

## Project Manager & Key Staff Standards for Technical Proposals

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(Updated 7/18/2022)

Project Manager	Project Specific Education, License and Other Requirements (TP Section 5)	Experience On Similar Projects (TP Section 6)	Similar Project Experience (TP Sections 6 & 7)
PROJECT MANAGER	<ul style="list-style-type: none"> <li>• BACHELORS DEGREE</li> <li>• NJPE</li> </ul>	UP TO 6 PROJECTS	<ul style="list-style-type: none"> <li>• EXPERIENCE IN NJDOT PROJECT DELIVERY PROCESS WITH THE MANAGEMENT OF AT LEAST ONE TRANSPORTATION PROJECT WITH SIMILAR SIZE AND COMPLEXITY FROM PRELIMINARY DESIGN/ENGINEERING PHASE THROUGH THE COMPLETION OF CONSTRUCTION WITHIN LAST 15 YEARS. DEPUTY PROJECT MANAGEMENT EXPERIENCE CAN (CANNOT) BE APPLIED FOR 1-3 PROJECTS.</li> <li>• EXPERIENCE WITH FHWA'S NEPA PROCESS.</li> <li>• EXPERIENCE IN MAINTAINING PROJECT'S BUDGET, SCHEDULE, SCOPE AND QUALITY MANAGEMENT AND SHOULD HAVE BEEN DIRECTLY RESPONSIBLE FOR BUDGET, SCHEDULE AND DELIVERY OF DESIGN DOCUMENTS/ STUDY REPORTS.</li> <li>• EXPERIENCE IN PROJECT'S PUBLIC OUTREACH.</li> <li>• EXPERIENCE IN PROJECT(S) OF SIMILAR SIZE AND COMPLEXITY SHOULD HAVE INCLUDED THE FOLLOWING (NJDOT CONTRACT MANAGER TO SELECT/ADD/DELETE APPROPRIATE PROJECT SPECIFIC CATEGORIES MARKED IN RED BELOW): -HIGHWAY DESIGN INCLUDING GEOMETRIC DESIGN AND/OR DRAINAGE DESIGN AND/OR TRAFFIC SIGNAL/SAFETY ENGINEERING AND/OR ITS AND/OR PAVEMENT DESIGN AND/OR MPT AND/OR ROW ENGINEERING AND/OR ACCESS DESIGN AND/OR UTILITY RELOCATION. -STRUCTURAL DESIGN INCLUDING BRIDGE REPLACEMENT AND/OR SUPERSTRUCTURE REPLACEMENT AND/OR DECK REPLACEMENT AND/OR BRIDGE REHABILITATION AND/OR GEOTECHNICAL AND FOUNDATION DESIGN AND/OR SUBSTRUCTURE DESIGN AND/OR RETAINING WALL DESIGN AND OR CULVERT DESIGN.</li> <li>• EXPERIENCE IN CONSTRUCTION ENGINEERING INCLUDING SHOP DRAWING REVIEWS, CONSTRUCTION SCHEDULE REVIEWS, AND PREPARATION OF CHANGE OF PLANS.</li> </ul>
		4 TO 10 YEARS	
Key Staff/ Team Leaders	Project Specific Education, License and Other Requirements (TP Section 9)	Experience On Similar Projects (TP Section 10)	Similar Project Experience (TP Section 10)
ROADWAY DESIGN	<ul style="list-style-type: none"> <li>• BSCE</li> <li>• NJPE</li> </ul>	UP TO 6 PROJECTS	<ul style="list-style-type: none"> <li>• PERFORMED GEOMETRIC DESIGN OF HIGHWAYS AND STREETS</li> <li>• PREPARED DESIGN EXCEPTION REPORT</li> <li>• RESPONSIBLE FOR THE DEVELOPMENT OF CONSTRUCTION PLANS, ENGINEERING ESTIMATES, AND SPECIFICATIONS USING TRANSPORT AND PRIMAVERA SCHEDULE</li> <li>• PREPARED TRAFFIC CONTROL AND STAGING PLANS (MPT)</li> <li>• PREPARED TRAFFIC SIGNAGE AND STRIPING PLAN</li> <li>• EXPERIENCE IN NJDOT CAPITAL PROJECT DELIVERY PROCESS</li> <li>• EXPERIENCE IN NJDOT/ AASHTO ROADWAY DESIGN MANUAL</li> <li>• EXPERIENCE IN NJDOT STANDARDS SPECIFICATIONS FOR ROAD &amp; BRIDGE CONSTRUCTION</li> <li>• EXPERIENCE IN NJ STATE HIGHWAY ACCESS MANAGEMENT CODE</li> </ul>
		4 TO 8 YEARS	
BRIDGE DESIGN	<ul style="list-style-type: none"> <li>• BSCE</li> <li>• NJPE</li> </ul>	UP TO 6 PROJECTS	<ul style="list-style-type: none"> <li>• PREPARED BRIDGE DESIGN PLANS AND SPECIFICATIONS USING AASHTO/NJDOT DESIGN MANUALS</li> <li>• PERFORMED LOAD RESISTANCE FACTOR DESIGN (LRFD) METHODOLOGY FOR BRIDGE DESIGN.</li> <li>• PERFORMED SEISMIC ANALYSIS AND DESIGN</li> <li>• EXPERIENCE IN NJDOT CAPITAL PROJECT DELIVERY PROCESS</li> <li>• EXPERIENCE WITH NJDOT/AASHTO BRIDGE AND STRUCTURE DESIGN MANUALS</li> </ul>
		4 TO 8 YEARS	

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GEOTECHNICAL ENGINEERING	<ul style="list-style-type: none"> <li>• BSCE</li> <li>• NJPE</li> </ul>	UP TO 6 PROJECTS	<ul style="list-style-type: none"> <li>• PERFORMED FOUNDATION, RETAINING WALL, SHEET PILE, NOISE WALL, SIGN STRUCTURE DESIGN</li> <li>• PERFORMED SETTLEMENT, STABILITY ANALYSIS</li> <li>• PERFORMED WAVE EQUATION, DRIVABILITY, PILE DYNAMIC ANALYSIS</li> <li>• PREPARED FOUNDATION REPORTS</li> <li>• EXPERIENCE WITH NJDOT /AASHTO BRIDGE AND STRUCTURE DESIGN MANUAL</li> </ul>
		3 TO 5 YEARS	
PAVEMENT DESIGN	<ul style="list-style-type: none"> <li>• BSCE</li> <li>• NJPE</li> </ul>	UP TO 6 PROJECTS	<ul style="list-style-type: none"> <li>• CONCRETE PAVEMENT REHAB TECHNIQUES</li> <li>• SOIL MECHANICS – RESILIENT MODULUS AND SUBSURFACE DRAINAGE</li> <li>• SUPERPAVE LEVEL I</li> <li>• LIFE CYCLE COST ANALYSIS</li> <li>• BACK CALCULATION OF FWD DEFLECTION DATA.</li> <li>• EXPERIENCE WITH SHRP LTPP DISTRESS IDENTIFICATION MANUAL</li> <li>• EXPERIENCE WITH AASHTO GUIDE FOR DESIGN OF PAVEMENT STRUCTURES, 1993 OR LATER</li> </ul>
		2 TO 8 YEARS	
HYDRAULICS AND HYDROLOGY	<ul style="list-style-type: none"> <li>• BSCE</li> <li>• TRAINING OR EXPERIENCE IN DRAINAGE DESIGN SOFTWARE (I.E. HEC-RAS, PONDPACK, HYDROCAD, STORMCAD, WATERSHED MODELING SYSTEM (WMS))</li> <li>• TRAINING IN SCOUR ANALYSIS</li> </ul>	UP TO 6 PROJECTS	<ul style="list-style-type: none"> <li>• DESIGN OF RETENTION AND DETENTION BASIN FOR WATER QUALITY</li> <li>• PERFORMED HIGHWAY STORM WATER DRAINAGE SPREAD CALCULATIONS AND DEVELOPED STORM WATER MANAGEMENT PLAN.</li> <li>• PERFORMED SCOUR ANALYSIS AND FLOOD ROUTING CALCULATIONS</li> <li>• PERFORMED HIGHWAY DRAINAGE DESIGN USING HEC-RAS, PONDPACK, HYDROCAD, STORMCAD, OR WATERSHED MODELING SYSTEM (WMS)</li> <li>• EXPERIENCE IN NJDEP FLOOD HAZARD CONTROL ACT AND STORM WATER MANAGEMENT REGULATIONS.</li> </ul>
		4 TO 6 YEARS	
UTILITY ENGINEERING	<ul style="list-style-type: none"> <li>• BS IN ENGINEERING</li> </ul>	UP TO 6 PROJECTS	<ul style="list-style-type: none"> <li>• PREPARATION OF UTILITY RELOCATION SCHEMES AND DESIGN-CONSTRUCTION PLANS</li> <li>• PREPARATION OF UTILITY AGREEMENT PLANS</li> <li>• PREPARATION OF SPECIFICATIONS (SPECIAL PROVISIONS)</li> <li>• EXPERIENCE WITH NJDOT CAPITAL PROJECT DELIVERY PROCESS</li> <li>• EXPERIENCE WITH STATE UTILITY &amp; RAILROAD ACCOMMODATION POLICY</li> <li>• EXPERIENCE WITH TITLE 16 NJDOT CHAPTER 25 UTILITY ACCOMMODATION POLICY</li> <li>• ACCOMMODATION POLICY DESIGN EXPERIENCE</li> <li>• EXPERIENCE WITH CFR TITLE 23 PART 645</li> <li>• EXPERIENCE WITH CFR TITLE 23 PART 646</li> <li>• EXPERIENCE WITH NJDOT ROADWAY DESIGN MANUAL</li> <li>• EXPERIENCE WITH NJDOT BRIDGE AND STRUCTURAL DESIGN MANUAL</li> <li>• EXPERIENCE WITH UTILITY DESIGN OF WATER AND MUNICIPAL SEWER</li> </ul>
		3 TO 5 YEARS	
SURVEYING AND ROW ENGINEERING	<ul style="list-style-type: none"> <li>• NJ PLS</li> </ul>	UP TO 6 PROJECTS	<ul style="list-style-type: none"> <li>• TOPOGRAPHIC SURVEY, BASE LINE SURVEY, PROFILE AND CROSS SECTIONS FOR HIGHWAYS</li> <li>• PREPARED ROW MAPS (ETM, GPPM,IPM) WITH PARCEL DESCRIPTIONS.</li> <li>• EXPERIENCE WITH NJ MAP FILING LAW FOR ROW MAPPING</li> <li>• EXPERIENCE WITH NJDOT SURVEYING MANUAL &amp; STANDARD ARTICLE 44</li> <li>• EXPERIENCE WITH NJDOT SURVEYING MANUAL AND STANDARD ARTICLE 51</li> </ul>
		5 TO 7 YEARS	
TRAFFIC ENGINEERING	<ul style="list-style-type: none"> <li>• BSCE or BSEE</li> <li>• TRAINING IN TRAFFIC SAFETY IN CONSTRUCTION ZONE,HIGHWAY CAPACITY MANUAL</li> <li>• TRAINING IN HIGHWAY CAPACITY ANALYSIS SOFTWARE HCM AND SYNCHRO.</li> </ul>	UP TO 6 PROJECTS	<ul style="list-style-type: none"> <li>• PERFORMED HIGHWAY CAPACITY /LOS ANALYSIS, USING HIGHWAY CAPACITY SOFTWARE, HCS</li> <li>• PERFORMED SPEED/DELAY STUDIES AND QUEUING ANALYSIS</li> <li>• PREPARED TRAFFIC SIGNAL DESIGN PLANS</li> <li>• PREPARED DESIGN TEMPORARY TRAFFIC SIGNAL</li> <li>• EXPERIENCE IN MUTCD, STANDARD ROADWAY CONSTRUCTION AND TRAFFIC CONTROL DETAILS.</li> </ul>
		3 TO 7 YEARS	

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ENVIRONMENTAL SCIENCE	<ul style="list-style-type: none"> <li>BACHELORS OR MASTERS DEGREE IN ENVIRONMENTAL SCIENCE, ECOLOGY, GEOLOGY, ENGINEERING, BIOLOGY, CHEMICAL OR NATURAL RESOURCES</li> </ul>	UP TO 6 PROJECTS	<ul style="list-style-type: none"> <li>MANAGED ENVIRONMENTAL TECHNICAL STUDIES FOR AIR, NOISE, ECOLOGY, HAZARDOUS WASTE, SOCIOECONOMIC, EJ, HISTORIC ARCHITECTURAL, AND ARCHEOLOGY.</li> <li>MANAGED PREPARATION OF NEPA DOCUMENTS AND ENVIRONMENTAL PERMITS</li> <li>MANAGED PREPARATION OF SECTION 4(F) DOCUMENTS</li> <li>EXPERIENCE WITH STATE &amp; FEDERAL ENVIRONMENTAL REGULATIONS</li> <li>EXPERIENCE WITH NJDOT CAPITAL PROJECT DELIVERY PROCESS</li> <li>EXPERIENCE WITH PROCEDURES INVOLVING SHPO AND DEP PERMITS</li> <li>EXPERIENCE WITH SECRETARY OF INTERIOR STANDARDS FOR REHABILITATION</li> </ul>
		5 TO 7 YEARS	
ENVIRONMENTAL - CULTURAL RESOURCES	<ul style="list-style-type: none"> <li>QUALIFIED IN 36 CFR PART 61 (WHICH NOTES BACHELORS OR MASTERS DEGREE IN ARCHEOLOGY, ANTHROPOLOGY, ARCHITECTURAL HISTORY, ART HISTORY, HISTORIC PRESERVATION OR CLOSELY RELATED FIELD)</li> </ul>	UP TO 6 PROJECTS	<ul style="list-style-type: none"> <li>CULTURAL RESOURCES (INCLUDING ARCHEOLOGY AND HISTORIC ARCHITECTURAL SURVEYS AND MITIGATION EFFORTS)</li> </ul>
		5 TO 7 YEARS	
ELECTRICAL ENGINEERING	<ul style="list-style-type: none"> <li>BSEE</li> </ul>	UP TO 6 PROJECTS	<ul style="list-style-type: none"> <li>TRAFFIC SIGNAL DESIGN</li> <li>HIGHWAY LIGHTING DESIGN</li> <li>EXPERIENCE IN CADD - "DGN" FORMAT</li> <li>EXPERIENCE WITH LIGHTING DESIGN SOFTWARE – VISUAL</li> </ul>
		2 TO 4 YEARS	
ITS	<ul style="list-style-type: none"> <li>BSCE or BSEE (ELECTRICAL OR ELECTRONICS)</li> </ul>	UP TO 6 PROJECTS	<ul style="list-style-type: none"> <li>DESIGN AND TESTING OF A COMPLETED AND OPERATIONAL ITS SYSTEM, INCLUDING DMS, CCTV, CTSS, AND TRAFFIC DETECTORS</li> <li>DATA AND VIDEO COMMUNICATIONS NETWORKS AND SYSTEMS INTEGRATION, INCLUDING FIBER AND WIRELESS SYSTEMS</li> <li>DESIGN OF TRAFFIC MANAGEMENT CENTER</li> <li>EXPERIENCE WITH DESIGN, DEPLOYMENT &amp; OPERATION OF ITS TECHNOLOGIES</li> <li>EXPERIENCE WITH NTCIP STANDARDS</li> <li>EXPERIENCE WITH ITS ARCHITECTURES &amp; SYSTEMS ENGINEERING PROCESS</li> </ul>
		2 TO 5 YEARS	
COMMUNITY INVOLVEMENT	<ul style="list-style-type: none"> <li>ORGANIZED COMMUNITY OUTREACH EVENTS</li> </ul>	UP TO 6 PROJECTS	<ul style="list-style-type: none"> <li>RESPONSIBLE FOR PUBLIC INFORMATION CENTERS</li> <li>COMMUNITY OUTREACH</li> <li>MAINTAINING MAILING LISTS AND RECORDS OF COMMUNITY OUTREACH PROGRAM</li> <li>CONTEXT SENSITIVE DESIGN (CSD)</li> </ul>
		3 TO 5 YEARS	