSF, Tura, Dobasipara, Meghalaya.
- 72 No's Men Barrack for Transit ORs at BSF Campus Geetanagar, Guwahati.
- 6 Nos Type-V and 3 Nos Type-IV Quarters at FTR H.Q., SSB, Sonapur, Guwahati.

16.27 Some of the ongoing works:

- Office cum Residential Complex for Special Bureau at Lumbatngen, Shillong.
- Administrative Building and residential quarters for CBI, ACB at Shillong .
- JNV buildings at Meghalaya.
- Regional Labour Institute at Shillong, Meghalaya.
- Pharmacy Building for North Eastern Institute of Ayurveda and Homeopathy, Shillong.
- 100 Seated Women's Hostel Building, Warden Residence, Academic Building for Conducting Medical Programme at NEHU, Shillong.
- 2 Nos. 120 men Barrack 4th Bn.,ITBP, Sangti, Arunachal Pradesh.
- Non- Residential Building at 30th Bn. Hqrs. SSB Dirang under FTR Hqrs. Guwahati.
- Residential Building at 30th Bn. SSB Dirang, Arunachal Pradesh.
- Main Campus of NIMAS at Dirang Arunachal Pradesh.
- Phase-A works at JNV Kiphire, Nagaland.
- Film and Television Institute at Jollang-Rakap Village, Itanagar, Arunachal Pradesh.
- Administrative Block, GOs Mess and Cement Approach Road at for NE Frontier, ITBP Khatting Hill, Itanagar Arunachal Pradesh.

- Transit camps Building for ITBP SHQ at Likabali (Assam).
- Non-residential building for SHQ, ITBP at Likhabali Arunachal Pradesh.
- T-II 24 Nos., T-III 16 Nos., T-IV 04 Nos. & T-V 03 Nos. Residential Quarters for SHQ, ITBP at Likhabali, Arunachal Pradesh.
- 02 Nos. 120 Men Barrack for 20th Battalion ITBP at Aalo Arunachal Pradesh.
- 45 Rooms for ASI Accommodation at 20th Bn. ITBP Aalo Arunachal Pradesh.
- 2 No 120 Men Barrack (G+3) for 49th Bn. ITBP at Basar, Arunachal Pradesh.
- 10 Bedded Hospital, Bin Type Magazine Building, M.T. Workshop and Garrage at 49th Bn. ITBP at Basar, Arunachal Pradesh.
- 45 Nos. Rooms for ASI Accommodation at 49th Bn. ITBP Basar, Arunachal Pradesh.
- Pharmaceutical Science Building at Assam University, Silchar, Assam.
- 593 nos. residential quarters at GC, CRPF, Dayapur, Silchar.
- Multipurpose Academic Building at Assam University, Silchar.
- 20000 MT capacity Rail Fed Godown i/c Ancillary Structure & development of Land in Bihara in Cachar, Assam.

16.28 Some photographs of completed works:



Administrative block of BSF at Frontier head quarter, Umpling, Shillong



GO's Mess for CTC, SSB, Salonibari

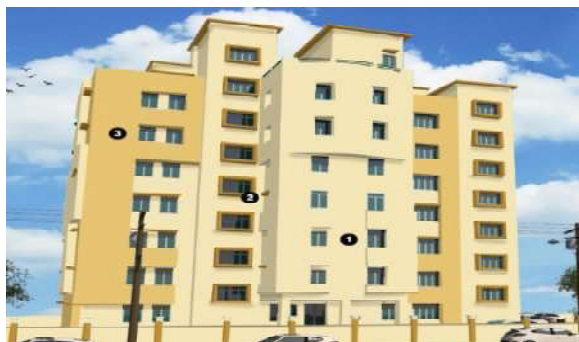


120 Men Barrack for 25th Bn ITBP at Tezu



Quarters for ATS ITBP at Lohitpur

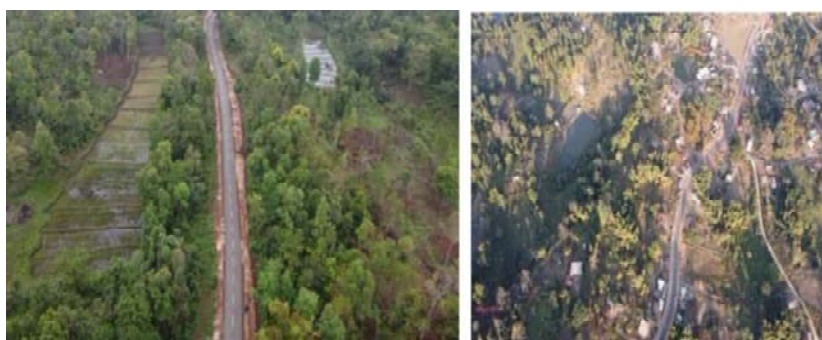
The details of the work are as follows:—



Office building for CGST Commissionerate Customs Division and Agartala Audit Circle at Agartala, Tripura



Up-gradation of Agartala Government Medical College, Tripura under PMSSY Phase-III



15.517 Km inter-state road between Meghalaya (13.397 Km approx.) to Assam (2.120 Km approx.) from Mukroh Umspar linking Jirkyndeng road under North East Road Sector Development Scheme

Border Roads, Fencing & Flood Lighting Works

16.29 CPWD is actively involved in development of Border Infrastructure and executing the works of Border Fencing, Roads, BOPs and Floodlighting works along Indo-Pak Border, Indo-Bangladesh Border and Indo-China Border. It is entrusted with construction of 4 new roads under Indo-China Border Road, Phase-II for ITBP having length 10.22 Km, 7.64 Km, 9.29 Km & 3.36 Km respectively.

CPWD was entrusted with 2 works by MHA, Govt. of India along Indo-China border in 2020.

- Annual Repair and Maintenance of ITBP Roads to Indo-China Border in Ladakh. SH: Karzok to Chummar (Length-70.085 km).
- Annual Repair and Maintenance of ITBP Roads to Indo-China Border in Ladakh. SH: Phorang-Chartse+Pt. 4433 (Length-73.985 km)

16.30 Some photographs of completed Border Project works: —



16.31 Some new MoUs signed with:

- Hindustan Aeronautics Limited (HAL) for construction of Building for Engine Test Bed (ETB), Module Change Workshop (MCW) and allied services at Indian Air Force, Naliya, Gujarat on January 06, 2023.
- AIIMS Patna for construction of 150 bedded Critical Care Hospital block on December 15, 2022.
- AIIMS, Bhubaneswar for Construction of Critical Care Health Building on December 15, 2022.
- NIFT Shillong on December 10, 2022 at Shillong for construction of new buildings and boundary wall for NIFT Shillong.

- Kerala Industrial Infrastructure Development Corporation KINFRA on October 29, 2022 for construction of proposed IT Building at KINFRA Film and Video Park, Thiruvananthapuram.
- IIM Raipur on October 07, 2022 for the construction of their campus (Phase-II) at Raipur.
- Central University Kashmir on October 04, 2022 for the construction of Residential Model Township at Ganderbal, Kashmir (J&K).
- Reserve Bank of India on October 04, 2022 for the construction of their office and residential complex at Imphal, Manipur.
- Central University Kashmir on October 04, 2022 for the construction of Residential Model Township at Ganderbal, Kashmir (J&K).
- Reserve Bank of India on September 05, 2022 for redevelopment of their residential complex at Mahim, Mumbai.
- Shri Mata Vaishno Devi Shrine Board on August 09, 2022 for the construction of Skywalk at Bhawan Katra, Jammu & Kashmir.
- National Institute of Open Schooling on July 18, 2022 for the construction of Regional Centre Building for NIOS at Rohini, Delhi.
- Tata Memorial Centre on May 26, 2022 for construction of Ayurvedic Cancer Hospital for Tata Memorial Centre at Tambati, Raigad.
- Reserve Bank of India on May 20, 2022 at Ahmedabad for Redevelopment of Residential Quarters of RBI at Vasna, Ahmedabad.
- Bank of Baroda on May 04, 2022 for construction of Commercial/Administrative Building for Bank of Baroda at IT Park, Dehradun.
- Hindustan Aeronautics Limited on April 28, 2022 for construction of their Fixed Base Full Mission Simulator (FBFMS) buildings for Jaguar Aircraft at Air Force Station, Jamnagar.
- Central University Andhra Pradesh on March 24, 2022 for construction of Central University Phase-I.
- Auroville Foundation, Tamil Nadu on March 15, 2022 for execution of Projects related to Making of Auroville City, Tamil Nadu.
- Reserve Bank of India on March 16, 2022 for redevelopment of Quarters of RBI at Zoo-Narengi Road, Guwahati.
- IIT Madras on March 10, 2022 for construction of Research Visitors Guest House for IIT Madras Campus at Chennai.
- Sports Authority of India (SAI) on March 09, 2022 for execution of their works all over the country.
- DMRC on February 28, 2022 at New Delhi for construction of underground METRO services in Central Vista Avenue for connecting Central Secretariate Buildings.

Efforts made to bring systematic changes to improve efficiency, effectiveness and transparency and public image:

16.32 Enterprises Resource Planning (ERP)

- CPWD, under the guidance of MoHUA, has taken the initiative to migrate its entire operations to a cloud-based ERP so that such technologies can be leveraged for improved delivery of all projects and enhanced client satisfaction in our maintenance operations.
- The proposed ERP application - e-NIRMIT - will take CPWD to a seamless working environment wherein all ERP modules, existing IT applications along with all required Central Govt. applications/portals like PFMS, Bhavishya, ERS, OCMS, PGMS, LIMBS, CPWD e-SEWA, Pragati etc. would operate completely in sync. The ERP solution would allow highly accurate and dynamic project monitoring and control along with risk alerts related to any project.
- This data will be used not only for analytics for tasks such as preventive maintenance, breakdown analysis, real-time progress monitoring and control for projects spread over each corner of the country, but also for machine learning algorithms to aid decision-making in real-time, improvement of efficiency in deployment of resources, early-alerts for worker safety at site and better-quality assurance in its works using artificial intelligence.
- The ERP will integrate all CPWD stakeholders such as contractors, consultants, vendors, clients, arbitrators, officials, project managers etc. into a seamless cloud-based environment for improving efficiency, eliminating time and cost over-runs of projects and works, cutting wastage and improving client satisfaction.
- It will be an important step in realizing our Hon'ble Prime Minister's dream of a digital India and serve as a lighthouse ERP Project for the entire Public Works ecosystem of the country to emulate. This project has the potential of completely overhauling and rejuvenating the Public Works administration in our country.

e-Governance Initiatives:

16.33 e-Governance unit took many initiatives for easing the working and improving the efficiency in department. Most of them are completed and achieved. Brief details of achievements of e-governance unit in financial year 2022-23 are as under:

- **Overall Quality Assurance Management System-** Standing Committee of Parliament suggested for making a provision in WBPMS for uploading of inspection reports and their replies by Region/Sub-Region inspecting authorities. The facility was created and made functional. Provision has also been made for uploading of Third-Party Quality Assurance Inspection reports and their replies thereof.
- **Updating/Uploading details of custodian of service records of retired employees:** Provision has been made in PIMS for updating details regarding custodian of service record of retired CPWD employees. Due to restructuring of CPWD, several offices have inter alia been renamed, merged, closed, etc. losing sight of service book of retired employees due to change in custodian of such service records. This provision will enable capture of such data of custodian of service records of the retired employees of CPWD to avoid inconvenience faced by retired employees as well as by concerned sections processing cases involving retired persons.

- **CEMS module 2022:** New Contractor Enlistment Management System (CEMS) module has been developed and launched as per Enlistment Rules, 2022 for enlistment/revalidation by prospective/existing contractors. Also various suggestions received from various stakeholders have been incorporated to make the module user friendly.
- **Integration of CPWD Contractor Enlistment Management System (CEMS) with National Single Window System (NSWS):** The integration of CPWD Contractor Enlistment Management System (CEMS) with National Single Window System (NSWS), a Government of India's flagship programme under Digital India 2.0 has been completed. This will enable Companies to apply for registration as contractor in CPWD through NSWS single window system in a faceless manner in addition to CPWD CEMS system.
- **Updation of CEMS 2021 Module:** CEMS Module, 2021 has been modified to incorporate major changes in "Rules for Enlistment of Contractors in CPWD, 2021" circulated by CSQ unit vide OM No. DG/SE/CM/Enlist. Rules/65 dated 21-03-2022 and also vide OM No. DG/SE/CM/Enlist. Rules/Misc./25 dated 17-05-2022.
- **Making list of contractor dynamic (with CEMS):** List of CPWD contractor as displayed in CPWD website has been linked with Contractor Enlistment Management System, so that as and when any new contractor is enlisted across the country in any Class and Category, it shall in real time be automatically updated in this list displayed for public viewing.
- **Arbitrator Appointment Module:** Arbitrator Appointment Module developed for appointment of Arbitrator, which is a mixture of both offline and online system with primary responsibility of entering data delegated solely to the Arbitration Appointment Authority. The data relating to work is to be fetched from WBPMs as filled by concerned EE in charge. All the activities relating to all correspondence shall be captured in system generated print copy and shall be carried out in a prescribed time frame. The details/status relating to appointment of Arbitrator can be viewed by all concerned officers as well as for monitoring in the Directorate.
- **Limited Departmental Competitive Examinations (LDCE):** Necessary provisions, for conduct of LDCE for promotion of subordinate employees to JEs and from JEs to AEs, have been separately incorporated in DEMPS module as per requirement of CPWD Training Academy. (a) Interested employees can fill their application online. (b) Download it and upload after getting it verified by controlling officer. (c) These applications can be scrutinized by various Controllers of Examination with provision to enable return back for correcting any deficiency before actual approval of the same. (d) Roll Nos. will now only be system generated ones. Necessary minor modifications have been incorporated in DEMPS module as per requirement of CPWD Training Academy, for conduct of LDCE for promotion of subordinate employee to JE and from JE to AE. Modifications in online examination application DEMPS module have been made to function to generate unique series of Roll Nos. station specific to clearly identify the station by seeing the Roll Nos.
- **Completion Certificate cum Contractor Performance Certificate-** Necessary changes have been incorporated in module developed for online generation of Completion cum Performance Certificate for any completed work. After UAT testing, it will be made live 24/7 for tendering purpose, alike experience, etc. Such certificate is open for contractor to

download as per sweet will for tendering purposes. At the same time the client & any other authority can in real time verify the certificate's authenticity.

- **Feature of uploading speaking order in APAR module:** Provision has been created in PIMS for uploading of any speaking order inter alia by reviewing authority or appellate authority and by custodian of APAR records.
- **Automated SMS/Email Alert system in PIMS module for Joining at posting station:** Provisions have been made in PIMS application for generating system alerts through SMS and e-mails to employees, who have failed to join their new place/station of posting after being relieved from earlier office after lapse of two months. These alerts are also sent to concerned Co-ordination units/Sections and the concerned controlling officer.
- **Feature of recording the higher qualification of employees after joining services:** Provision has been created in PIMS for entering & capturing all data related to acquiring of any higher qualification by employees after their entry into service, which will help in documenting authentic record of academic qualifications. This date will facilitate in deciding the promotion cases as well as for preparing bonafide Seniority List, in respect of such employees.
- **Feature of recording the type of promotion to employees after joining services:** Provision has been created in PIMS for capturing and updating of data relating to various types and category of promotion accorded to various level employees of CPWD, such as Regular/Proforma/Ad-hoc/In-situ/Current Duty Charge. This type of information was hitherto not available in respect of any promoted employees/officers.
- **Additional Feature in Transfer/Posting Module:** Online application for transfer from existing office in PIMS for Assistant Engineer and lower rank employees has been remodelled, so as to facilitate them to simultaneously apply for Inter-Region transfers, as well as for Intra-Region transfers. Earlier only one such request was accepted. Now the concerned co-ordination officer can see the opted options of employees transferred from other Region to their Region, so that final office orders are issued by them. This will enable employees to join their place of posting directly without submitting their joining report in concerned co-ordination office and wait for final posting.
- **Updation in Hindi Pranali reporting Module:** Modifications have been made in the existing Hindi Pranali reporting module in order to enable viewing of quarterly progress report prepared by various Sections under the various Head of the Offices in the CPWD Directorate.
- **Feature for updating Accessibility Audit Report:** Facility for uploading of Accessibility Audit Report of buildings in Sugamya Bharat module has been created.
- Provision has been created for retaining duplicate PIMS ID of any employee in case of its change or correction.
- **Feature for uploading the Occupancy Certificate of building:** Provision has been created for entering details in Occupancy Certificate in WBPMS module. Earlier there was provision only for selection of either 'Yes' or 'No' and then uploading of scanned copy of Occupation

Certificate. Now information about such reports can be generated for all supervising officers in the hierarchy.

- **New module for uploading of PPTs:** New module for uploading of PPTs presented during VC of DG, CPWD has been developed.

Eco Friendly & Sustainable Initiatives

16.34 CPWD is committed to keeping pace with technological advancement and adopting indigenous, sustainable, energy efficient green and clean technologies in all our construction activities and is spearheading the construction industry in respect of environment friendly construction practices.

Use of renewable energy

- CPWD has taken initiatives for generation of renewable energy in Government Buildings, Roof top Solar PV plants have been made mandatory in all new projects. Installation of 20 MW capacity solar power plants in 194 Government Buildings has been completed till date. Further, all field units have been directed again to take up Solar PV plants in GPOA and Non-GPOA buildings in remaining buildings and new projects as per the site feasibility.



Implementation of Energy Efficiency Measures in Government Building

- Replacement of conventional light fittings, fans & ACs with energy efficient LED light, fans and ACs in 550 Government Office buildings completed till date resulting in saving of 1674 lakh units cumulatively of electricity and reduction in carbon dioxide emission of 1,50,740 Tons. It is expected that there will be reduction in carbon dioxide emissions upto 3,34,046 Tons cumulatively upto 2024.
- Direction has also been given to field units for ensuring compliance to India Cooling Action Plan directives to reduce cooling demand in the existing and upcoming projects and thus reduce consumption of electrical energy.
- To address the problem of depleting ground water resources, CPWD has made it mandatory to install Rain Water Harvesting system and Waste Water Recycling plant in all its major projects.
- New campuses are being developed by CPWD with zero discharge and zero waste concept.

- CPWD is already using C&D waste materials in its works in shape of sand, aggregates, bricks, PCC blocks, Paver Blocks etc. In Delhi, so far, more than 6850 Metric Tons of C&D waste materials have been utilized. This resulted in saving of equal quantity of natural stone and sand, reduction in CO2 emissions by over 137 Metric Tons and saving in water use by 5400 kiloliters.

Accessible India Campaign

16.35 Under the 'Sugamya Bharat' Mission, CPWD has undertaken the massive task of making public buildings accessible. Under this mandate, CPWD has completed accessibility works of 211 Buildings of MoHUA. Accessibility works in 889 Buildings of other Ministries has also been completed by the CPWD.

Use of Modern and Innovative Technologies

16.36 CPWD, while keeping pace with the technological advancement is also committed to encourage environment friendly construction practices. It has taken initiative of adopting 50 new and emerging construction technologies. These systems are found to be fast, efficient and eco-friendly and in conformity with the green and sustainable development.

New publications / guidelines

16.37 As a part of up-gradation of systems and processes of CPWD, following revised CPWD Publications have been brought out:

- Quality Assurance Manual for Building Works 2022
- CPWD Works Manual 2022
- Standard Operating Procedures (for CPWD Works Manual 2022)
- General Conditions of Contract 2022 for EPC Projects
- Rules for Enlistments of Contractors in CPWD 2022
- CPWD Specifications for Modular OT (MOT) 2022
- CPWD Specification for Nurse Call System (NCS) 2022
- CPWD Specification for Pneumatic Tube Transport System (PTTS) 2022
- CPWD Specifications for Medical Gas Pipeline System (MGPS) 2022
- Delhi Schedule of Rates (E&M) 2022
- Delhi Analysis of Rates (E&M) 2022
- Compendium of Duties 2022

Skilling and Health of Construction Workers

16.38 Skilling Mission has been taken as a social responsibility for unskilled workers engaged at construction sites. Provision for skilling of construction workers has been increased in GCC from 20% to 30%.



16.39 Welfare of Construction Workers

- Under the backdrop of MoU signed with CPWD Officers Wives Association (OWA) for welfare of the construction workers, so far, over a dozen health camps have been organized and equal number of crèches opened by CPWD OWA.
- In pursuance of directives of PMO for providing hygienic living conditions to construction workers, CPWD has developed standard modules for workers shelter at construction sites. These designs and specifications of shelters have been circulated to all CPWD field units for erection at their work sites. These shelters, when provided at sites will facilitate comfortable and habitable living conditions for workers at worksites.

16.40 Enhanced Visibility of Department

- Newsletter of Department showcasing activities and achievements is being brought out on monthly basis with wide circulation to Clients and senior most functionaries of the Government. This effort has been instrumental in increasing the awareness about CPWD amongst the clients.
- CPWD connected itself with social media through official twitter handle, face book, You Tube Channel, Instagram and Koo.
- Regular interaction with the Electronic and Print Media on activities of the Department.

16.41 Swachh Bharat Mission Activities

- Under SBM, 92 Sewage Treatment Plants have been installed in the existing GPOAs and GPRAs maintained by CPWD.

- For Solid Waste Management, 79 Solid Waste Convertors have been installed in existing GPRAs/GPOAs.
- CPWD is doing waste segregation at source at different locations in Delhi and outside with the help of start-ups with no cost to CPWD.

16.42 Major reformative measures undertaken

Functioning of the CPWD significantly revamped and improved owing to initiatives taken as under:

- **Revision of Delegation of Financial Powers to CPWD officers:** The existing "Delegation of Financial Powers to CPWD officers" was approved by Ministry in year 2013. Consequent upon re-structuring/de-layering, the functional levels in the hierarchy were reduced. As part of restructuring, work centric units were created. Keeping in view, CPWD revised delegation of powers at various levels in different categories of work which will facilitate speedier execution of works.
- **Revision of Departmental charges being levied by CPWD:** Departmental charges rationalized after a period of 38 years on account of mechanization of work, outsourcing, introduction of EPC contracts etc. Earlier Departmental charges were levied in the range of 23% - 7%. Now, it has been reduced to 10% - 4%. Further, slabs of the charges have also been reduced to 3.
- **Compendium of Duties 2022:** Duties of officers of CPWD have been mentioned under Section-III of CPWD Code in 1959. The duties of various posts were issued from time to time with the approval of DG, CPWD /MoHUA. A 'Compendium of Duties of officers of CPWD' has been published first time. It highlights the functions to be performed by all officers of the department.
- **Creation of post of Assistant Engineer (Planning):** A need was felt to have dedicated technical staff at the Division level to handle and expedite various technical issues like planning in pre-construction stage, preparation and scrutiny of tenders and scrutiny of extra item/ deviation arising in execution of works and miscellaneous function like reply to Quality Assurance para and handling of Arbitration matters. This issue became more important and pressing in the revised organizational structure of CPWD with work centric approach. The better planning will lead to better quality of construction.
- **New Contractor Enlistment Management System module** based on 'Rules for Enlistment of Contractors in CPWD 2022' has been launched and made functional. For ease of doing business, Contractors' Enlistment Management System developed for online registration of contractors. The Enlistment Rules of contractors have been simplified.
- CPWD Works Manual 2022 issued incorporating various aspects on account of restructuring of the department.
 - EPC Contracts adopted for all works costing more than Rs. 100 Crores.
 - Timelines prescribed for taking decision by various authorities related to contract.
 - Online system for recording of delays and hindrances introduced.
 - Third Party quality Assurance Agency for all works over Rs 20 Crores.
 - Guidelines for keeping client in loop from the stage of start of dispute.

- **To bring about transparency in the appointment of arbitrators**, the process of empanelment of arbitrator has been made broad based with opening the empanelment of arbitrator to retired railway officers also.

16.43 Events

- CPWD celebrated 168th year of its glorious service to the Nation on July 12, 2022. Shri Hardeep S Puri, Hon'ble Union Minister, MoHUA and Shri Manoj Joshi, Secretary, MoHUA graced the occasion as the 'Chief Guest' and 'Guest of Honour'.



- During the CPWD's Annual Day function, several technical publications including Nirman Bharati- annual magazine released and 06 ERP e-modules launched. In addition, Best performers and Best projects were recognized and awarded Medals and Certificates.



- **Green Action Plan 2022-23**
 - Under Green Action Plan 2022-23, CPWD organized 'Free Distribution of Plants' at Nirman Bhawan, New Delhi on November 24, 2022. On the occasion Shri Shailendra Sharma, DG, CPWD distributed Plants Sapling to various officers and staff of CPWD.
- **International Yoga Day**
 - To commemorate the 100 days countdown to International Yoga Day, Central Public Works Department organised Yoga related events/ workshop on May 03, 2022 at

Headquarter as well as regional level all across country. Various yoga related workshops/ demonstrations explaining the benefits of Yoga as well as yoga related competitions, lectures, training etc were organised under the able guidance of yoga experts. Yoga was practiced and performed by around 1,400 officers and staff of CPWD along with families at more than 39 locations all over the country by CPWD. Shri Hardeep Singh Puri, Hon'ble Minister of Housing & Urban Affairs and Petroleum & Natural Gas virtually led the online 'Yoga Workshop' which was attended by large number of officers of CPWD and MoHUA.



- **Indian Urban Housing Conclave-2022**

- CPWD participated in the Indian Urban Housing Conclave-2022 held in Rajkot, Gujarat from October 19-21 October, 2022. Shri Shailendra Sharma, Director General CPWD gave a presentation on the 'Use of innovative technologies by public and private agencies' on October 19, 2022 highlighting the various innovative initiatives and technologies adopted and implemented by CPWD.



- **Special Campaign 2.0:**

- CPWD participated in the Good Governance Week- 2022 organized by DARPG from October 19-23 December, 2022 at Vigyan Bhawan, New Delhi. Dr. Jitendra Singh, Hon'ble Union Minister for Personnel, Public Grievances and Pensions inaugurated the event. A stall highlighting the achievements of CPWD during the Special Campaign 2.0 was displayed during the exhibition.



16.44 Azadi Ka Amrit Mahotsav:

- As a part of Azadi Ka Amrit Mahotsav, 'Anu walkathon' was organized by Deptt. of Atomic Energy from Rajaji Bhawan Complex CPWD to Elliot's beach on August 28, 2022. The Walkathon Flagged off by Shri Rajesh Kumar Kaushal, Special Director General Chennai, CPWD and Shri Venkatraman B., Director Atomic Energy (DAE) Kallapakam in the presence of Shri Ramdass Director, National Institute of Ocean Technology and Shri Rajesh Khare, Chief Engineer Chennai, CPWD.
- An inaugural CPWD Runathon 2022 was organised by National CPWD Academy on October 30, 2022 to celebrate Azadi Ka Amrit Mahotsav. The response received was overwhelming. Many Officers and Staff from CPWD and Other Central Govt. Departments; and their family members actively participated in the run.



SWACHHATA PLEDGE

Mahatma Gandhi dreamt of an India which was not only free but also clean and developed.

Mahatma Gandhi secured freedom for Mother India.

Now it is our duty to serve Mother India by keeping the country neat and clean.

I take this pledge that I will remain committed towards cleanliness and devote time for this.

I will devote 100 hours per year that is two hours per week to voluntary work for cleanliness. I will neither litter nor let others litter.

I will initiate the quest for cleanliness with myself, my family, my locality, my village and my work place.

I believe that the countries of the world that appear clean are so because their citizens don't indulge in littering nor do they allow it to happen.

With this firm belief, I will propagate the message of Swachh Bharat Mission in villages and towns.

I will encourage 100 other persons to take this pledge which I am taking today.

I will endeavour to make them devote their 100 hours for cleanliness.

I am confident that every step I take towards cleanliness will help in making my country clean.



सत्यमेव जयते

**GOVERNMENT OF INDIA
MINISTRY OF HOUSING AND
URBAN AFFAIRS**