

**SECTION 1.01  
DEFINITION OF TERMS AND  
PERMISSIBLE ABBREVIATIONS**

**1.01.01—Definitions**

**1.01.02—Abbreviations, Publications and Standards**

**1.01.03—Abbreviations and Terms**

**1.01.01—Definitions:** In these specifications, unless the context requires otherwise, words of the masculine gender include the feminine and the neuter, and, when the sense so indicates, words of the neuter gender may refer to any gender.

**ADDENDUM:** Contract revisions developed and incorporated into the contract after bid advertisement and before the opening of bid proposals.

**AIR OPERATIONS AREA:** Any paved or unpaved area of the airport used or intended to be used for the unobstructed movement of aircraft. These movements shall include landings, takeoffs, and surface maneuverings.

**AWARD:** The Department's acceptance in writing of the proposal of the lowest responsible bidder for the work, subject to the execution and approval by the Department of a contract therefor and the provision by the bidder of performance and payment bonds to secure the performance thereof which are acceptable to the Commissioner, and to such other conditions as may be specified by the Department or required by law.

**BID ADVERTISEMENT:** A public announcement soliciting bids for a contract for work to be performed or materials to be furnished.

**BID MANUAL:** "The State of Connecticut Department of Transportation Construction Contract Bidding and Award Manual," copies of which are available from the Department's Division of Contracts.

**CALENDAR DAY:** Every day shown on the calendar, Sundays and holidays included.

**CERTIFICATE OF COMPLIANCE:** The formal document issued at the completion of a project by the State Building Inspector's representative. The document is often referred to informally as a "Certificate of Occupancy," "C.O.C." or "C.O."

**CHANNEL:** A channel shall be interpreted to mean a natural or artificial watercourse having an average width at the bottom, after excavation, of 4 feet (1.2 meters) or more.

**COMMISSIONER:** State of Connecticut Transportation Commissioner acting directly or through a duly-authorized representative.

**CONSTRUCTION ORDER:** A written order signed by the Engineer for a contractor to perform work or provide supplies stipulated therein at the price or upon the basis of payment set forth therein.

**CONTRACT:** The agreement covering the performance of the work and the furnishing of materials required for the construction of the Project. The Contract shall be deemed to include the "Plans," "Specifications" (*i.e.*, the edition of the Department's "Standard Specifications for Roads, Bridges and Incidental Construction" which is in effect on the date of the Bid Advertisement), "Construction Orders," and such other provisions as may be incorporated into the agreement, in addition to the contents of the bound contract containing the schedule of prices, signature sheet, addenda, special provisions, required federal and state provisions, supplemental specifications, labor and wage schedules and other such material.

**CONTRACTOR:** When the word is capitalized, the party of the second part to the Contract, acting directly or through its agents or employees. When this word is not capitalized, it is to be taken in its more general sense.

**DEPARTMENT:** State of Connecticut Department of Transportation.

**DESIGNER:** A duly-authorized representative of the Engineer, responsible for the design of the Project.

**DRAINAGE DITCH:** An unpaved, artificially-constructed open depression having an average width of less than 4 feet (1.2 meters) at the bottom, after excavation, constructed for the purpose of carrying off surface water.

**ENGINEER:** The Commissioner or Deputy Transportation Commissioner, acting directly or through a duly-authorized representative.

**EXECUTION OF CONTRACT:** The date of execution of the Contract by the Department is the date on which the Department's authorized signatory signs the Contract on behalf of the Department.

**EQUAL:** A material, device, type of equipment, or method other than what is specified in the Contract, which is a recognized equivalent in substance and function for that specified thing, taking into account quality, workmanship, economy of operation, durability, and suitability for purposes intended, provided that the proposed equivalent would not require or constitute a change in Contract work.

**FIXED COSTS:** Any labor, material and equipment costs directly incurred for the item or items under consideration, which are necessary for the fulfillment of Contract requirements and which remain constant regardless of the quantity of the work done.

**HIGHWAY:** A general term denoting a public way used for vehicular travel. When referred to in the Contract, it signifies the whole right of way reserved for or secured by the Department for use in constructing or maintaining a roadway and its appurtenances.

**INSPECTOR:** A duly-authorized representative of the Engineer, assigned to make inspections of the work performed and materials furnished by the Contractor.

**LABORATORY:** Unless another laboratory or type of laboratory is indicated, the official testing laboratory of the Department.

**MAJOR AND MINOR ITEMS:** The original Contract item of greatest cost, computed at the original Contract price and quantity, and such other original Contract items next in sequence of lower cost, computed at original Contract price and quantity, necessary to equal a total cost at the original prices and quantities of not less than 60 percent of the original aggregate Contract cost shall be considered to be a major item or major items. All other original items shall be considered to be minor items.

**MANAGER OF CONTRACTS:** The Transportation Manager of Contracts, who is the head of the Department's Division of Contracts, and whose office is located at the headquarters of the Department at 2800 Berlin Turnpike, Newington, CT.

**MATERIAL:** Any substance specified in the Contract for use in the construction of the Project, including appurtenances of products that are substantially shaped, cut, worked, mixed, finished, refined or otherwise fabricated, processed, or installed to form a part of the work.

**PAVEMENT STRUCTURE:** The combination of sub-base, base course and surface course placed on subgrade to support and distribute the traffic load.

**PLANS:** All drawings or reproductions of drawings supplied by the Department to the Contractor pertaining to the construction or details of the Project.

A. Standard Sheets – Standardized plans containing details approved by the Department and the FHWA, for construction of a given type on any project, included in contracts on an as-needed basis.

**PROJECT:** All work included under one Department contract, notwithstanding the occasional use by the Department of multiple project numbers for the work included within one contract.

**PROJECT SITE:** The space available to the Contractor, under the Contract, for performing construction activities. The extent of the Project site is as indicated on the plans or elsewhere in the Contract.

**RECLAIMED CONCRETE AGGREGATE:** Reclaimed waste consisting of crushed and graded concrete removed from pavements, structures, or buildings. Metal may be acceptable only where it is contained as reinforcement within small fragments of concrete; *e.g.*, metal projecting from concrete fragments would be unacceptable. All such material trucked from beyond the limits of the Project must be accompanied by a materials certificate and certified test report indicating that the material is environmentally acceptable and structurally sound in accordance with Section 1.06.07, unless the source of the material is a Department Project and that source is acceptable to the Engineer.

**RECLAIMED MISCELLANEOUS AGGREGATE:** Glass-free and clinker-free reclaimed waste, which has been crushed, graded and blended, as specified in the Contract, with natural crushed stone or gravel. Metal may be acceptable only where it is contained as reinforcement within small fragments of concrete; *e.g.*, metal projecting from concrete fragments would be unacceptable. All such material trucked from beyond the limits of the Project must be accompanied by a materials certificate and certified test report indicating that the material is environmentally acceptable and structurally sound in accordance with Section 1.06.07, unless the source of the material is a Department Project and that source is acceptable to the Engineer.

**RECLAIMED WASTE:** Debris from the demolition of buildings, structures, and pavements; residue from incineration and recycled glass. Acceptable material shall include concrete, bituminous concrete, glass, ceramics, brick, pavement sub-base and base courses, and clinker from resource recovery plants. Metal may be acceptable only when it is contained within large fragments of concrete. Reclaimed waste trucked from beyond the limits of the Project must be accompanied by a materials certificate and certified test report indicating that the waste is environmentally acceptable and structurally sound in accordance with Section 1.06.07, unless the source of the material is a Department Project and that source is acceptable to the Engineer.

**ROADBED:** The graded portion of a highway, including portions within the top and side slopes, which

have been prepared as a foundation for the pavement structure and shoulders.

**ROADWAY:** The portion of the highway, including shoulders, which may be used for vehicular travel within the Project limits.

**SHOP DRAWINGS:** Drawings, including proposed details, diagrams, schedules, procedures and other supporting data, prepared by a Contractor to supplement the Contract documents, showing all information necessary for fabrication of items for which some specific design or detail appears in the Contract.

**SHOULDER:** The portion of the roadway adjacent to the traveled way, that can accommodate stopped vehicles for emergency use, and that provides lateral support of base and surface courses.

**SPECIFICATIONS:** The Department's written provisions and requirements for the performance of the Contract, contained in or incorporated by the Contract.

- A. *Standard Specifications*—A book of specifications published and approved by the Department for general application and repetitive use, available from the Manager of Contracts and entitled the "Standard Specifications for Roads, Bridges and Incidental Construction."
- B. *Supplemental Specifications*—Approved additions to and revisions of the Standard Specifications.
- C. *Special Provisions*—Other Department specifications applicable to an individual project.

**STATE:** State of Connecticut.

**SUBCONTRACTOR:** Any individual, firm, partnership or corporation to which the Contractor sublets, with the approval of the Commissioner, any part or parts of the Project covered by the Contract.

**SUBSTANTIAL COMPLETION:** The date at which the performance of all work on the Project has been completed except minor or incidental items, final cleanup, work required under a warranty, and repair of unacceptable work, and provided the Engineer has determined that:

- A. The Project is safe and convenient for use by the public, and
- B. All traffic lanes including all safety appurtenances are in their final configuration, and
- C. Failure to complete the work and repairs excepted above does not result in the deterioration of other completed work; and provided further, that the value of work remaining to be performed, repairs, and cleanup is less than one percent (1%) of the estimated final Contract amount, and
- D. If applicable a Certificate of Compliance has been issued.

**SUBSTITUTE:** A replacement for a specified material, device, type of equipment, or method, which is sufficiently different in substance and function, quality, or workmanship to constitute a change in the Contract work.

**SUBSTRUCTURE:** All of that part of the bridge below the bearings of simple and continuous spans, skewbacks of arches and tops of footings of rigid frames, including backwalls, wingwalls and any protective railings mounted on the wingwalls.

**SUB-SUBCONTRACTOR:** Any individual, firm, partnership or corporation to which a subcontractor sublets, with the approval of the Commissioner, any part or parts of the Project covered by the Contract.

**SUPERSTRUCTURE:** The entire bridge except the substructure.

**UTILITY:** Any public service company and the plant of such a company or similar facilities. Such companies may consist of, but not be limited to, companies selling or controlling the sale, distribution or use of water, gas, electricity, communications systems, sewers and railroad lines. Such facilities may consist of, but not be limited to, wires, cables, ducts, pipes, manholes, transformers, poles, towers and tracks.

**WORKING DRAWINGS:** Drawings, calculations, procedures and other supporting data prepared by a Contractor, documenting the Contractor's proposed design, details, materials, construction methods and equipment for any construction for which no specific design or detail appears in the Contract.

**1.01.02—Abbreviations, Publications and Standards:** Whenever one of the following abbreviations is used in the Contract, its meaning shall be interpreted as follows:

AA—Aluminum Association, Inc. (The)

~~AAA—Aluminum Alloy Association~~

AABC-Associated Air Balance Council

AAMA-American Architectural Manufacturers Association

AAPA—American Association of Port Authorities

AASHTO—American Association of State Highway and Transportation Officials: Wherever reference is made to an AASHTO Standard Method of Test or Standard Specification, it refers by letter and number to the method or specification published by AASHTO in the "Standard Specifications for Transportation Materials and Methods of Sampling and Testing". The edition governing the work shall be in effect on the date the Contract was advertised for solicitation of bids shall govern.

ABMA—American Bearing Manufacturers Association  
ACGIH—American Council of Government Industrial Hygienists  
ACI—ACI International (American Concrete Institute)  
~~ADA—Americans with Disabilities Act~~  
ADAAG—Americans with Disabilities Act (ADA)  
~~AFPA—American Forest and Paper Association~~  
AF&PA—American Forest & Paper Association  
AGA—American Gas Association  
AGC—Associated General Contractors of America (The)  
AHA—American Hardboard Association  
AHAM—Association of Home Appliance Manufacturers  
AI—Asphalt Institute  
AIA—The American Institute of Architects (The)  
~~AIEE—American Institute of Electrical Engineers~~  
AISC—American Institute of Steel Construction  
AISI—American Iron and Steel Institute  
AITC—American Institute of Timber Construction  
~~ALI—Associated Laboratories, Inc.~~  
A.L.I.—Automotive Lift Institute  
ALSC—American Lumber Standard Committee, Incorporated  
AMCA—Air Movement and Control Association International, Inc.  
ANLA—American Nursery and Landscape Association  
ANSI—American National Standards Institute  
AOAC—AOAC International  
~~AOEC—Area of Environmental Concern~~  
AOSA—Association of Official Seed Analysts, Inc.  
APA—APA-The Engineered Wood Association  
API—American Petroleum Institute  
AREMA—American Railway Engineering and Maintenance-of-Way Association  
ARI—Air-Conditioning & Refrigeration Institute  
ARTBA—American Road and Transportation Builders Association  
ASA—Acoustical Society of America  
ASC—Adhesive and Sealant Council  
ASCE—American Society of Civil Engineers  
ASHRAE—American Society of Heating, Refrigerating and Air-Conditioning Engineers  
ASME—ASME International (The American Society of Mechanical Engineers International)  
ASSE—American Society of Sanitary Engineering  
ASTM—American Society of Testing and Materials (ASTM International): Wherever reference is made to an ASTM specification, test method, or practice, it refers by letter, number, or both to standards published by ASTM International in the "ASTM Standards Source™ Database". The edition governing the work shall be in effect on the date the Contract was advertised for solicitation of bids shall govern.  
~~ATA—American Transit Association~~  
ATSSA—American Traffic Safety Services Association  
~~AWG—American Wire Gauge~~  
AWI—Architectural Woodwork Institute  
AWPA—American Wood-Preservers' Association  
AWPI—American Wood Preservers Institute  
AWS—American Welding Society: Wherever reference is made to an AWS materials specification, inspection methods, or welding procedures, it refers by section number to standards of the American Welding Society published in the applicable steel, or aluminum welding code. The edition governing the work shall be in effect on the date the Contract was advertised for solicitation of bids shall govern.  
AWWA—American Water Works Association  
~~AZI—American Zinc Institute~~  
BHMA—Builders Hardware Manufacturers Association  
BIA—Brick Industry Association (The)  
~~BOCA—Building Officials and Code Administrators International BOCA International, Inc.~~

CBM—Certified Ballast Manufacturers Association  
CDA \_ Copper Development Association Inc.  
CCRL—Cement and Concrete Reference Laboratory  
CGA - Compressed Gas Association  
CISCA—Ceilings and Interior Systems Construction Association  
CLFMI—Chain Link Fence Manufacturers Institute  
ConnDOT—Connecticut Department of Transportation  
CFR—Code of Federal Regulations  
CGS—Connecticut General Statutes  
CISPI—Cast Iron Soil Pipe Institute  
~~CPI—Clay Pipe Institute~~  
CRI—Carpet and Rug Institute (The)  
CRSI—Concrete Reinforcing Steel Institute  
~~CS—Commercial Standard~~  
CSI—Construction Specifications Institute (The)  
CSSB—Cedar Shake & Shingle Bureau  
CTI—Cooling Technology Institute  
DASMA—Door and Access Systems Manufacturers Association, International  
DEP—Connecticut Department of Environmental Protection  
~~DFPA—Douglas Fir Plywood Association~~  
DHI—Door and Hardware Institute  
DOD—Department of Defense Military Specifications and Standards  
DPUC—Department of Public Utility Control  
EIA—Electronic Industries Alliance  
EPA—Environmental Protection Agency  
FAA—Federal Aviation Administration, ~~U.S. Department of Transportation~~  
FCC—Federal Communications Commission  
FCICA—Floor Covering Installation Contractors Association  
FHWA—Federal Highway Administration, ~~U.S. Department of Transportation~~  
~~FM—Factory Mutual System~~  
FMG-FM Global  
FRA—Federal Railway Administration, ~~U.S. Department of Transportation~~  
FS—Wherever reference is made to FS in the contract, it refers by number, letter, or both, to the latest standard or tentative standard of the Federal Specification Unit, General Services Administration, Federal Supply Service, as to materials, specifications, or methods of testing, whichever the case may be.  
FTA—Federal Transit Administration  
~~HASP—Health and Safety Plan~~  
HI - Hydraulic Institute  
~~HMA—Hot Mix Asphalt or Bituminous Concrete~~  
~~HPMA—Hardwood Plywood Manufacturers Association~~  
HPVA-Hardwood Plywood & Veneer Association  
GA—Gypsum Association  
GANA—Glass Association of North America  
GSA—General Services Administration  
~~ICBO—International Conference of Building Officials~~  
ICC-International Code Council  
ICC-ES - ICC Evaluation Service, Inc.  
ICEA—Insulated Cable Engineers Association, Inc.  
IEC - International Electrotechnical Commission  
IEEE—Institute of Electrical and Electronics Engineers, Inc. (The)  
IESNA—Illuminating Engineering Society of North America  
IGCC—Insulating Glass Certification Council  
IGMA - Insulating Glass Manufacturers Alliance  
IMSA—International Municipal Signal Association  
IRI—HSB Industrial Risk Insurers

ISO – International Organization for Standardization  
ITE—Institute of Traffic Engineers  
KCMA—Kitchen Cabinet Manufacturers Association  
LMA—Laminating Materials Association  
LPI—Lightning Protection Institute  
MBMA—Metal Building Manufacturers Association  
~~MIL—Military Standardization Documents, U.S. Department of Defense~~  
MILSPEC - Military Specification and Standards  
MMA—Monorail Manufacturers Association  
~~MS—Military Specifications~~  
MSHA—Mine Safety and Health Administration  
MSS—Manufacturers Standardization Society of The Valve and Fittings the Valve Industry, Inc.  
MUTCD—Manual on Uniform Traffic Control Devices  
NAAMM—National Association of Architectural Metal Manufacturers ~~(The)~~  
NADCA-National Air Duct Cleaners Association  
NAIMA—North American Insulation Manufacturers Association (The)  
NBFU—National Board of Fire Underwriters  
~~NBS—National Bureau of Standards~~  
~~NC—National Course~~  
NCHRP—National Cooperative Highway Research Program  
NCMA—National Concrete Masonry Association  
NCPI—National Clay Pipe Institute  
~~NCPRC—National Clay Pipe Research Corporation~~  
NEBB—Natural Environmental Balancing Bureau  
NEC—National Electrical Code  
NECA—National Electrical Contractors Association  
NEMA—National Electrical Manufacturers Association  
NEPCOAT—North East Protective Coatings Committee  
NESC—National Electrical Safety Code  
~~NETA—International Electrical InterNational Testing Association~~  
NFPA—National Fire Protection Association  
NFRC – National Fenestration Rating Council  
~~NFS—NFS International~~  
NHLA-National Hardwood Lumber Association  
NICET—National Institute for Certification in Engineering Technologies  
NIOSH—National Institute of Occupational Safety and Health  
NIST—National Institute of Standards and Technology  
NLGA-National Lumber Grades Authority  
~~NLMA—National Lumber Manufacturers Association~~  
NOAA—National Oceanic and Atmospheric Administration  
NRCA—National Roofing Contractors Association  
NSF-NSF International (National Sanitation Foundation International)  
NTMA—National Terrazzo and Mosaic Association, Inc. (The)  
~~NWWDA—National Wood Window and Door Association~~  
OEO—Office of Equal Opportunity  
OSHA—Occupational Safety and Health Administration  
PCA—Portland Cement Association  
~~PCC—Portland Cement Concrete~~  
PCI—Precast/Prestressed Concrete Institute  
PDI – Plumbing & Drainage Institute  
~~PLP—Plastic Laminate Producers~~  
~~PS—Product Standard of NBS, U. S. Department of Commerce~~  
PTI—Post-Tensioning Institute  
~~RLMI—Reflector and Lamp Manufacturers' Institute~~  
RMA—Rubber Manufacturers Association  
S.D.I.-Steel Door Institute

SAE—SAE International  
~~SAWP—Society of American Wood Preservers~~  
SDI - Steel Deck Institute *or*  
Steel Door Institute  
SFPA—Southern Forest Products Association  
SJI-Steel Joist Institute  
SMACNA-Sheet Metal and Air Conditioning Contractors National Association  
SPIB—Southern Pine Inspection Bureau (The)  
SPRI – Single Ply Roofing Industry  
SSPC—Where reference is made to SSPC in the Contract, it refers by number, letter, or both, to the latest standard or tentative standard specification of The Society for Protective Coatings, Formerly the Steel Structures Painting Council, as to materials specifications, methods of testing, systems, procedures, inspection or other specification pertaining to any or all phases of cleaning or painting, whichever may apply.  
SWRI – Sealant, Waterproofing, & Restoration Institute  
TCA—Tile Council of America, Inc.  
TIA-Telecommunications Industry Association  
TIA/EIA -Telecommunications Industry Association/Electronic Industries Alliance  
TPI-Truss Plate Institute, Inc.  
TRB – Transportation Research Board  
~~UBC—Uniform Building Code~~  
UFAS – Uniform Federal Accessibility Standards  
UL—Underwriters Laboratories Inc.  
~~UMTA—Urban Mass Transportation Administration, U.S. Department of Transportation~~  
~~UPC—Uniform Plumbing Code~~  
USDA—United States Department of Agriculture  
USGBC-U.S. Green Building Council  
~~USS—United States Standard~~  
~~VOC—Volatile Synthetic Organic Chemicals~~  
WCLIB—West Coast Lumber Inspection Bureau  
WCSC-Window Covering Safety Council  
~~WCLA—West Coast Lumberman's Association~~  
WDMA – Window & Door Manufacturers Association  
~~WSA—Temporary Waste Stockpile Area~~  
WWPA—Western Wood Products Association

**1.01.03—Abbreviations and Terms:** Abbreviations and terms used in the Contract are in lieu of and are to be construed in the same way as are the respective expressions represented. Some of these abbreviations and terms, but not necessarily all, are:

ABS—acrylonitrile butadiene styrene  
AC—alternating current  
ACCM Pipe or ACCMP—Asphalt-Coated Corrugated Metal Pipe  
AOEC-Area of Environmental Concern  
AWG-American Wire Gauge  
B & B—balled and burlapped  
bbl—barrel  
BCPC—Bituminous Concrete Park Curbing  
Bit.—bituminous  
Bit. Conc.—bituminous concrete  
CB—catch basin  
CCM Pipe or CCMP—coated corrugated metal pipe  
CICU—controller interface communications unit  
CLLCU—closed loop local coordination unit  
CLMU—closed loop master unit  
Conc.—concrete  
CPE Pipe or CPEP—corrugated plastic or polyethylene pipe  
CPS—centipoise second

cwt—hundredweight or 100 pounds  
DC—direct current  
dist.—distillation  
EW—endwall  
exc—excavation  
fi—jacking tension  
f c—specified minimum compressive strength at a specified age  
f ci—required strength at time of transfer  
g—gram  
ga—gauge or gage  
HASP—Health and Safety Plan  
HMA—hot mix asphalt or bituminous concrete  
JMF—job mix formula  
kip—1000 pounds  
ksf—kips per square foot  
LED—light-emitting diode  
L.S.—lump sum  
mbf—1000-foot board measure  
MBR—metal beam rail  
Mgal—1000 gallons  
MH—manhole  
MPT—Maintenance and Protection of Traffic  
Pavt.—pavement  
PCBC—precast concrete barrier curb  
PCC—Portland Cement Concrete  
PE—polyethylene  
Perf. ACCM Pipe or Perf. ACCMP—Perforated Asphalt-Coated Corrugated Metal Pipe  
Perf. CCM Pipe or Perf. CCMP—Perforated Coated Corrugated Metal Pipe  
Perf. CPE Pipe or Perf. CPEP—Perforated Corrugated Plastic or Polyethylene Pipe  
pfmd.—preformed  
PROM—programmable read only memory  
psf—pounds per square foot  
psi—pounds per square inch  
p/s—prestressed  
PVC—polyvinyl chloride  
RAP—reclaimed asphalt pavement  
RC—Reinforced Concrete  
RCCE—Reinforced Concrete Culvert End  
RC Pipe or RCP—Reinforced Concrete Pipe  
SD—system detector  
sec.—second  
sol.—soluble  
sp. gr.—specific gravity  
sp. visc.—specific viscosity  
std.—standard  
surf.—surface  
THHN—Heat resistant thermoplastic, insulated nylon jacket, 90 degrees Centigrade, 600 volt building wire  
THWN—Moisture and heat resistant thermoplastic, insulated nylon jacket, 75 degrees Centigrade, 600 volt building wire  
tsf—tons per square foot  
U'drain—Underdrain  
UTCS—urban traffic control system  
UV—ultra-violet or ultra violet light  
VOC—Volatile Organic Compound  
VT—vitrified tile

W—watt

WSA-Waste Stockpile Area