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ABOUT US

NPEC Consultancy Private Limited "NPEC" is a ISO 9001:2015 certified organization under companies act 1956 was actually born in year 2010 as N.P. Engineering & Consultancy with a vision to create a premier engineering and consultancy organization offering total engineering solutions in all facets of Infrastructure Development in Transportation, Water and Power sectors within and outside India. The dream come true due to passion and committed efforts of group of young engineering professional who makes the core team of NPEC.

NPEC specializes in integrated design, engineering, construction, and project management and has wide sector coverage with particular expertise in infrastructure, residential, commercial, healthcare and industrial properties.

Today NPEC prides itself on delivering clients completed projects by fusing tremendous engineering knowledge with innovative skills, harnessing men and materials. Our operations have always been marked by creation of synergies, backward and forward integrations and strategic innovations for competitive edge. Our ability to mobilize financial, material and human resources in quick timeframe makes us the preferred team for critical projects.

Long term client relationships, strategic partnerships and collaborative working are all part of the NPEC ethos.

Vision

"To be a Premier engineering & Consultancy organization holding recognition and respect as an expert and leading company offering Total Project Solutions in all facets of Infrastructure development in Transportation, Water Resources and Power sectors within and outside India

Mission

"Sustained growth in profitable manner, Excellence in performance, Continuous up-gradation by using state-of-art technical expertise, Innovation, Augmentation in capabilities and Meeting needs of Society."

OUR STAFF

We are a people-driven enterprise. Our innovative and diverse workforce has the will to take on challenges and see them through. Be it the scorching desert sun, the fierce monsoons or Freezing temperatures, our people are always willing to perform with single minded focus on enhancing the company's name.

Transcending cultural and ethnic barriers, our vast and varied workforce of skilled professionals, speaks only one language - that of attaining common goals. At all our projects, this team spirit among workers has contributed to precise co-ordination, motivation and enthusiasm. The dynamic synergy of this global resource has been the primary catalyst in the Group's emergence as a premier engineering, procurement and construction player in the region.

Our areas of expertise range from feasibility study, design and project management, through construction to building services and whole-life asset management and maintenance. This allows us to self-perform major portions of the work on our projects.

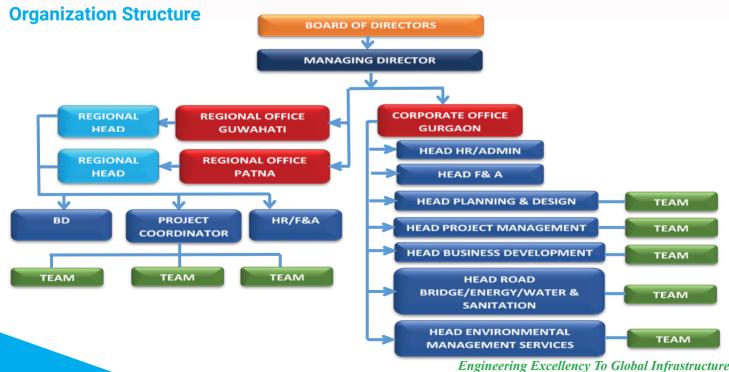


The Chairman (Honorary)

Mr. J. Sarkar, Honorary Chairman of NPEC is a Former IRTS, Govt. of India carries nearly three decades of experience in the field of transport management and planning with him having worked in one of the largest Railway systems in the world. During his excellent carrier he served as Director Rail Board, India, many key Advisory positions of India and then ended with Senior most position in RITES, an infrastructure consultancy organization under the Ministry of Railways, Government of India. He is associated with many consultancy projects related to perspective planning in transport & infrastructure sectors both in India and abroad. Mr. Sarkar had headed the Total Transport System Study, a landmark national level exercise undertaken by Planning Commission, Government of India towards the formulation of an integrated transport policy for India. Considered the largest single assessment exercise in transport sector so far, it covered all modes of transport spread across the entire canvas of India as the study base. Much awarded, Mr. Sarkar is a recipient of National Award for outstanding performance in Rail operations in India. He has also attended numerous international conferences and workshops as an invited speaker. He has been a mentor and the brain behind the company's growth.

The Managing Director

The pillar of this mission of excellence is Mr. P Ghosh, Managing Director of NPEC. An Civil engineer by profession, he is a renowned Technocrat with Master's Degree in Transportation & MBA. Accomplished, is associated with many international bodies. Mr. Ghosh is having over 24 years of experience in handling engineering projects across the country and abroad in multidisciplinary arenas encompasses an entire spectrum of assignments. Having handled Design, Planning and execution of Expressways/National/State Highways, multistory Buildings, Runways, Marine structures and management/Financial expert, he brings a wealth of technical prowess to NPEC.





QUALITY POLICY

At NPEC, our most important goal is a satisfied client. We emphasize quality workmanship, reliability, and personal involvement with each project we undertake. NPEC subscribes to the philosophy that accident prevention and preserving the environment is an ongoing responsibility. We are committed to strategic business development in engineering services such as real estate, infrastructure, design and quality control, environmental engineering and Skills development as the key to nation building in the 21st century. We aim to achieve perfection in everything we undertake with a commitment to excel.

We have the capability, knowledge and experience to undertake services for both public and private sector and government sector clients

We are committed to the principles of good governance and aim to do business with integrity aspiring to the highest standards.

We recognize that the work we perform will affect countless people in unknown ways. Accordingly, we take our work seriously and put forth our best effort in every task we undertake.

Today NPEC prides itself on delivering clients completed projects by fusing tremendous engineering knowledge with innovative skills, harnessing men and materials. Our operations have always been marked by creation of synergies, backward and forward integrations and strategic innovations for competitive edge. Our ability to mobilize financial, material and human resources in quick timeframe makes us the preferred team for critical projects. Our Guiding Principles have been:

- » Meeting the highest engineering quality standards
- » High level of service and dedication to customers
- » Use of existing experience in order to reach creative and advanced
- » Upgrading and developing the company personnel in order to achieve professional Excellency
- » Meeting of deadlines
- » Placing one of the partners in charge of each project

Long term client relationships, strategic partnerships and collaborative working are all part of the NPEC ethos. NPEC enjoys a well-respected reputation among national and international clients.



WE OFFERS COMPLETE ENGINEERING SOLUTION FOR INFRASTRUCTURE



SERVICES

- » PROJECT PREPARATION
- » PLANNING
- » PROJECT ADVISORY SERVICES
- » PROJECT MANAGEMENT
- » DESIGN
- » CONSTRUCTION SUPERVISION
- » PROOF/SAFETY AUDIT CONSULTANCY SERVICES
- » LANDSCAPING DESIGN
- » RESEARCH, DEVELOPMENT, INVESTIGATION OF NEW TECHNOLOGY AND MATERIAL TESTING AND **SURVEYS**
- » LENDER'S ENGINEERING SERVICES

SECTOR

- » TRANSPORTATION, ROAD AND BRIDGE
- » RESIDENTAL, COMMERCIAL BUILDING, TOWNSHIP
- » LANDSCAPE AND HORTICULTURE
- » ENVIRONMENTAL MANAGEMENT
- » IRRIGATION, DRAINAGE, WATER MANAGEMENT













TRANSPORTATION, ROADS & BRIDGES

NPEC Provides comprehensive Highway Engineering Consultancy Services covering all aspects of Conceptual and Detailed Design, Construction, Supervision of Highways, Expressways, Feeder/Rural roads, Bridges/Viaducts, Strategic Planning for Improvement / Upgrading of Road Systems, Operation & Maintenance.

- » Advisory / technical assistance
- » Pre-feasibility and techno-economic feasibility studies
- » Network improvement studies
- » Expressway studies
- » Transportation & traffic studies
- » Detailed engineering design and project preparation
- » Pavement evaluation & design
- » Safety and Environmental impact assessment
- » Construction supervision and Project management
- » Quality assurance

Project Preparation

- » Preparation of DPR
- » Pre-feasibility and techno-economic feasibility studies.
- » Project Cost Estimation & Budget Preparation.
- » Safety and environmental impact assessment.
- » Advisory and technical assistance
- » Architectural consultancy.
- » Planning & Control.
- » Location Analysis.
- » Space planning and design
- » Site Analysis & Selection.
- » Cost Analysis & Evaluation.
- » Project Technical Analysis.

- » Specification Development.
- » Project Scheduling.
- » Regulatory Compliances.
- » Equipment Specification
- » Drawing Development, Layout Design.
- » Economic Evaluation.
- » Engineering Estimate & Analysis. Expansion & Retrofits.
- » Bid Preparation & Analysis.
- » Procurement Analysis.
- » Construction Scheduling.
- » Field Studies.
- » Startup Assistance.
- » Third party Inspection & Certification



Project Management

Project Management Services for Institutional Buildings/ Campus, Schools, Infrastructural Projects, Residential Buildings/Colonies, Hospitals, Office Buildings, Commercial Buildings including shopping malls. NPEC has abundant resources and technical competence to conceptualize, develop, executes and ensures the logical conclusion of all projects.

Our Project Management Services include Contract Documentation, Cost engineering, Value Engineering, Cost Consulting, Cost estimating, Capital asset management, Resident engineering & inspection, Risk Management, Quantity Surveying.

We offer the following proactive and value driven services related to Project Management consulting:

- » Project Record Maintenance & Archiving.
- » Deviation Analysis.
- » Drawings & Records.
- » Constructability and design reviews
- » Strategic advice, Procurement advice & Contractual advice
- » Cost management
- » Cost Estimating
- » Project aftercare, property maintenance & re-engineering. (O&M)
- » Facilities management strategy and compliance
- » Site Supervision Services for Civil, Electrical Engineering

- » Project Coordination & Supervision.
- » Preparation of tender documents
- » Quantity & Quality Surveying.
- » Quality control, Inspection & Analysis.
- » Project Scheduling, Planning & Control.
- » Construction Supervision, Coordination & Safety Management.
- » Third party Inspection & Monitoring.
- » Construction Management. Quantity, Quality & Cost Survey, Analysis & Control.
- » Risk Management
- » Capital Asset Management
- » Value Engineering

Design

With our diverse experienced team, we experts in detailed design and provides services in all levels of all sector in infrastructure.

- » Structural Analysis & Design.
- drainage structures.
- » Stress & Failure Analysis.
- » Infrastructure Design.
- » Concrete Design & Analysis.
- » Structural Evaluation.
- » Steel Structure Design & Steel Analysis.

- » Construction Detailing & Drawings
- » Design of ROBs/RUB's/culverts and other RCC cross » Bridges, Roads Design. Investigation & Failure Analysis.
 - » Application Design.
 - » Restoration & Rehabilitation of Structures.
 - » Analysis & Evaluation of Soundness of Structures.
 - » Design of all types of Structures, Tanks, Bins,





Construction Supervision

Authority Engineer Services

- » Review the EPC Contractor's design, consultant drawings and give approval based on the detailed engineering study and the requirements enumerated by the government authority in its tender document.
- »Review the quality assurance plan of the contractor and approve the material source and the materials used in the construction.
- » Review of the project progress and ensure its timely completion.
- » Review, inspection and monitoring of O&M.

Independent Engineer Services

- » Review of the Drawings and Documents of Concessionaire
- » Review, inspection and monitoring of Construction Works.
- » Review the monthly progress report furnish by the Concessionaire and sent its comments thereon to the Authority and the Concessionaire.
- » Conducting Tests on completion of construction and issuing Completion / Provisional certificate.
- » Review, inspection and monitoring of O&M.
- » Review, inspection and monitoring of Divestment Requirement
- » Determining, as required under the Agreement, the costs of any works or services and/ or their reasonableness.
- » Determining, as required under the Agreement, the period or any extension thereof, for performing any duty or obligation.
- » Assisting the Parties in resolution of disputes and Undertaking all other duties and functions in accordance with the Agreement.







Proof/Safety Audit Consultancy Services

Safety Audit Consultancy Services

- Develop the detailed methodology and check list for safety audit, provided by the Client, in consultation with the EPC Contractor and the Authority.
- » Verify and suggest improvement in Traffic Management Plan proposed by the EPC Contractor.
- » Assessment of design of horizontal curves to ensure adequate super elevation, transition lengths for chosen radius of curve and for particular design speed.
- » Assessment of vertical curves for minimum curve length to be adopted for specific change in grade to have adequate sight distances.
- » Assess proposed provision of geometrical improvements at major and minor junctions with respect to applicable specifica tions and standard. Junction improvement shall also be checked against the hindrances and black spots in order to avoid accidents at junctions. Requirement of grade separator shall also be checked with respect to present and proposed projected traffic as per IRC guidelines.
- Verify road furniture plan.
- » Assess lane marking and adequacy of lighting at the junctions, Installation of road studs, provision of object / hazard markers, installation of traffic signs etc.
- Check adequacy of the pedestrian facilities like pedestrian guard rail, footpath, road marking etc.
- » Drainage provisions in urban areas viz-a-viz site requirement in order to ensure clearing of water from the carriage way in minimum possible time.

Proof Checking Consultancy Services

Proof checking of all Structural design and drawings including Good for construction drawings for all the structures coming in the alignment which include :-

- » Vetting of all GAD drawings prepared by main structural consultant
- » Vetting of soil investigation report prepared by main design consultant.
- » Proof Checking of Structural design of foundations, substructure, superstructure, crash barrier, retaining wall, RE wall, cycle track, footpath etc. for complete project. to complete the project It shall also include the modification in design/drawings, at no extra cost, required to be done due to any site constraints or otherwise as directed by Engineer-in-Charge.
- » Proof checking of Design of pavement.
- » Vetting of Good for construction drawing for entire stretch showing pavement / footpath/ road / Bridge/, Drainage, Signages, Road Marking etc.
- » Review proposals on construction technology of various items of work and suitable modifications are suggested keeping in view the technical requirements, contractual provisions, safety measures, sequential operation of various items, time frame, compatibility of work programme, proposed deployment of personnel and equipment and site conditions.
- » Review and approve various construction/installation methodologies submitted by the contractors and approved by main consultant.
- » Review and recommend any changes in design, if proposed by the Contractor during execution of project.
- » Review the quality assurance manual, quality assurance plans, method statements, maintenance manual, 'as built drawings' and suggest modifications, if required.

Assist Client in periodical meetings to review progress achieved with respect to the approved program.





RESIDENTIAL/COMMERCIAL BUILDING/TOWNSHIP

NPEC provides overall engineering consultancy for Project Management and execution right from infancy stage till successful completion of the projects of Commercial, Residential and all types of Building Projects. Our main objective is to optimize the resources and efforts towards maximum reduction in project cost and execution time in addition to look into the aspects of improving quality.

- » Project Organization and Set up
- » Development of Project Procedural Manuals (PPM)
- » Site Survey and mandatory field testing
- » Budgeting and Cash Flow Statements
- » Tendering Process
- » Site Supervision and Site management

Site Supervision and Site management for following works

- » Civil Works
- » Interiors Works
- » Facade Elements
- » Landscaping
- » Execution as per drawings / specifications
- » Co-ordination among various agencies
- » Quality Assurance
- » Bill auditing

Design

With our diverse experienced team, we experts in detailed design and provides services in all levels of all sector in Infrastructure viz.Residential, Commercial and industrial buildings.

- » Structural Analysis & Design.
- » Stress & Failure Analysis.
- » Foundation Design.
- » Concrete Design & Analysis.
- » Structural Evaluation.
- » Analysis & Evaluation of Soundness of Structures.
- » Steel Structure Design & Steel Analysis.
- » Pre- Engineered Buildings.
- » Construction Detailing & Drawings.
- » Storm Water & Sewage Design.
- » Application Design.
- » Restoration & Rehabilitation of Structures.
- » Analysis & Evaluation of Soundness of Structures.

Planning

A complete solution in the field of planning of new townships as well as in the up gradation and beautification of the existing ones:

- » Development of Zonal plans, sector plans and layouts for various urban and suburban agglomerates.
- » Planning of the related infrastructure utilities such as the roads, water supply, sewerage and drainage.
- » Building Permission
- » Encroachments

- » Planning Applications
- » Planning Appeals
- » Design statements
- » Housing layouts
- » New Housing development
- » Re-Development

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LANDSCAPE AND HORTICULTURE

NPEC offers Landscape design focuses on both the integrated master landscape planning of a property and the specific garden design of landscape elements and plants within it. The practical, aesthetic, horticultural, and environmental sustainability are also components of landscape design. It is often divided into hardscape design and softscape design. We have talented and vast experienced professionals in our Landscape design team with related various disciplines such as architecture and , soils and civil engineering, surveying and also we have collaboration with with related various disciplines such as geography, botany and artisan specialties for best quality and fast delivery of our assignments. Design projects may involve two different professional roles: landscape design and landscape architecture. Landscape design: typically involves artistic composition and artisanship, horticultural finesse and expertise, and emphasis on detailed site involvement from conceptual stages through to final construction. Landscape architecture: focuses more on urban planning, city and regional parks, civic and corporate landscapes, large scale interdisciplinary projects, and delegation to contractors after completing designs.

We provides following services for Clients;

Garden Design

Garden design is the art and process of designing and creating plans for layout and planting of gardens and landscapes. We have Garden designer professionals of vast experienced and expertise. Our professional garden designers have trained in horticulture and the principles of design.

Landscape Planning

We offer a professional service to our Clients and our approach is based on balancing the requirements of development against the need to deliver sustainable solutions that protect the natural environment. Landscape Architecture is distinctive amongst the design disciplines involved in the construction industry as it requires a deep understanding design and nature.

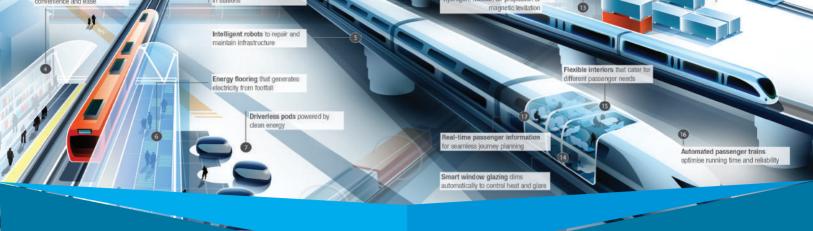
Landscape Assessment

Landscape & Visual Impact Assessment evaluates the effect of a proposed development upon the surrounding landscape. This is demonstrated though the preparation of 3D images, photomontages, maps and a report demonstrating the suitability of the scheme. Depending on your requirements and the nature of the development, we will produce the appropriate level of detail for your project. Our Landscape Assessment is often accompanied by our other services Landscape Planning & Landscape Visualization.

Landscape Consultancy

In addition to our design services, we provide consultancy services and support services to our Clients. From cost estimates, production of tender documentation through to post contract supervision we can ensure your project is completed to the highest standard and give value for money to your Clients. Successful Landscape Contract Management is carried out by our team and involves attending regular site meetings, continually reviewing the projects on the ground and providing support services to other professionals where required.





RAILWAY INFRASTRUCTURE

NPEC offers offer a comprehensive range of technical consultancy services for projects relating to civil engineering (including tunnels, bridges and viaducts).

- » Feasibility studies
- » Studies/concept review/methods
- » Preliminary design, detailed design
- » Studies and Construction methods
- » Preparation of tender dossiers
- » Evaluation of bidding
- » Supervision of construction design
- » Construction supervision
- » Diagnosis of existing structures and the design and supervision of remedial works

Our wealth of experience enables us to provide the highest-quality tunnel, bridge and viaduct structures with respect to cost efficiency, construction speed and schedule, integration to the environment, and maintenance and safety requirements.





ENVIRONMENTAL MANAGEMENT

Environmental Engineering is the need of today. At NPEC believes in being efficient in the way resources are used, creating savings for our business and adding value for our customers. We at NPEC with our expertise in the field of waste water management provide a healthy environment after treating water with highly advanced plants with adequate management.

Waste Water Management Services

Designing, Implementation, commissioning, and optimization of:

- » Sewage Treatment Plant (STP) Based upon ASP, SAFF and FABB Wastewater Treatment Technology
- » Effluent treatment Plant (ETP)
- » Tube Settler
- » Sand filter
- » Activated Carbon Filter
- » Modification, Extension of Existing STP and ETP
- » Supply of Water purification system (RO)
- » Environmental Impact Assessment Study (EIA) of Construction work

Laboratory services

- » Analysis of water, sewage and Industrial Effluent Sample
- » Bacteriological Analysis of water for Drinking Purpose
- » Air pollution Monitoring Services
- » Assist various industries to set-up their own laboratory at site to monitor the Plant on day to day basis
- » Provide Training course to various plant personnel regarding operation & maintenance of treatment plant

Strom Water Management Services

NPEC provides comprehensive and sustainable stormwater management planning, drainage design, flood control, hydraulic analysis, and integrated site design solutions.

NPEC Stormwater Management services include:

- » Permitting & Regulatory Compliance Support
- » Hydromodification Assessments
- » Detention Facility Modeling & Design
- » Stormwater Management Plan Development
- » Stormwater Master Plan Development
- » Stormwater System Modeling & Design
- » Drainage System Improvements & Basin Plans
- » Alternatives Evaluation
- » Floodplain Management
- » Erosion and Flood Control

Master Servicing and Preliminary Engineering Feasibility Studies



IRRIGATION, DRAINAGE AND WATER MANAGEMENT

NPEC provides consultancy services in water resource development, including Irrigation, Agriculture and Water Management. It covers all aspects of Hydrology, design of Irrigation Network from headworks down to Micro-Distribution System, Canal Automation, preparation of Reservoir Operation and Maintenance Manuals, Institutional Arrangements, design of Modern Irrigation Application Systems (Sprinkler/ Drip), Agronomy, Extension Services, Agro-Economics, Training, etc.

- » Detailed Project Reports
- » Macro and micro planning
- » Contract management
- » Rehabilitation/ Modernization
- » Monitoring & performance evaluation
- » Participatory irrigation & drainage management

Irrigation

- » Surveys & investigations
- » Feasibility studies
- » Preliminary & detailed designs of irrigation structures
- » Distribution system & micro level planning and designs
- » Operation & maintenance

Drainage

- » Detailed designs of surface & sub-surface drainage
- » Implementation of surface and sub-surface drain age systems
- » Sociological studies for farmers participation
- » Bio-drainage
- » Water audit for control of seepage losses
- » Water balance and salt balance studies
- » Audit of seepage losses

Water Management

- » Allocation & distribution
- » Warabandi
- » Water users association
- » On-farm development

Socio-Economic Evaluation

- » Socio-economic baseline survey
- » Monitoring & evaluation
- » Farmers training & participation
- » Farm planning
- » Strategies for production, transportation, storage and outlet centres



PROJECT ADVISORY SERVICES

NPEC provides comprehensive services for Project and Contract Management of infrastructure projects including Financial and technical support. We Provides Advisory Services that include market assessment, financial/economic feasibility check, project structuring, RFQ/RFP preparation, bid process management & selection of partner proposal, preparation of Concession Agreement and other legal documents etc.

We identifies the risks at every stage of the project and guide and support the Client. When it comes to infrastructure projects, we provides engineering, technical, project management, contractual and legal services – all under one roof. We always with the Client at all stages of the project right from pre-bid services, agreement, execution and till end of agreement of project.

Our strong team of professionals possess requisite knowledge and experience to assist our Client in appropriate decision making. Our team brings together all relevant parameters on board that helps the Client understand pros and cons of undertaking the project. We provides advisory services for upcoming, ongoing and stressed infrastructure projects.

TECHNO LEGAL SERVICES

NPEC offers Techno Legal services for various sector projects including Highways, Bridges, Residential complexes, Commercial complexes in all aspects of Contract Management, Correspondence, Claims / Dispute Management, Arbitration etc.

NPEC has a team of dedicated and talented professionals who have proven records of their meritorious services in their respective fields of Project/Contract Management, Legal and Arbitration Consultants. We offers following services

- » Contract Drafting and Management
- » Preparation of Contractual Correspondence
- » Preparation of Contractual Claims
- » Preparation of documents for Arbitration
- » Arbitration Dispute Resolution
- » Study of Tender documents & other correspondence.
- » Guiding Contractor's staff in the preparation of contractual correspondence.
- » Guiding Contractor's staff in dealing with day to day contract related issues



QUALITY ASSURANCE

INDEPENDENT QUALITY ASSURANCE

The Quality Assurance division has the competence to provide services as Independent Quality Assurance (IQA) Consultant in the following fields:

- » Construction of residential and commercial projects.
- » Construction of highways projects.
- » Construction of ROBs and flyovers.
- » Irrigation projects.
- » Industrial projects.
- » Environmental engineering.

As an IQA consultant, the division can offer the following services to its clients:

- » Provision of advisory services to the client & its supervisory staff on quality assurance & quality control measures during the execution of the work & assisting clients in technical audit of the work during the execution & on completion.
- » Ensuring that the contractor performs and executes the work in accordance with the specifications & scope of work as per contract agreement with the client and to examine and check that the field and laboratory test as has been performed by the contractor and to verify the same.
- » Conducting field and laboratory tests at site during the execution of the work and comparison of the same with test results as per tests conducted by the contractor.
- » Devising system for quality assurance and quality control and ensure that it is strictly followed during the execution of work. The number of tests and their frequency shall be strictly adhered as per relevant specifications/guidelines and quality control manuals.
- » Ensuring proper coordination between the client & the contractor so that there is no conflict between the requirement of quality and the speed of the work.
- » Verification of contractor's running bills.
- » Prescription of quality control formats for various tests as per ISI Specifications and quality control guidelines and to ensure that the quality control formats for all the tests are regularly maintained for inspection by the supervisory staff of the client.



RESEARCH, DEVELOPMENT, INVESTIGATION OF NEW TECHNOLOGY AND MATERIAL TESTING AND SURVEYS

NPEC Consultancy (P) Limited provides various kinds of Research, Investigation & Material testing services for rail/road projects, bridges/ROBs, industrial, institutional, residential and commercial projects. We have the infrastructure, expertise, technical instruments and resources to carry out all types of investigations including geotechnical and topographical investigations as part of pre-feasibility and DPR studies.

Testing of Road & Highway Material

Complete Testing facility is available to undertake the Quality testing of Roads, bridges, building & Highway Materials for the following:

- » Soil/Earthwork / Sub grade
- » Granular Sub Base
- » Wet Mix Macadam / Water Bound Macadam
- » Premix Carpet / Mix Seal Surfacing
- » Bituminous Macadam / Dense Bituminous Macadam / Dense Graded
- » Bituminous Macadam
- » Asphalt Concrete / Bituminous Concrete
- » Pavement Quality Concrete (PQC)
- » Structural concrete likePCC, RCC, PSC and HPC (M10 Grade to M60Grade)

Topographic Survey

- » Reconnaissance survey for route selection, alternative alignments, abstract cost estimates and feasibility report.
- » Preliminary engineering survey using conventional tachometry, optimization of alignment, site verification and computer aided mapping.
- » Location survey using EDMs, total stations, computerized data processing, mapping, staking of alignment on ground.

R & D of New Technology

- »Testing and Research and Development of Material
- » Preparation of DPR for Project
- » Pre-feasibility and techno-economic feasibility studies.
- » Project Cost Estimation & Budget Preparation.
- » Safety and environmental impact assessment.
- » Advisory and technical assistance
- » Architectural consultancy.
- Planning & Control.
- Location Analysis.

Geo-Technical Investigations

We have a fully equipped Soil Mechanics Laboratory with the latest soil and field testing instruments and can offer the following services in this filed:

- » Geophysical investigations.
- » Earthwork compaction.
- » Pile designing & testing.
- » Pavement design & testing.
- » Slope stabilization.
- » Geo-technical study for economical design of slopes in embankments & cuttings, foundations for bridges, buildings, towers, viaducts & other structures.
- » Route selection (rail, road, oil & gas pipeline, power transmission lines)
- » Quality control on all foundations

Transportation Survey

- » Traffic Volume Counts Surveys
- » Axle Load Surveys
- » Origin Destination Surveys
- » Intersection Turning Movement Survey
- » Project Scheduling.
- » Drawing Development, Layout Design.
- » Economic Evaluation.
- » Engineering Estimate & Analysis and Cost Analysis & Evaluation.
- » Project Engineering & Consulting.
- » Field Studies.
- » Startup Assistance.
- » Third party Inspection & Certification
- » Site Analysis & Selection.





HIGHLIGHTS OF SOME PROJECTS

NPEC has done pre-feasibility and feasibility studies, DPR, Project Supervision & management and Design engineering activities. The various projects where we were involved, some projects listed below:

ONGOING PROJECTS

Consultancy Supervision Projects

» Authority's Engineer For Supervision of rehabilitation and up-gradation to 2 lane with paved shoulder / 4 lane standards of National Highway section (i) Ahmedpur to Pimpla junction Section of Ahmedpur – Kopra – Kinagaon – Ambejogai – Kaij – Manjarsumbha – Patoda – Jamkhed Road (NH 548D) (Length - 55.623 km) section (ii) Pimpla junction to Manjarsumbha section of NH-548 D (Length - 81.685 km) section (iii) Manjarsumbha to Chumbhali Phata section of NH-548 D (Length - 32.17 km) On EPC Basis. Total Project Length: 169.478 Km

Client: Maharashtra State Road Development Corporation Limited, Maharashtra

» Independent Engineer services for Development of Sinnar to Nashik Section of N.H.50 from Km. 177/00 to 201/350 to four lane on PPP following DBFOT (Toll) in state of Maharashtra.

Client: The Chief Engineer, NH Division, PWD, Nashik, Maharashtra

Detailed Project Report Projects

» Consultancy Services for Feasibility Study and preparation of Detailed Project Report for Two lanning from Morigaon To Rowta via Koupati including a two lane bridge across river Brahmaputra and from Udalguri To Indo-Bhutan border via Khoirabari including Udalguri and Rowta bypass (Including 7 Km Major Bridge). in the state of Assam.

Client: Chief Engineer, PWD(NH Works), Assam

» Consultancy Services for Feasibility study & preparation of Detail Project Report for two lanning via Baihata Chariali- Goreswar-Khairabari-Bhergaon-Tangla-Harishinga-Udalguri in the State of Assam.

Client: Chief Engineer, PWD(NH Works), Assam

» Consultancy services for Feasibility Study and preparation oi oetailed Project Report for Two lanning from Lahoal (Dibrugarh Distric)- Dutiajan- Naharkatia- Namrup –Sonari in the State of Assam. Package No.PWD-NH(R)/ FS 12016-17/04/C (Job No.NHs/AS/D PR/2016-L7/163). Project Length: 76 Km Client: Chief Engineer, PWD(NH Works), Assam



ONGOING PROJECTS Preparation of Detailed Design Engineering/Design Director Projects

- Construction of 2-lanningwith paved shoulders Road on Package No.- NSK 57-Improvements to Kathredigar Satana Malegaon Chalishgaon Road SH-19 Km 82/800 to 132/800 Tal – Malegaon Dist- Nashik (Part- Malegaon to Chalishgaon) in the State of Maharashtra under MRIP on Hybrid Annuity Mode.
- » Construction of 2-lanningwith paved shoulders Road on Package No.- NSK 56- Improvement to Malegaon Nandgaon SH-26 Road Km 0/00 to 27/100 and Nandgaon Yeola to Nashik District Border (SH-25) Km 27/100 to 66/00 (Taluka palce Malegaon to Taluka place Yeola) in the State of Maharashtra under MRIP on Hybrid Annuity Mode.
- » Construction of 2-lanningwith paved shoulders Road on NSK-54A-Improvements to Nampur Satana, Kalwan Vani Pimpalgaon Niphad Sinnar road SH 27 km 0/000 to 73/800 Tal. Satana, Kalwan, Dindori, Niphad, & Sinnar Dist. Nashik. (Nampur to Vani) in the State of Maharashtra under MRIPon Hybrid Annuity Mode. NSK-54B- Improvement to Nashik Dindori Vani MSH-3 Km 10/750 to Km42/500 Road SH-27 Tal. Dindori Dist. Nashik (Dindori to Vani)in the State of Maharashtra under MRIP on Hybrid Annuity Mode.
- » Balance Scope of Value Engineering and detailed Design works for balance Structure work for Four Laning of Solapur-Maharashtra/Karnataka border Section of NH-9 from Km.249.000 to Km. 348.800 (100.060 Km) in the state of Maharashtra on Design, Build, Finance, Operate and Transfer(DBFOT) Basis under NHDP Phase III
- » PN-45 Improvement to Vita Peth Malkapur Anuskura Satavali Pavas SH-150 (section District Border to Anuskura District Border) km 0/00 to 84/00 Dist-Sangali (km 0/00 to 83/700 Dist-Sangali) (Section- Vita to Kokrud Km 0/000 to Km 83/700)
- » PN 43 Improvements to Top Wadgaon Shigaon Ashta Tasgaon Bhivghat Atpadi Dhighachi Road, SH 151, Km 0/000 to 127/950 (Part I- Top to Arwade Km 0/000 to Km 63/000)
- » Strengthening with construction of paved shoulder from km 135/00 to 138/00, km 157/00 to 171/00 & km 177/00 to 182/00 (Total Length =22.000Km) of NH -52 (New NH-15) for the year of 2017-18 under Nagaon NH Division, Nagaon in the State of Assam Under EPC Mode.

Proof Checking Consultancy Projects

- » Proof Checking Consultancy Services of Upgradation of Chhatrapati Chowk Latur to Pangaon of NH 548B Chha trapati Chowk Latur to Renapur Phata from km 184/950 to km. 164/200 and NH 361H- Renapur Phata to Pangaon from Km 59/400 to 38/200 to two lanes with paved shoulder/ four lane configuration [Omerga-Ausa-Latur-Rena pur-Pangaon-Dharmapuri-Parali-Injegaon road design chainage km 64/250 (Chhatrapati Chowk Latur) to km.106/200 (Pangaon) (Length-41.95 km)] in the in the State of Maharashtra on EPC mode under NH(O).
- » Proof Checking Consultancy Services Upgradation of Pangaon to Dharmapuri of Stretch NH 361H from km 38/200 to km. 25/550 and Parali to Injegaon NH 548B from km 95/800 to km. 83/700 to two lanes with paved shoulder configura tion [Omerga-Ausa-Latur-Renapur-Pangaon-Dharmapuri-Parali-Injegaon road design chainage km 106/200 (Pangaon) to km. 118/850 (Dharmapuri) And km 144/400 (Parali) to km.156/500 (Injegaon) (Length-24.75 km)] in the in the State of Maharashtra on EPC mode under NH(0).
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ONGOING PROJECTS Safety Audit Consultancy Services

- » Safety consultancy service for Proposed Bridge over River Ajoy at 22nd Km on Panagarh-Illambazar Road (SH-14) adjacent to the existing bridge under Birbhum Highway Division No.-II in the district of Birbhum, West Bengal.
- » Safety consultancy service for Proposed Bridge over river Ajay, Construction, near Shibpur at Ch. 17.84 km of Muchipara-Shibpur road (district of PaschimBurdwan) connecting Jaydev-Kenduli-Khagra road at Ch.1.05 km (district of Birbhum) under Asansol Highway Division, Public Works (Roads) Directorate, West Bengal.
- » Safety consultancy service for Construction of proposed 4-lane RUB and its approaches in liew of existing level crossing No.41 at Km.365.110 on NH-234(railway Chainage-73/2-3) near Gauribidanur Bypass in the State of Karnataka. "Job No. NH-234/KNT(8)/16-17-S&R(B)-014"

P.M.C. for Other Infrastructure Projects (Building, Sport Complex, Stadium, Bus/Truck Terminal etc.)

- » Design & Construction Supervision of the works," Construction of Bawngkawn Fly-Over, Aizawl, Mizoram.
- » Design & Construction Supervision of the works," Construction of Vaivakawn Fly-Over, Aizawl, Mizoram.
- » Design & Construction Supervision of the works," Construction of Chaltlang Bus Terminal, Aizawl, Mizoram.
- » Detailed Design & Construction Supervision of the works," Construction of Multiple Truck Terminal, Rangvamual, Aizawl. Mizoram.
- » Design & Construction Supervision of the works," Construction of Aizawl City Centre at Chawnpui, Dinthar & Khatla Tri-Junction, Aizawl, Mizoram.
- » Design & Construction Supervision of the works," Construction of Football Stadium, Luangmual, Aizawl, Mizoram".
- » Design & Construction Supervision of the works," Construction of Football Stadium, Zemabawk, Aizawl, Mizoram".
- » Design & Construction Supervision of the works," Construction of Football Stadium, Sihphir, Aizawl, Mizoram".
- » Design & Construction Supervision of the works," Construction of Football Stadium, Zuangtui, Aizawl, Mizoram".
- » Design & Construction Supervision of the works," Construction of Khatla South YMA Hall, Aizawl, Mizoram".
- » Design & Construction Supervision of the works," Construction of Luangmual YMA Hall, Aizawl, Mizoram".
- » Design & Construction Supervision of the works," Construction of Zemabawk North YMA Hall, Aizawl, Mizoram".
- » Design & Construction Supervision of the works," Construction of Zemabawk South YMA Hall, Aizawl, Mizoram".
- » Detailed Design & Construction Supervision of the works," Construction of Falkland YMA Hall, Aizawl, Mizoram".



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COMPLETED PROJECTS Preparation of Detailed Design Engineering/ Design Director

- » Consultancy Services for Preparation of Detailed Engineering Design Report and Construction Supervision of Upgrading of D153 from Great East Road at Moono Police Check Point Via Palabana to D 151 at Chilyabale Basic School (54Km) road in Lusaka Province of Zambia (Total Length=74 KM)" Project Cost: 190 Cr
- » Consultancy Services for Preparation of Detailed Engineering Design Report and Consultancy Supervision of the Upgrading of 113km of the Samfya to Kasaba via Lubwe (D096) Road in Luapula Province – Lot 1 in Zambia (Total Length=113 KM). Project Cost: 294 Cr
- » Consultancy Services for Preparation of Detailed Project Report of Development and Operation of Chittorgarh -Neemach (MP Border) of NH-79 Section (Km. 183.000 to Km. 221.400) by Four Laning and Nimbahera- Pratapgarh of NH-113 Section (Km. 5.4000 to 80.000) by Two Laning in the State of Rajasthan through Public private Partnership (the "PPP") on Design, Build, Operate and Transfer(DBFOT-Toll) basis. Length: 74.6 Cr, Project Cost: 511 Cr
- » Consultancy Services for Preparation of Detailed Project Report for Four Laning of Jam-Warora SH-264 from Km.0.000 to Km. 40.000" in the State of Maharashtra on BOT basis. Length: 40.0 Km. Project Cost: 230 Cr.

Detailed Project Report/Design Consultancy-Bridges

» Preparation of Detailed Project Report Bridges of Six district in Bihar by Bihar Rajya Pul Nirman Nigam Limited, Bihar Client: BRPNNL, Bihar

Proof Checking Consultancy Projects

» Proof Checking Consultancy Services of Four laning of the stretches from End of Borghat to Khopoli Rest House (Km.75/500 to 78/200) & from Khopoli to Khalapur (Km.79/300 to 84/400) in the state of Maharashtra on EPC Mode. Package No. 3/NH-04/2016

Feasibility Study for Pre-Tendering

- » Consultancy Services for Preparation of Feasibility Report Two Laning with Paved Shoulders including Strengthening of Nashik-Peth Section from Km 11/600 to Km 65/600 of National Highway No. 848 in Nashik District in the State of Maharashtra (to be implemented under EPC Mode)
- » Development/Up-gradation to Two Lane with Paved Shoulder/Four Laning Configuration of Wakan-Pali-Khopoli Road (SH-93) (New NH) from Km 0/000 to Km 41/000 in the State of Maharashtra on EPC Mode Under NHDPR.
- » 4 laning of RAIPUR KODEBAD Section, Package-I (Km 3.400 km To Km 43.400) of NH-43 under NHDP Phase-IV on EPC mode in the State of Chhattisgarh.





COMPLETED PROJECTS Other Infrastructure Projects (Buildings, Airport Terminal, Landscaping, Sports Block, Multilevel Parking, Water Suply etc.)

- » Architectural, Structural and Project Management Services for Sports Block at Wangcha Rajkumar Government College, Deomali, under Urban Development & Housing Department, Khonsa Division, Tirap district, Arunanchal Pradesh. Project Cost: Rs.82.83 Lac.
- » Architectural, Structural and Project Management Services for Construction and Upgradation of Xion Hospital, Dimapur for casualty and physiotherapy Block and Pediatric Nursing unit cum two storeyed hostel building. (This project includes Main Building, Basement, Multilevel Car Parking, approach road and boundary wall with gates.). Project Cost:Rs. 8.12 Cr.
- » Project Management Services for Detailed Engineering Design and Construction Supervision of Development of Public amusement facilities, Utility Blocks, Plantation, Landscaping, Beautification of Gomti River Front Development in the State of Uttar Pradesh. Project Cost: Rs. 32.00 Cr.
- » Project Management Services for Site Survey, Soil investigation, Planning, Design, Construction Supervision for Construction of Airport Terminal Building HAL, Ozar Airporort at Ozar, Tal-Niphad, Dist Nashik, Maharashtra. Project Cost: Rs.94.81 Cr.
- » Planning, Infrastructure Design, Project Management Services for Construction of 500 Beded Hospital and Medical College at Baramati, Pune, Maharashtra. Project Cost: Rs.197.22 Cr.
- Planning, Detailed Engineering and Project Mangement Services for Augmentation to Hingoli Water Supply Scheme (Siddheshwar Dam Source) under Infrastructure Development Scheme for Small & Medium Towns under Municipal Council Hingoli, Hingoli, Maharashtra. Project Cost: Rs.70.71 Cr.
- » Design, Engineering and Project Management Services for Extension and Augmentation to Ambernath Underground Drainage Scheme for Ambernath City under JNNURM, Dept of Ambernath Municipal Council. Project Cost: Rs. 138.48 Cr.
- » Project Mangement Services for Detailed Survey, Investigations, and Designing & Drawing and Construction Supervision for River Training, Sewerage System, Sewage Treatment Plants, Strom Water Drainage, Landscping, Associated Electrical works for Rejuvenation and Conservation of Harmu River in Ranchi City, Jharkhand. Project Cost: Rs. 85.43 cr.
- » Survey, Soil Investigation, Master Planning, Architecture Design, Engineering Design and Project Management Services for Construction of 534 flats under EWS at Kh No.157/2, 165 to 168, 190, 191/2 & 192, Mouza. Pimpalgaon Tah. Hinganghat, Dist. Wardha, Maharashtra. Project Cost: Rs.39.05 Cr.
- » Survey, Soil Investigation, Master Planning, Architecture Design, Engineering Design and Project Management Services for 1127 EWS, 180 LIG, 96 MIG Houses and Development of Infrastructure in Balaghat, Madhya Pradesh under PMAY. Project Cost: 101.13 Cr









CLIENTELE, CERTIFICATION AND ACCREDITATION/EMPANELMENT

NPEC is Empaneled and working with various national, central, state and provincial governments and infrastructure departments.

- 1. Ministry of Road Transport & Highways (MoRT&H), India
- 2. Aizawl Municipal Corporation
- 3. Financial Department, Govt. of Mizoram
- 4. Bihar Rajya Pul Nirman Nigam Limited (BRPNN)
- 5. Kolkata Municipal Corporation

Clientele-Govt. Bodies





























Government of India

Ministry of Housing and Urban Affairs

Clientele-Private Organizatios



















RELIANCE Infrastructure

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