3R Core Value - Responsibility, Reliability & Responsiveness







Engineering & Design Pvt. Ltd.

Basic & Detailed Engineering & Design Company
GSTIN No: 06ABKCS4064N1ZT



Telecommunication & Security System Design – Instrumentation System Design – Control & Automation System Design

Offshore & Onshore Oil & Gas I Fertilizers I Hydrocarbon Pipelines I Power Plants I Metals & Mining I Buildings & Infrastructure I Process Industries

REGISTERED CORPORATE OFFICE:

DLF Industrial Plot No. 5
First & Second Floor, Mahesh Complex
Near Mewla Maharajpur Metro Station, Sector – 31
Faridabad, Haryana - 121002, INDIA

ENGINEERING & DESIGN CENTER

FARIDABAD I GURUGRAM

Tel / FAX: +91-129-3556243 | **Mobile:** +91-9711079859 | **WhatsApp:** +91-9711079859

E-Mail: info@sketchconsultant.co.in , career@sketchconsultant.co.in



INFRASTRUCTURE

Tel / FAX: +91-129-3556243 | **Mob:** +91-9711079859, +91-7065108240 **E-Mail:** info@sketchconsultant.co.in | **WhatsApp:** +91-9711079859





INTRODUCTION

Tel / FAX: +91-129-3556243 | Mob: +91-9711079859, +91-7065108240 E-Mail: info@sketchconsultant.co.in | WhatsApp: +91-9711079859 Website: www.sketchconsultant.co.in









WHO WE ARE?

SKETCHCOM ENGINEERING & DESIGN is a detailed engineering & design company, specialized in **Telecommunication & Security Systems, Instrumentation, Control & Automation systems** for various domains like Oil & Gas (Offshore & Onshore), Hydrocarbon Pipelines, Fertilizer Plants, Power Plants, Process Industries, Metals and Mining and Buildings & Infrastructure.

Why SKETCHCOM?

SKETCHCOM ENGINEERING & DESIGN is committed to provide a sustained competitive advantage over its competitors by doing value engineering & design optimization right from the conceptual design stage, thereby adding value to its customer in terms of CAPEX & OPEX.

Its quality assurance procedures & **design standardization**, combined with a team of highly experienced engineers and designers are always committed to meet the demands of the customer at all stages of the project life cycle.

With its established Quality Assurance Procedures, Design standardization modules, in-house developed design tools and other support functions like technology partners, customer's needs evaluation team and IT systems, SKETCHCOM ensures a cost effective, reliable, safe and error free design. Our engineers are having tremendous experience in the design and engineering Telecommunication & Security systems, and they bring together a vast pool of domain specific knowledge and lessons learnt to provide a design to meet any project requirement.



CORE COMPETENCY

Tel / FAX: +91-129-3556243 | **Mob:** +91-9711079859, +91-7065108240 **E-Mail:** info@sketchconsultant.co.in | **WhatsApp:** +91-9711079859

Website: www.sketchconsultant.co.in

Industrial
Telecommunication
System Design

Industrial Security System Design

Instrumentation Design

Control & Automation
Systems Design

Communication System Infrastructure (ICT)
Design

What we do?

Oil & Gas (Offshore) Subsea Pipelines



Basic Engineering (FEED)

Detailed Engineering

Special Studies & Calculations

Installation & Commissioning Supervision

Conceptual & Feasibility Study

Procurement Engineering

BICSI Certification FAT / SAT / Surveys

Field Engineering / AS-BUILTs

Metals & Mining
Fertilizer Plants
Buildings & Infrastructure

Oil & Gas (Onshore) Pipelines



ENGINEERING SERVICES

Tel / FAX: +91-129-3556243 | Mob: +91-9711079859, +91-7065108240 E-Mail: info@sketchconsultant.co.in | WhatsApp: +91-9711079859

Website: www.sketchconsultant.co.in

Industrial Telecommunication & Security Systems, Instrumentation & Control System

- Conceptual & Feasibility studies (DFR / PFR)
- Basic Engineering (FEED).
- Detailed Engineering & Design package
- Engineering Deliverables
- Engineering Drawings (AUTO-CAD & Micro station)
- Procurement Engineering (MR / TBE / PR / VDR)
- Proposal / Estimation Engineering (Pre-Bids)
- Specialized Studies and Calculations
- FEED Verification
- Value Engineering & Design Optimization
- AS-BUILTs

- BICSI Certification
- Training on Design & Engineering
- Field Engineering
- Site Surveys
- FAT and SAT support
- Pre-Bid Costing
- Vendor Engineering (Design Package)
- Site execution coordination



SKETCHCOM

TELECOMMUNICATION & SECURITY SYSTEM DESIGN

Tel / FAX: +91-129-3556243 | Mob: +91-9711079859, +91-7065108240 E-Mail: info@sketchconsultant.co.in | WhatsApp: +91-9711079859

Website: www.sketchconsultant.co.in

Engineering & Design Pvt. Ltd.



Security Access Control
System

Process CCTV System

Marine VHF System

Security CCTV System

BWA Radio System

Building / Fence Intruder
Detection System

HVAC System / Solar Power System

VSAT System / RF cabling Microwave & radio data

SCADA / RTU System
Process & Safety Network

IP & TETRA Radio System Collision avoidance radar

Satellite Phones, WiMAX

Pipeline Leak & Intruder
Detection System

Automatic Turnstile / Boom Barrier and Crash Barrier System



Infrastructure GSP Platform

Public Address & General Alarm System, TERs Weather Monitoring Syst.





Fiber Optic Networks (ISP/OSP & SDH/PDH)

Paging and Intercom Offshore Safety Commun.

Smart TV System
Ship to shore links

Audio & Video Conferencing System

Public Information
Display System



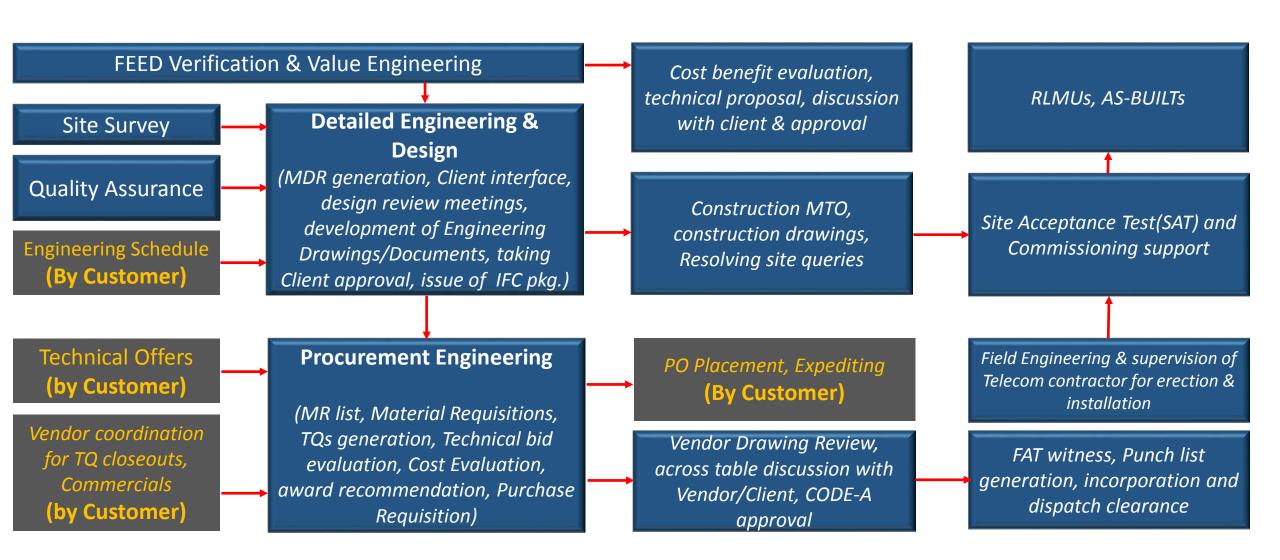
Telephone System (IP, Analog, Hotline) EPBAX, IP-EPBAX, MPLS, Leased Line



EXECUTION METHODOLOGY

Tel / FAX: +91-129-3556243 | Mob: +91-9711079859, +91-7065108240

E-Mail: info@sketchconsultant.co.in | WhatsApp: +91-9711079859





ENGINEERING DELIVERABLES

Tel / FAX: +91-129-3556243 | Mob: +91-9711079859, +91-7065108240

E-Mail: info@sketchconsultant.co.in | WhatsApp: +91-9711079859

Website: www.sketchconsultant.co.in

Industrial Telecommunication & Security Systems, Instrumentation & Control System

DOCUMENTS

Engineering Scope of Work

Design Basis & Design Criteria

Data Sheets

Detailed Bill of Material (BOM)

Engineering MTO

Technical Specifications

Cable Schedule

Equipment Tag list

Network Tie-in Specification

Functional Design Specifications

Network Channeling Plans

Third Party Interface Document & Drawing

Construction Scope of Work

Construction MTO

Operation, Trouble Shooting and Maintainnece Manuals

DRAWINGS

System Architecture

System Block level Diagrams

Installation Drawings including FOC

System Wiring & Interconnection Drawings

Fiber Patching and Termination Drawings

FOC Core Allocation Drawings

Network & Channeling Plan (Bandwidth) diagram

Network Tie-In Drawings

LAYOUTS

Cable Route layout

Telecom room / Control Room layout

Equipment Location layout

FOC Route layout



ENGINEERING DELIVERABLES Contd...

Tel / FAX: +91-129-3556243 | Mob: +91-9711079859, +91-7065108240

E-Mail: info@sketchconsultant.co.in | WhatsApp: +91-9711079859

Website: www.sketchconsultant.co.in

Industrial Telecommunication & Security Systems, Instrumentation & Control System

STUDIES & CALCULATIONS

Telecom Battery and Charger Calculation

RF Traffic Study

RF Frequency Planning

RF Intermodulation Study

RF Frequency Interference Study

Telecom System Availability and Reliability Study

Radio Line of Sight Calculation

CCTV Coverage Study

BICSI certification

PA/GA Acoustic Study

Wi-Fi Heat Mapping Study

TETRA Coverage Verification test reports

VSAT Antenna and Transmission line layout

VSAT Link Budget Calculation

Fiber Optic Link Budget Calculation

Telecom Bandwidth and Service Assignment

Telecom Bandwidth Calculation

Panel Power and Heat Calculations

PROCUREMENT ENGINEERING

Material Requisition, Vendor Offer and Review, Technical Bid Evaluation, Purchase Requisition, Vendor Document Review, Master Deliverable Register

CONSTRUCTION

Detailed Construction MTO

Cable Schedules, Work Volumes

Earthing Layouts

Pre-commissioning and Commissioning Procedures

AS-BUILT Drawings



PROJECT ORGANIZATION

Tel / FAX: +91-129-3556243 | **Mob**: +91-9711079859, +91-7065108240 **E-Mail:** info@sketchconsultant.co.in | **WhatsApp:** +91-9711079859

Website: www.sketchconsultant.co.in

Engineering Coordinator Lead Engineer (Technical Specialist Deputed **Customer office Deputation** (Design & Execution Experience on Telecom & Security **SKETCHCOM Home Office**full time in Customer office) Systems) – 15+ / 18+ years experience **Faridabad** 12+ Years experience DCC & QA **Site Engineer** (Document Controller, Quality (During Erection / Commissioning phase) (10+ Years of Site Experience on Telecom & Assurance) Security Systems) Discipline Engineer / Doman Specialist / Network Specialist **Customer office Deputation** (Design Experience on Telecom & Security Systems) **SKETCH Home Office-Faridabad** 12+ years experience **Design Engineer** (Design Experience in Drafting AutoCAD, **Customer office Deputation** Microstation) **SKETCHCOM Home Office-Faridabad** 7+ Years experience

Customer Engineering & PMT Interface

Quality & Design Softwares

- Quality Assurance procedures for telecom design
- Quality Documents
- Work Instructions
- Check List
- Design Softwares (Auto-CAD, Micro station)
- Telecommunication
 Specialized Softwares
- Internal Audits



TRACK RECORD

Tel / FAX: +91-129-3556243 | Mob: +91-9711079859, +91-7065108240 E-Mail: info@sketchconsultant.co.in | WhatsApp: +91-9711079859

Domain	Role	Systems	Location	Standards	No. of Projects
Telecommunication & Security System	 Detailed Engineering & Design Proposal Engineering 	IP & Analog Telephone System (IPBAX, EPBAX, IP-EPBAX, Hotlines), FOC Network (LAN/WAN/Firewalls/Routers and network Switches), Security Access Control System(SACS), PA/GA System, Data Network SDH /PDH, RTU-SCADA Network, Wi-Fi System, CCTV System, TETRA Radio System, Marine VHF System, PDO WiMAX network, Saudi Aramco DMZ Network, Paging & Intercom System, Ship to Shore Links, VSAT System, Audio-Video System, Public Information Display System, Fence Intruder Detection System using FOC, IP and TETRA Radio Collision avoidance system, Automatic Turnstile, Boom Barriers, RF Cabling, Microwave System, Structured Cabling System, Telecom Room layouts, Telecom UPS design, Heat and Power Dissipation, Network Mapping, Wi-Fi Heat Mapping Study, PAGA Coverage study, CCTV Coverage Study, FOC Link Budget Calculation etc.		Saudi Aramco (SAES, SAMMS, SAEP, Security Standards) PDO Shell DPs Exinnmobil GPs EIL Standards Reliance Standards GASCO IEC IEEE BICSI	50+



TRACK RECORD Contd...

Domain	Role	Systems	Location	Standards	No. of Projects
Instrumentation & Control System	 Detailed Engineering & Design Proposal Engineering 	DCS, ESD & F&G System, Field Instruments and Electronic Transmitters like Pressure Guage, Temperature Transmitter, Pressure Transmitters, Flow Transmitters, Thermowell and Wake frequency calculation, PSV Sizing, Vibration Monitoring System, Custody Transfer Metering Skids, Instrument & Control cable, Instrument UPS, E&I Interface, RTU-SCADA System, Packaged PLC System, Telecommunication & Control System Interface design, Pipeline Leak Detection System, Pig Signaler, ESD & ON-OFF Valves, Regulators, Corrosion Probes and Transmitters, Analyzers, Pressure Regulating Skids, F&G Detectors and Devices, MOVs, HIPPS System, Control Valve, Multiflow Meter skids, Density Meter, Gas Chromatographs, Inputs for SIL Study, Inputs for HAZOP Study	India Middle east Onshore Oil & Gas EPC Offshore Oil & Gas EPC	Saudi Aramco (SAES, SAEP, SAMMS) Shell DPs Reliance Standards GASCO/ADNOC IEC, IEEE, ASTM, API etc	35+



STAKEHOLDERS

Tel / FAX: +91-129-3556243 | Mob: +91-9711079859, +91-7065108240 E-Mail: info@sketchconsultant.co.in | WhatsApp: +91-9711079859









































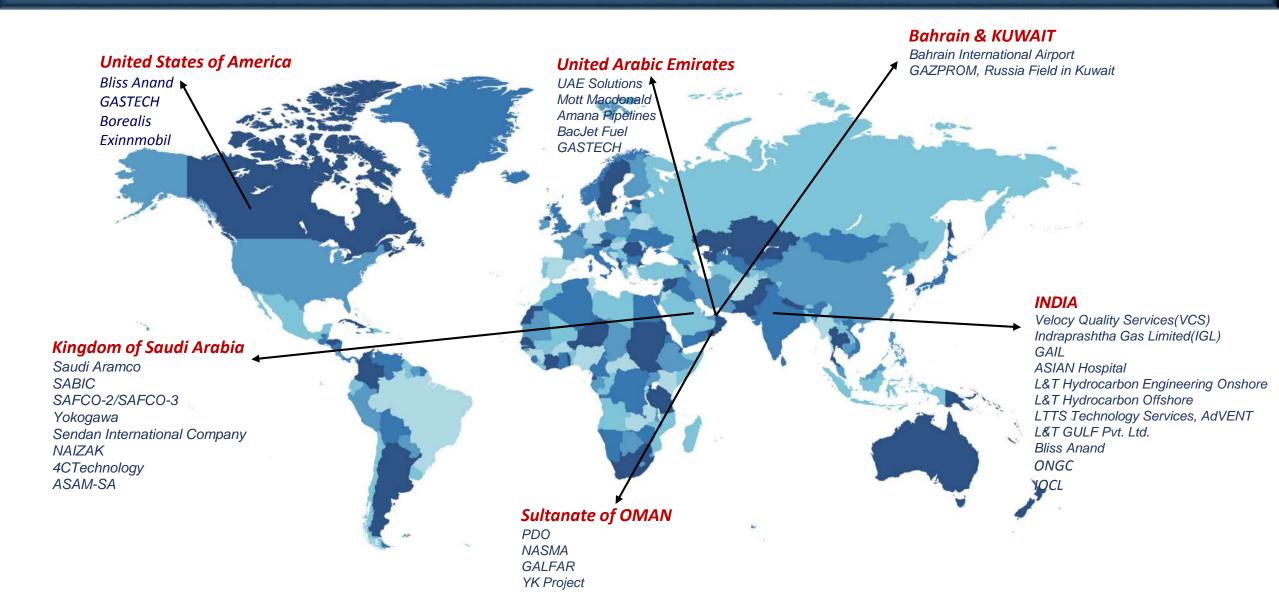






PROJECT SPREAD

Tel / FAX: +91-129-3556243 | Mob: +91-9711079859, +91-7065108240 E-Mail: info@sketchconsultant.co.in | WhatsApp: +91-9711079859 Website: www.sketchconsultant.co.in





CONTROL & AUTOMATION DESIGN

Tel / FAX: +91-129-3556243 | Mob: +91-9711079859, +91-7065108240 E-Mail: info@sketchconsultant.co.in | WhatsApp: +91-9711079859

Website: www.sketchconsultant.co.in



DCS / PLC

SCADA/RTU

ESD & FGS

FAS

Pipeline Leak & Intrusion **Detection System**

VMS System

HSSD System

CMS / PMS

AMS

PSA

WHCP

Control Room Design, HIPPs Logic Solver, MOV Control panels, ESD Consoles, PDHMS, Solar power System, UPS, process & safety networks, OPC severs, PCNs, DMZ Design, Integration works



INSTRUMENTATION DESIGN

Tel / FAX: +91-129-3556243 | **Mob**: +91-9711079859, +91-7065108240 **E-Mail:** info@sketchconsultant.co.in | **WhatsApp:** +91-9711079859

Website: www.sketchconsultant.co.in



Field Instrument

FF Design

ESD / ON-OFF Valves

Control Valves , Regulators

F&G Detectors & Devices

CTMS Skids

Regulation / Control Skids

Multiphase Flow meter HIPPs System Sampling System

PSV

MOVs

Corrosion Probes / CC

Analyzers

DT / GC



Building CO2 / Clean Agent System, Gas Compressors, Instrument Air Compressors, Multiphase pumps, Scrapper launcher & Receivers, production Manifolds, Active Conditioned Shelters, Chemical Injection Skids, HVAC



CORE VALUES 3R

Website: www.sketchconsultant.co.in

Engineering is the Make or Break of an EPC project

Impacts EPC Cost & Project Schedule

SKETCHCOM delivers optimized design and on schedule....
and the key is our 3R Core Values...

Reliability

Responsibility

Responsiveness

QUALITY MANAGEMENT SYSTEM

Tel / FAX: +91-129-3556243 | Mob: +91-9711079859, +91-7065108240 E-Mail: info@sketchconsultant.co.in | WhatsApp: +91-9711079859

Website: www.sketchconsultant.co.in

VISION STATEMENT

To transform from Quality Assurance(QA) driven design process to a Standardized Module(SM) driven design process, thereby adding high value to its customer with respect to time saving, value engineering & cost saving, error free design, ensuring high quality and high level of consistency.

QUALITY POLICY

Our Quality Policy is to provide a reliable and cost effective design solution with high engineering quality, taking complete responsibility of the project, being responsive at all times and satisfying the applicable health, safety, environmental, statutory, regulatory & contractual requirements and stakeholders' objectives.

We shall possess adequate quality system procedures & objectives to achieve the above and are committed to:

- create total awareness within the company
- provide optimum resources to facilitate adherence
- improve the effectiveness and suitability through periodic reviews



CUSTOMER INTERFACE

Tel / FAX: +91-129-3556243 | Mob: +91-9711079859, +91-7065108240 E-Mail: info@sketchconsultant.co.in | WhatsApp: +91-9711079859

Website: www.sketchconsultant.co.in

Engineering & PMT

Procurement Team

Construction Team

End User



- Full time engineering coordinator posted at customer design office.
- Frequent travel of Lead and Engineers to customer office for design reviews, interface checks and representation in front of end user as one team.
- VC & Teleconference facility
- Across the table discussion with PMT, client and Vendor as required

INFRASTRUCTURE

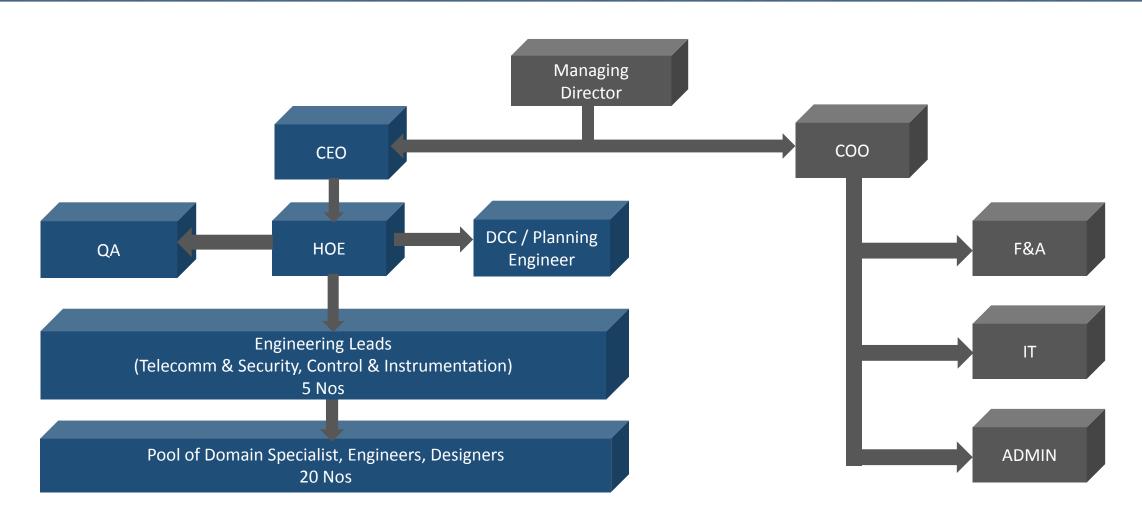
- 5000 Sq. feet of engineering & design office in Main Delhi Mathura road.
- Easy access by road from Delhi, NOIDA, IGI Airport and Gurgaon.
- Just next to NHPC Metro Station (Violet Line)
- Network server, LAN, Wireless LAN
- Technology support in UAE & Oman
- **Telecommunication Design Tools**
- Latest windows & office tools
- Data backup / archiving everyday
- E-mail & Net server
- Fire protection certified office



COMPANY ORGANIZATION CHART

Tel / FAX: +91-129-3556243 | Mob: +91-9711079859, +91-7065108240

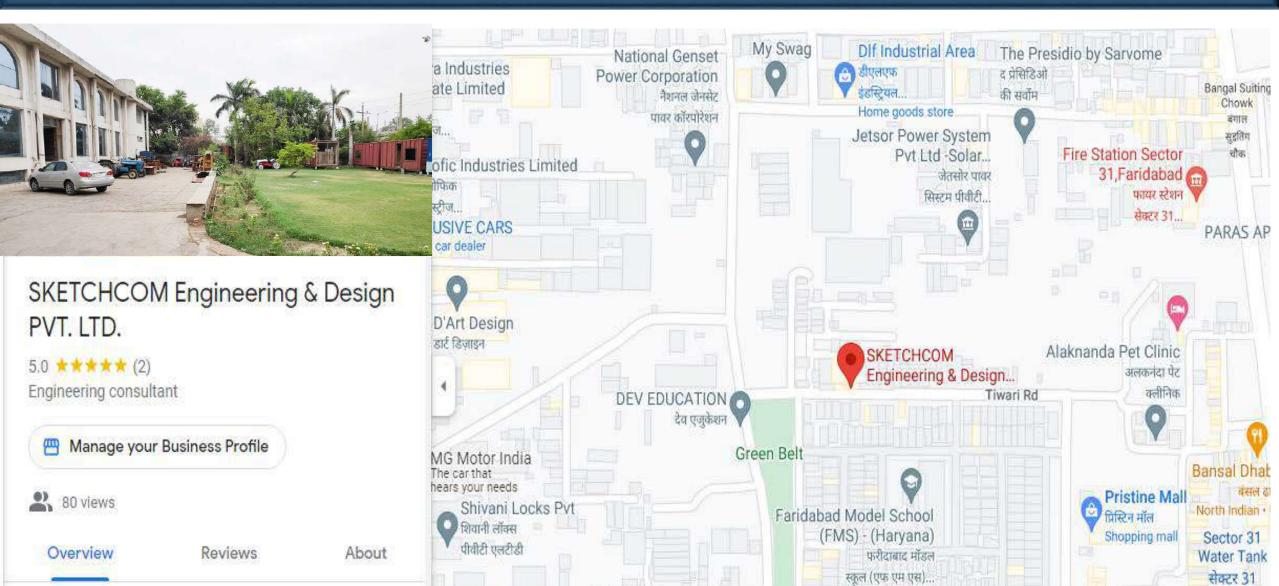
E-Mail: info@sketchconsultant.co.in | WhatsApp: +91-9711079859





LOCATION

Tel / FAX: +91-129-3556243 | **Mob:** +91-9711079859, +91-7065108240 **E-Mail:** info@sketchconsultant.co.in | **WhatsApp:** +91-9711079859





THANK YOU

Tel / FAX: +91-129-3556243 | Mob: +91-9711079859, +91-7065108240 E-Mail: info@sketchconsultant.co.in | WhatsApp: +91-9711079859

Website: www.sketchconsultant.co.in

It's the Beginning...

For Business & Info. please contact:

MOBILE: +91-9718024846, +91-9711079859

WHATSAPP: +91-9711079859

E-MAIL: sk@sketchconsultant.co.in , info@sketchconsultant.co.in

WEBSITE: www.sketchconsultant.co.in

For career opportunity please contact:

MOBILE: +91-9871161496, +91-9711079859

WHATSAPP: +91-9711079859

E-MAIL: mc@sketchconsultant.co.in, career@sketchconsultant.co.in

WEBSITE: www.sketchconsultant.co.in



E-Mail: info@sketchconsultant.co.in | WhatsApp: +91-9711079859

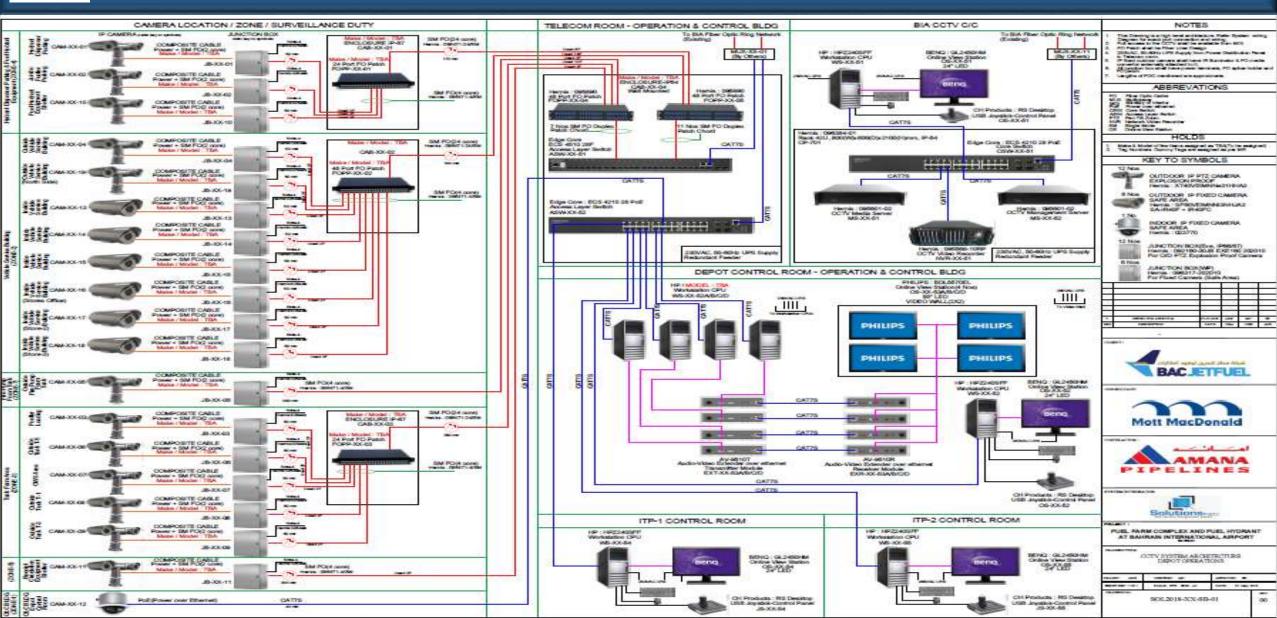
Website: www.sketchconsultant.co.in



Sample Drawings

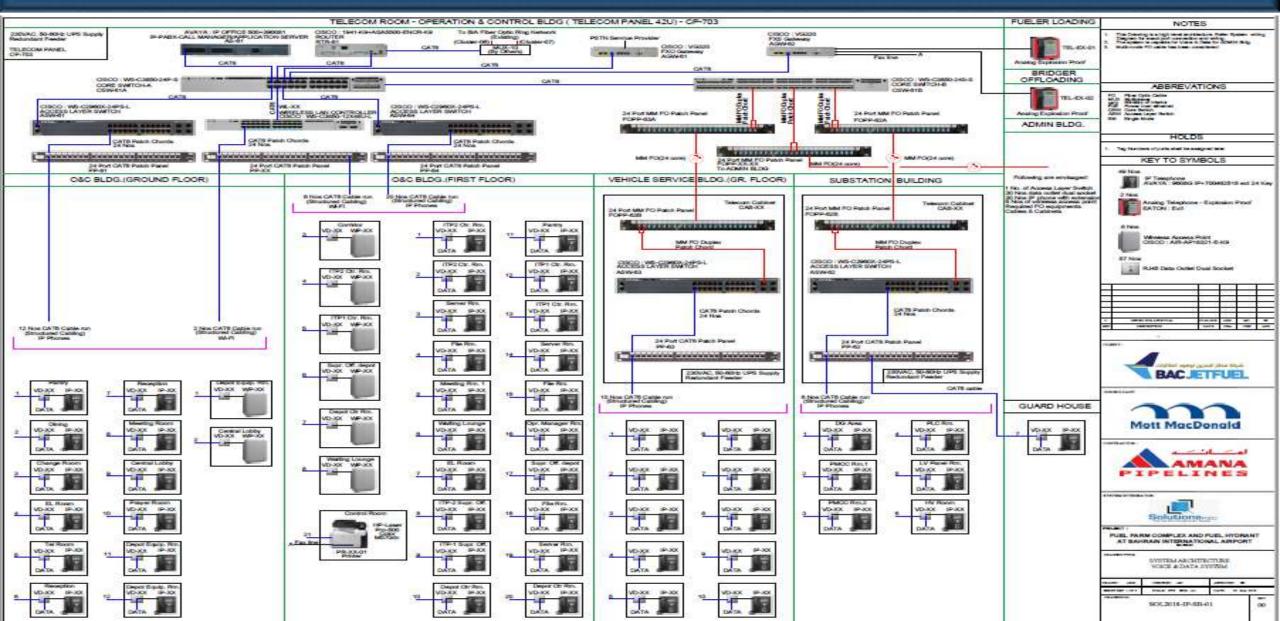


Tel / FAX: +91-129-3556243 | Mob: +91-9711079859, +91-7065108240 E-Mail: info@sketchconsultant.co.in | WhatsApp: +91-9711079859 Website: www.sketchconsultant.co.in



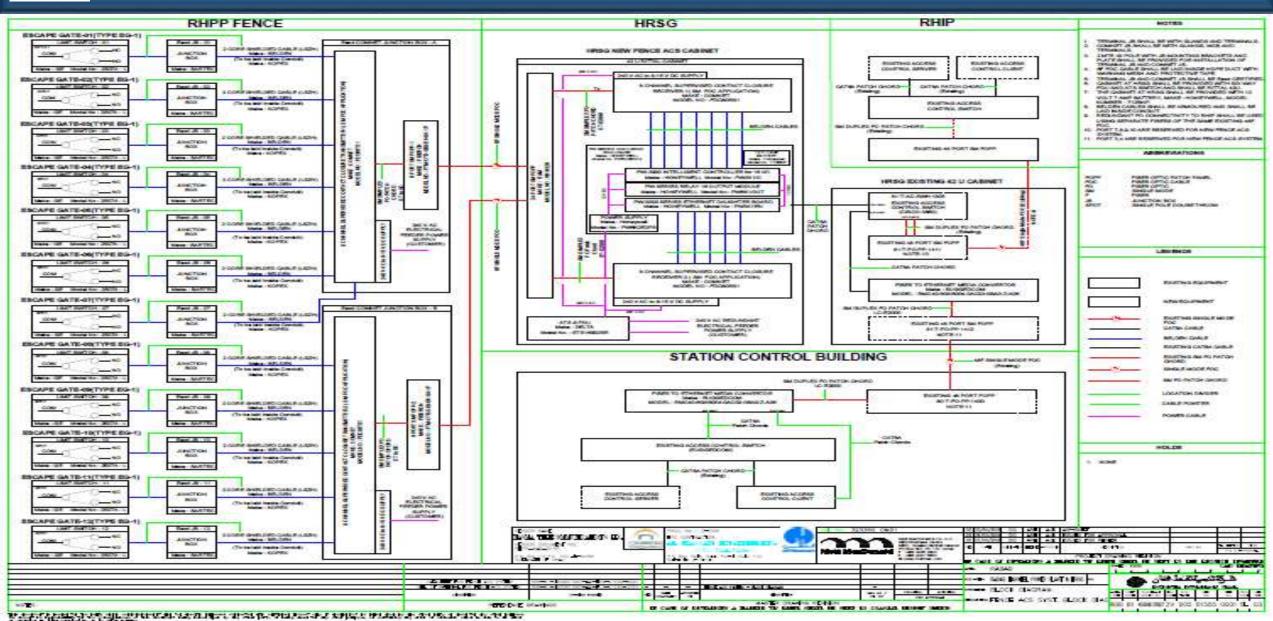


Tel / FAX: +91-129-3556243 | Mob: +91-9711079859, +91-7065108240 E-Mail: info@sketchconsultant.co.in | WhatsApp: +91-9711079859



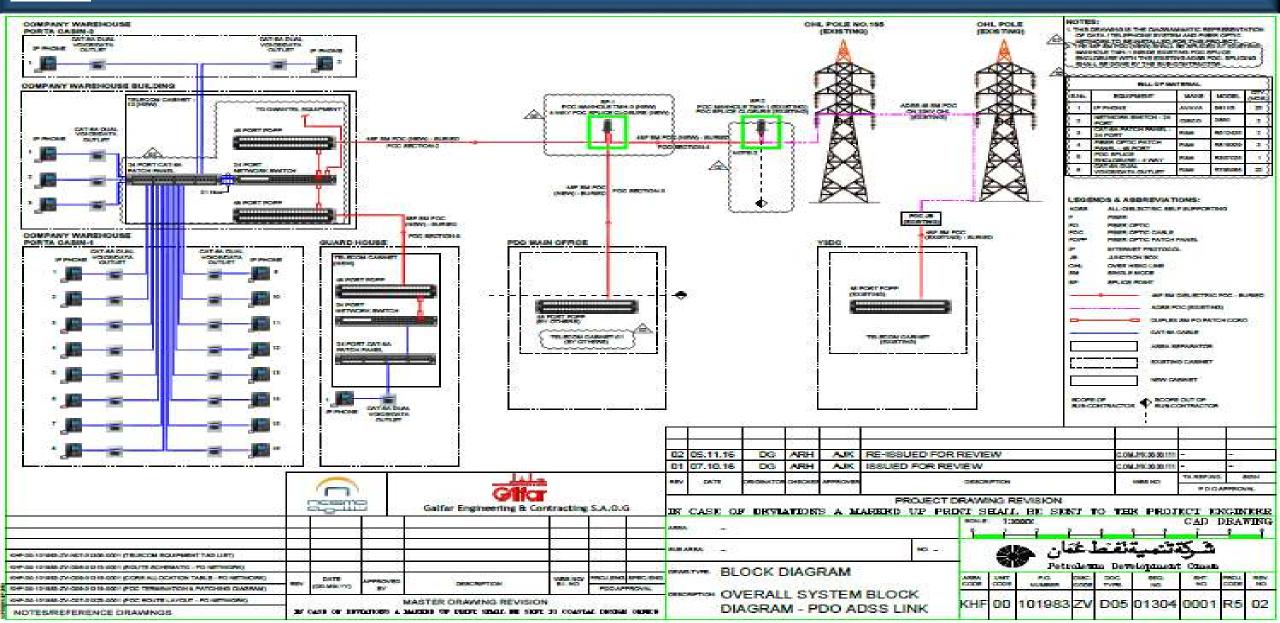


Tel / FAX: +91-129-3556243 | Mob: +91-9711079859, +91-7065108240 E-Mail: info@sketchconsultant.co.in | WhatsApp: +91-9711079859 Website: www.sketchconsultant.co.in



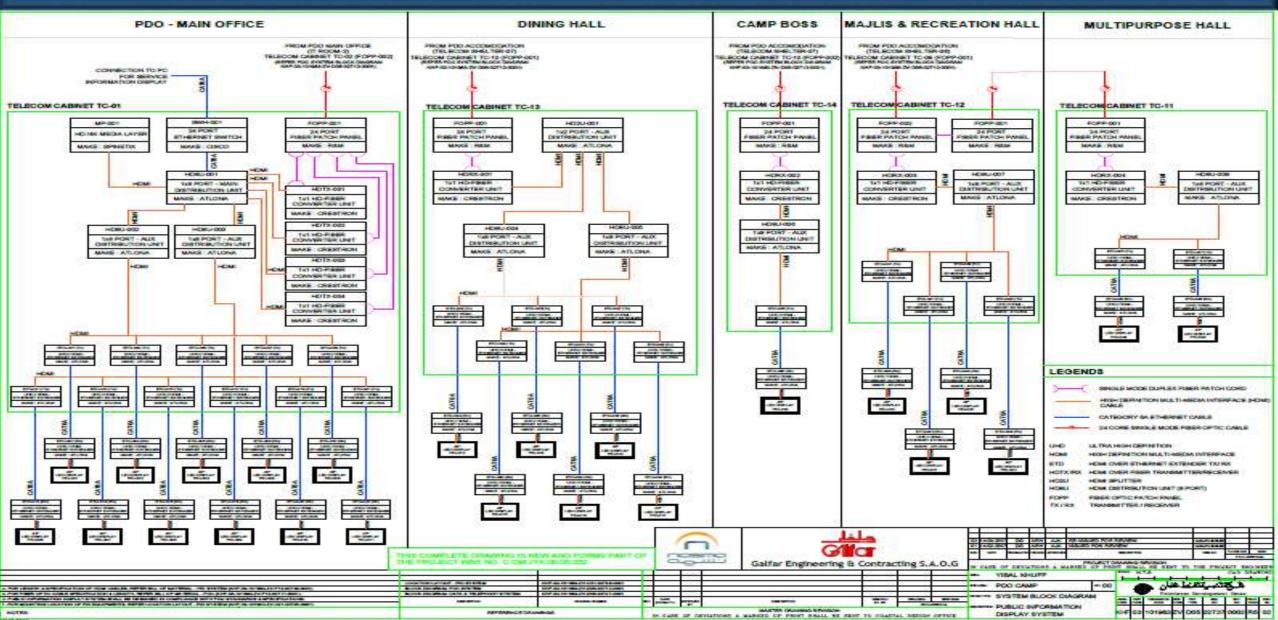


Tel / FAX: +91-129-3556243 | **Mob:** +91-9711079859, +91-7065108240 **E-Mail:** info@sketchconsultant.co.in | **WhatsApp:** +91-9711079859

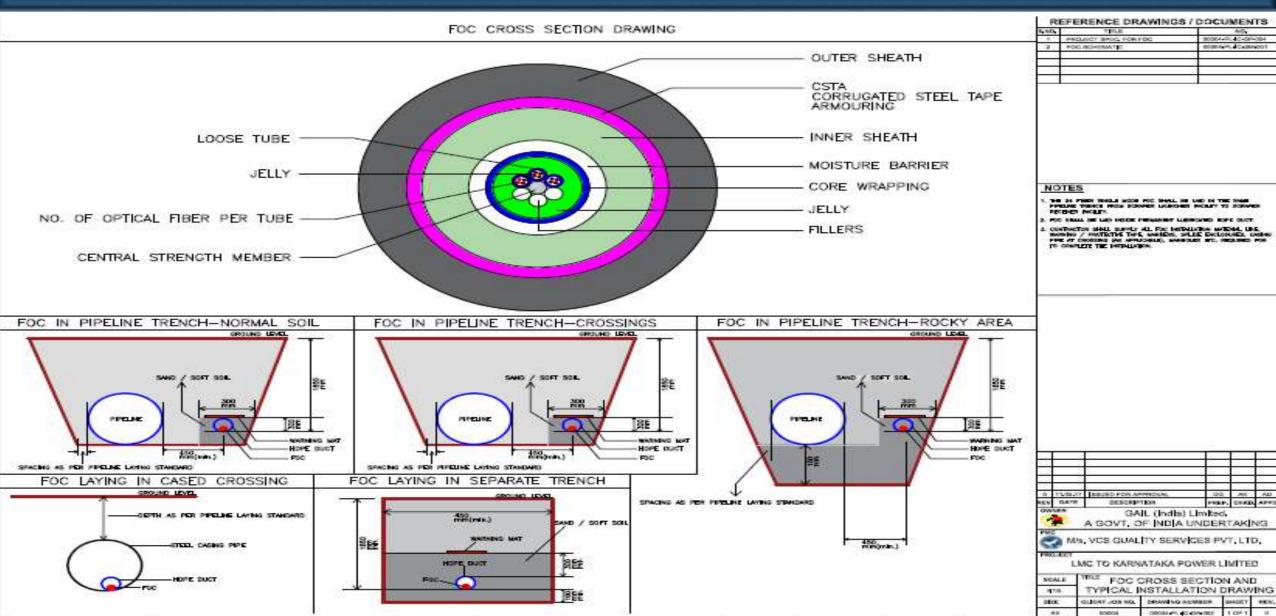




Tel / FAX: +91-129-3556243 | **Mob**: +91-9711079859, +91-7065108240 **E-Mail**: info@sketchconsultant.co.in | **WhatsApp:** +91-9711079859

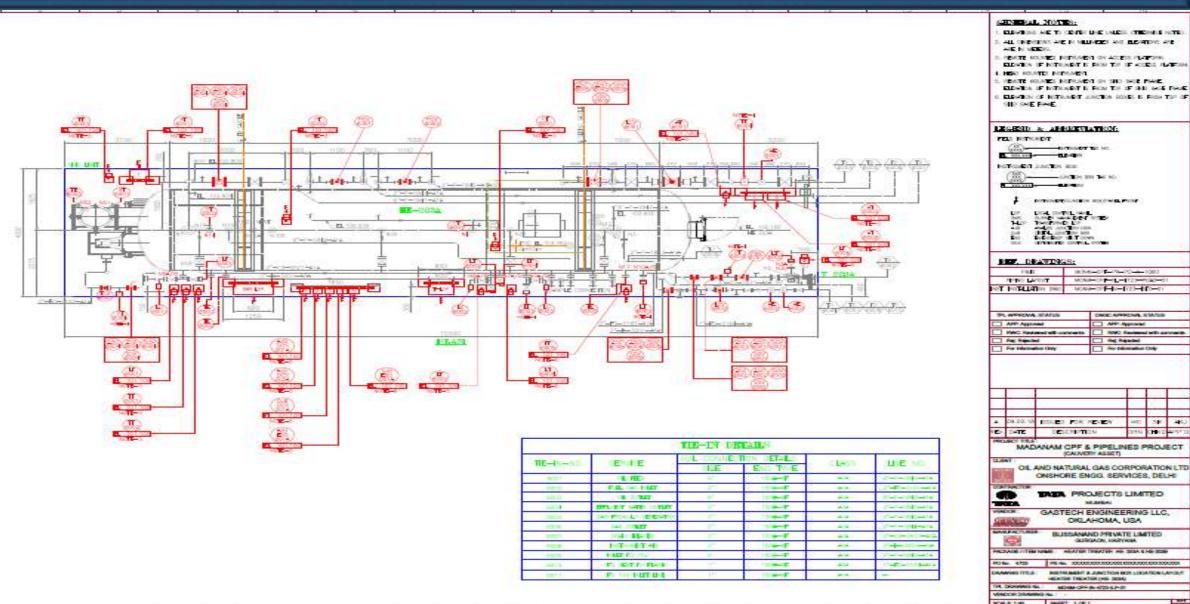








Tel / FAX: +91-129-3556243 | Mob: +91-9711079859, +91-7065108240 E-Mail: info@sketchconsultant.co.in | WhatsApp: +91-9711079859





DIRECTOR'S PROFILE

Tel / FAX: +91-129-3556243 | Mob: +91-9711079859, +91-7065108240 E-Mail: info@sketchconsultant.co.in | WhatsApp: +91-9711079859 Website: www.sketchconsultant.co.in



SUBHASH KUMAR (Managing Director)

B.Tech in Electronics & Communication Engineering from BITs Pilani,INDIA

MBA from IIM Ahmadabad, Gujarat, INDIA

Certified ISO-9001-2008/15 Quality Auditor

IPMA Level D Certified Professional Engineer

18+ Years of Experience in Design & Engineering of Telecommunication & Security Systems, Control & Automation System for Oil & Gas EPC Projects in India and Middle East.

Previous companies – L&T Hydrocarbon, BECHTEL, Schneider, Vedanta Resources (Now CEIL), CIMAC, Allen Bradley.



MUKUL CHAUHAN (Director & CEO)

B.Tech in Electronics & Instrumentation UPTU, INDIA

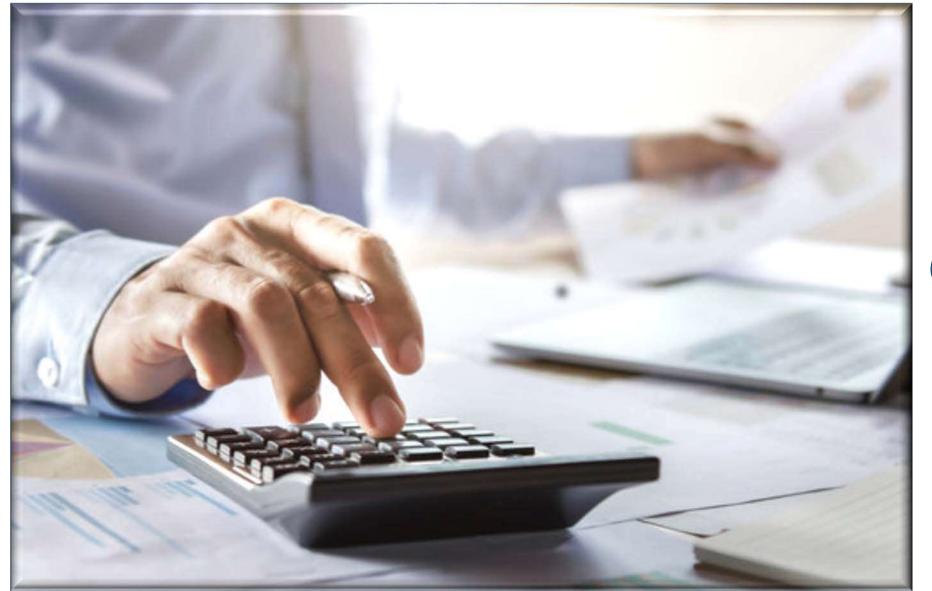
IPMA Level D Certified Professional Engineer

15+ Years of Experience in Design & Engineering of Telecommunication & Security Systems, Instrumentation & Control System for Oil & Gas EPC Projects in India and Middle East.

Tel / FAX: +91-129-3556243 | Mob: +91-9711079859, +91-7065108240

E-Mail: info@sketchconsultant.co.in **I WhatsApp:** +91-9711079859

Website: www.sketchconsultant.co.in



Commercials



PRICING & PAYMENT TERMS

Tel / FAX: +91-129-3556243 | Mob: +91-9711079859, +91-7065108240 **E-Mail:** info@sketchconsultant.co.in | WhatsApp: +91-9711079859

Website: www.sketchconsultant.co.in

Detailed Engineering & Design / FEED / DFR / Consultancy

S.NO	ACTIVITY TYPE	CRITERIA	PRICING	PAYMENTS
1	Detailed Engineering & Design package(Drawings and Documents / Layouts as per Project MDR)	Initial Rev. to Final AFC	Lumpsum + 18% GST	Monthly on Progress % and Weightage
2	Procurement Engineering (MR / Offer Evaluation / TQs / TBE / PR and Vendor Document Review	Till code A approval of all Vendor Documents	Lumpsum + 18% GST	Monthly on Progress % and Weightage
3	Basic / FEED Engineering & Design package(Drawings and Documents / Layouts as per Project MDR)	Initial Rev. to Final AFC	Lumpsum + 18% GST	Monthly on Progress % and Weightage
4	Special Studies	Till Approval of the Study report	Lumpsum + 18% GST	40% Advance with PO 50% upon submission of Study Report 10% after submission of revised report incorporating comments
5	As-BUILTs	RLMU by Purchaser	Lumpsum + 18% GST	20% Advance with PO 80% upon submission of As-BUILTs



PRICING & PAYMENT TERMS Contd...

Tel / FAX: +91-129-3556243 | Mob: +91-9711079859, +91-7065108240 | E-Mail: info@sketchconsultant.co.in | WhatsApp: +91-9711079859

Website: www.sketchconsultant.co.in

Visits & Deputation

S.NO	ACTIVITY TYPE	CRITERIA	PRICING	PAYMENTS
1	Site Visits / Review Meetings	Max. 7 days	Man-day rate + 18% GST (Excluded : Boarding, Lodging, VISA, Insurance, Travel)	100% after return
2	Deputation (Engineering Office / Site)	Min. 1 Year	Man-Month rate + 18% GST (Excluded : Boarding, Lodging, VISA, Insurance, Travel)	Monthly based on Timesheet

Tel / FAX: +91-129-3556243 | Mob: +91-9711079859, +91-7065108240

E-Mail: info@sketchconsultant.co.in | WhatsApp: +91-9711079859

Website: www.sketchconsultant.co.in

www.sketchconsultant.co.in

