Perkins Coie

Data Center Design and Construction Schedule

Significant Timeline Milestones and Risk Considerations

Milestones	Key Activities	Risk Considerations
Project conception and feasibility	Define objectives, assess site options, site conditions (surveys, easements, and others), conduct feasibility studies, plan budget, determine power supply (fossil fuel, wind, solar, and others) power availability (distribution)	Inaccurate cost estimates, site selection issues, local codes and public acceptance, regulatory hurdles, existing infrastructure, power supply questions/logistics, owner's financial assurance
Project delivery method	Select delivery model—Engineering, Procurement, and Construction (EPC), design-bid-build (DBB), fast track, target price, master agreement with work orders (construction and design), multiple phase development	Cost and schedule transparency, contractor availability, timely project delivery, cost control, internal/proprietary designs (IP), confidentiality
Design development	Architectural/engineering design, technology integration planning, value engineering	Design errors, technology compatibility issues, scope gaps, IP concerns
Contractor selection	Public request for proposals, private bidding, single-source award, contract preparation, Kepner-Tregoe (KT) evaluation process, select evaluation team, union, or non-union project	Longer time for request for proposal (RFP) process to award, less competition with single-sourced award, evaluation team capabilities, C-suite requirements/oversight
Procurement and contracting	Negotiate/execute contracts, schedule development, project site logistics, insurance structure, prequalify vendors, order owner-supplied contractor-installed equipment (servers, cooling, power, and others), manage lead times, pre-construction services	Supply chain delays, tariffs/cost escalation factors, vendor insolvency, integration of equipment and design specifications, permitting
Construction mobilization	Site preparation, contractor mobilization, safety planning, coordination, owner's separate contractors/equipment suppliers	Labor shortages, local authority approval, safety incidents, weather delays, schedule coordination, material availability/delays, schedule delays, contractor viability, project safety, worker claims
Project construction, project controls, and monitoring	Schedule management, cost tracking, quality assurance/quality control, project safety, contractor reporting	Schedule slippage, cost overruns, quality failures, liquidated damages, dispute resolution management, project safety, worker claims
Commissioning and testing	System integration, performance requirements and testing, regulatory inspections	System integration and performance failures, liquidated damages, regulatory compliance failures, delayed occupancy, project safety, worker claims
Project closeout and warranty	Punch lists, final inspections, handover, warranty administration, lien releases, equipment and other related documentation, local authority approval	Unresolved defects, incomplete documentation, mechanic lien claims, warranty disputes, worker claims