## SECTION 1.05

## CONTROL OF THE WORK

**1.05.01—Authority of Engineer**
**1.05.02—Plans, Working Drawings and Shop Drawings**
**1.05.03—Conformity with Plans and Specifications**
**1.05.04—Coordination of Special Provisions, Plans, Supplemental Specifications and Standard Specifications and Other Contract Requirements**
**1.05.05—Cooperation by Contractor**
**1.05.06—Cooperation with Utilities (Including Railroads):**
**1.05.07—Coordination with Work by Other Parties**
**1.05.08—Vacant**
**1.05.09—Authority of Inspectors**
**1.05.10—Inspection**
**1.05.11—Removal of Defective or Unauthorized Work**
**1.05.12—Payrolls**
**1.05.13—Examining and Copying Contractor's Records**
**1.05.14—Termination Clause**
**1.05.15—Markings for Underground Facilities**
**1.05.16—Dimensions and Measurements**
**1.05.17—Welding**

**1.05.01—Authority of Engineer:** All work shall be subject to the review of the Engineer. He shall decide all questions as to interpretation of the plans and specifications, and questions of mutual or respective rights of the Contractor and other Department contractors. The Engineer shall decide on an acceptable rate of progress, on the manner of performance, and on what shall be deemed acceptable fulfillment of the Contract. The Engineer shall have the right to determine the points at which the Contractor may begin work and the order in which the work shall be prosecuted in the best interests of the State within the intent of the terms in the Contract.

If a Project-related dispute arises between the Contractor and Department personnel assigned to the Project, and if those parties prove unable to resolve it, the Contractor may submit a detailed written description of the dispute to the Department's Assistant District Engineer administering the Contract.

It must be understood, though, that at no time may the Contractor, because of its disagreement with the Engineer, either disregard the orders of the Engineer or halt Project construction. If the Contractor cannot resolve a Project work or pricing dispute with the Engineer, the Contractor's proper remedy is a claim under CGS Section 4-61. A Contractor that disregards the orders of the Engineer with regard to the prosecution of Project work, or who refuses to continue Project work because of a disagreement with the Engineer, may be subject to termination of its Contract, to a subsequent finding that it is nonresponsible as an apparent low bidder for a Department contract, to the assessment of liquidated damages, and to other adverse legal or administrative action by the Department.

**1.05.02—Plans, Working Drawings and Shop Drawings:**

1. **Plans:** The plans prepared by the Department show the details necessary to give a comprehensive idea of the construction contemplated under the Contract. The plans will generally show location, character, dimensions, and details necessary to complete the Project. If the plans do not show complete details, they will show the necessary dimensions and details, which when used along with the other Contract documents, will enable the Contractor to prepare working drawings or shop drawings necessary to complete the Project.
2. **Working Drawings:** When required by the Contract or when ordered to do so by the Engineer, the Contractor shall prepare and submit 9 copies of the working drawings to the Engineer for review.

These drawings shall be submitted sufficiently (at least 30 calendar days) in advance of the proposed use, to allow for their review, and any necessary revisions, without delay of the Project. No work covered by these working drawings shall be done until the drawings have been submitted to the Engineer for review and the Engineer's comments have been appropriately taken into account and implemented. The furnishing of the working drawings shall not serve to relieve the Contractor of any part of its responsibility for the safety or the successful completion of the Project construction.

Any comments or suggestions by the Engineer concerning working drawings prepared by the Contractor

shall not relieve the Contractor of any of its responsibility for claims by the State or by third parties, as per Article 1.07.10.

There will be no direct payment for furnishing any working drawings, procedures or supporting calculations, but the cost thereof shall be considered as included in the general cost of the work.

The working drawings shall be signed, sealed and dated by a qualified Professional Engineer licensed to practice in the State of Connecticut.

a. Working Drawings for Permanent Construction: Drawings shall be submitted on 22-inch x 34-inch (559-millimeter x 864-millimeter) sheets with a border and title block similar to the Department standard. Calculations, procedures and other supporting data may be submitted in an 8-1/2-inch x 11-inch (216-millimeter x 279-millimeter) format. The Contractor will be required to furnish the Engineer with a complete set of reproducible mylar drawings of all the 22-inch x 34-inch (559-millimeter x 864-millimeter) sheets after all the comments made by the Engineer are resolved.
   The Contractor's designer who prepares the working drawings, shall secure and maintain at no direct cost to the State a Professional Liability Insurance Policy for errors and omissions in the minimum amount of $1,000,000. The Contractor's designer may, at his election, obtain a policy containing a maximum $250,000 deductible clause, but if the Contractor's designer should obtain a policy containing such a clause, he shall be liable to the extent of at least the deductible amount. The Contractor's designer shall obtain the appropriate and proper endorsement of its Professional Liability Policy to cover the indemnification clause in this Contract, as the same relates to negligent acts, errors or omissions in the Project work performed by him. The Contractor's designer shall continue this liability insurance coverage for a period (1) of 3 years from the date of acceptance of the Project by the Commissioner, as evidenced by a State of Connecticut, Department of Transportation Form Number CON-13, entitled "Certificate of Acceptance of Work and Acceptance of Project," issued to the Contractor, or (2) for 3 years after the termination of the Contract, whichever is earlier, subject to the continued commercial availability of such insurance.
   The Contractor shall supply to the Engineer a certificate of insurance in accordance with Article 1.03.07 at the time that he submits the working drawings for the Project.
b. Working Drawings for Temporary Construction: The Contractor may submit to the Engineer drawings, calculations, procedures and other supporting data in any format acceptable to the Engineer.

**3. Shop Drawings:** When required by the Contract or when ordered to do so by the Engineer, the Contractor shall prepare and submit 9 copies of the shop drawings to the Engineer for review and approval before fabrication. In the case of a structure carrying a railroad, an additional copy of the superstructure shop drawings shall be submitted to the Engineer. When requested to do so by the Engineer, the Contractor shall also furnish the Engineer with a complete set of reproducible mylar drawings of same.

Drawings shall be submitted on 22-inch x 34-inch (559-millimeter x 864-millimeter) sheets with an appropriate border and with a title block in the lower right-hand corner of each sheet. Procedures and other supporting data may be submitted on 8½-inch x 11-inch (216-millimeter x 279-millimeter) sheets.

After review of such drawings, the Engineer will stamp each drawing as "Approved," "Approved as Noted," or "Revise and Resubmit." Three copies of each drawing stamped as "Approved" or "Approved as Noted" will be returned to the Contractor for its use. No additional copies of a drawing stamped "Approved as Noted" need be resubmitted, but the Engineer's notes must be appropriately taken into account and implemented by the Contractor. In the case of a drawing that is reviewed and stamped "Revise and Resubmit," two copies of the drawing will be returned to the Contractor, which shall take into account and implement all comments; the Contractor shall then resubmit the required number of copies of the revised drawings for review and approval.

If the Contractor proposes a revision of a previously-submitted shop drawing that has been stamped "Approved" or "Approved as Noted," the Contractor shall submit 9 copies of the revised drawing for the Engineer's review. Any such resubmitted shop drawing shall clearly indicate, in a revision block, the date and precise nature of the revision, as well as its location on the revised drawing.

When any shop drawing is stamped "Approved" or "Approved as Noted" by the Engineer, such approval shall not relieve the Contractor from responsibility for omissions, or for errors in dimensions, shop fits, field connections, etc.; or for providing the proper quantity of materials; or for compliance with the Contract; or for the successful completion of the Project. Any approval, comments or suggestions by the Engineer concerning shop drawings prepared by the Contractor shall not relieve the Contractor of any of the Contractor's responsibility for claims by the State or by third parties, as per Article 1.07.10.

The Contractor shall submit any drawings to the Engineer at least 30 calendar days in advance of their

proposed use in order to allow for their review by the Engineer, as well as for any necessary revision and approval of the drawing, without undue delay of the Project construction.

No work covered by shop drawings shall be done until the drawings have been submitted to the Engineer for review and approved by the Engineer. There will be no direct payment for furnishing any shop drawings, but the cost thereof shall be considered as included in the general Project costs.

**1.05.03—Conformity with Plans and Specifications:** All work performed and all materials furnished by the Contractor must be, in the opinion of the Engineer, in conformity with the lines, grades, cross-sections, dimensions and material requirements, including tolerances, shown on the plans or indicated in the Contract specifications.

If the Engineer believes that the materials or the finished product in which the materials were used are not in conformity with the plans and specifications, but believes nonetheless that the finished product is acceptable, he will then determine whether or not the work will be accepted and remain in place. If the Engineer believes that the work should be accepted, he will issue a construction order confirming his determination, and may provide therein for any equitable adjustment in the basis of payment which he deems appropriate.

If, in the opinion of the Engineer, any material provided by the Contractor, any finished product in which the materials were used, or any work performed does not conform to the plans and specifications and has resulted in an unacceptable product, the Contractor shall, at its own expense, either cure or remove and replace the unaccepted work and material, as the Engineer directs.

**1.05.04—Coordination of Special Provisions, Plans, Supplemental Specifications and Standard Specifications and Other Contract Requirements:** All requirements indicated on the plans or in the Standard Specifications, the Supplemental Specifications, Special Provisions or other Contract provisions shall be equally binding on the Contractor, unless there is a conflict between or among any of those requirements. In the case of such a conflict, the order of governance among those requirements, in order of descending authority, shall be as follows:

1. Environmental Permits
2. Environmental Permit Applications
3. Special Provisions
4. Plans other than Standard Sheets (enlarged details on plans, used to clarify construction, shall take precedence over smaller details of the same area; and information contained in schedules or tables, titled as such, shall take precedence over other data on plans)
5. Standard Sheets
6. Supplemental Specifications
7. Standard Specifications and other Contract requirements

Numerical designations of dimensions shall take precedence over dimensions calculated by applying a scale to graphic representations. Neither party to the Contract may take advantage of any obvious error or omission in the Contract. Should either party to the Contract discover such an error or omission, that party shall notify the other party of same immediately in writing. The Engineer will make such corrections and interpretations of the Contract as are necessary, in his judgment, to fulfill the purposes of the Contract that are evident from examining the Contract as a whole.

If the Contract includes an item that does not have a corresponding specification for either performance or payment purposes, the Contractor shall notify the Engineer of that fact in writing at least 2 weeks prior to ordering materials for or commencing work on the item. If the Department's documents do not contain such a specification, the Engineer shall, if possible, derive an appropriate specification from applicable AASHTO Specifications or, if necessary, ASTM Specifications. If neither of those sources provides a suitable specification, the Contractor shall seek guidance from the Engineer with regard to the item, and the Engineer will formulate a reasonable specification for the item. When compliance with 2 or more standards is specified, and the standards may establish different or conflicting requirements for minimum quantities or quality levels, the Contractor shall refer such issues to the Engineer for a decision before proceeding with the pertinent work.

**1.05.05—Cooperation by Contractor:** The Contractor will be supplied by the Department with copies of the plans, and the Contractor shall have available on the Project site at all times during the prosecution of the Project, a copy of the Contract plans and specifications. The Contractor shall give the Project constant attention to facilitate the progress thereof, shall cooperate with the Department, and shall promptly comply with all orders and directions of the Engineer.

The Contractor shall at all times during Project construction have on the Project site one of its employees

who is thoroughly experienced in the type of work being performed, to supervise the work and accept directions from the Engineer. The Contractor shall always notify the Engineer of the identity of said employee representative in advance of the employee's assignment to that position. The Contractor's representative must have full authority to promptly execute and carry out the orders and directions of the Engineer within the terms of the Contract, and to supply such materials, equipment, tools, labor and incidentals as may be required by the Contract or by the Engineer.

**1.05.06—Cooperation with Utilities (Including Railroads):** The Engineer may anticipate that a Project construction activity will require the removal, repair, replacement or relocation of a utility appurtenance. In such an instance, the Engineer, in advance of the commencement of such activity, will notify the affected utilities, either directly or through the local government, of the anticipated nature and timing of said activity. The Engineer will endeavor to have all necessary adjustments of public or private utility fixtures, pipelines, and other appurtenances within or adjacent to the limits of Project construction made as soon as practicable, when such changes are required by the State or local government.

Whenever the Engineer determines that the relocation or adjustment of poles or the overhead plant of public or private utilities or railroad facilities is dependent upon the completion of certain required Contract activities, the Contractor shall complete those activities within a reasonable length of time.

Temporary and permanent changes required by the State or local government in water lines, gas lines, sewer lines, wire lines, service connections, water or gas meter boxes, water or gas valve boxes, light standards, cableways, signals and all other utility (including railroad) appurtenances within the site of the proposed Project construction are to be made by others at no expense to the Contractor, except as otherwise provided for in the Special Provisions or as noted on the plans.

When the Contractor is required by the Engineer to relocate utility appurtenances, such work will be paid for as extra work unless specific bid items for such work appear in the Contract.

If the Contractor, for its convenience or for any other reason, desires a change in the location of a water line, gas line, sewer line, wire line, service connection, water or gas meter box, valve box, light standard, cableway, signal or any other utility (including railroad) appurtenances, the Contractor shall satisfy the Department that the proposed relocation will not interfere with the Contractor's or other contractors' Project operations or their fulfillment of the requirements of the plans, and that said change will not create an obstruction or hazard to traffic. If the requested change of location is acceptable to the Engineer, the Contractor shall make its own request for such relocation work to the utility companies, pipe owners or other parties likely to be affected by said work. Such relocation work shall be done at the Contractor's sole expense.

The Contractor shall schedule its operations in such a manner as to minimize interference with the operations of the utility companies or local governments in effecting the installation of new facilities, as shown on the plans, or the relocation of their existing facilities. The Contractor shall consider in its bid all permanent and temporary utility appurtenances in their present or relocated positions and any installation of new facilities required for the Project. The Department will not make any additional compensation to the Contractor for delays, inconvenience or damage sustained by the Contractor due to (i) interference with Project construction caused by the location, condition or operation of utility (including railroad) appurtenances or (ii) the installation, removal, or relocation of such appurtenances; and the Contractor may not make a claim for any such compensation.

**1.05.07—Coordination with Work by Other Parties:** The Contractor shall make every effort to perform its work so as not to interfere with other work for the State or other parties. In the case of a dispute with another contractor working for the Department regarding their work for the State, or in the case of a conflict between their planned operations or the needs of their projects, the Contractor shall bring that dispute or conflict to the Engineer's attention, and the Engineer shall decide how it shall be resolved. The Engineer's decision shall be binding upon all of the contractors working for the Department who are involved in the matter.

The Contractor shall, as far as possible, schedule and otherwise plan and arrange its work, and place and dispose of its Project materials, so as not to interfere with the operations of other contractors working for the State. The Contractor shall, as necessary to accomplish this goal, endeavor to coordinate and schedule its work in the way which will interfere least with the work of other parties.

If the Contractor's work or activities under the Contract come into conflict with other activities or work for the State, any financial or other liability arising from such conflicts shall be the Contractor's; and the Contractor shall protect and save harmless the State from any and all damages or claims, and the costs of defending same, which may arise because of inconvenience, delay, financial hardship, or injuries caused to

the Contractor or to other contractors as a result of such conflicts, unless:

(a) The Contractor notifies the Engineer of such conflicts as soon as the likelihood of such a conflict becomes apparent; or, if such likelihood could not have been foreseen earlier, then as soon as the conflict becomes apparent.

(b) The Contractor waits for direction from the Engineer as to how the conflict should be avoided or resolved, and the Contractor does not proceed with the work involved in the conflict until the Engineer has provided the Contractor with such direction.

(c) The Contractor follows the directions given by the Engineer for avoiding, resolving, or minimizing the conflict.

The Contractor shall be responsible for the completion of its Contract work, regardless of any interference with, or delay of, that work which may be caused by the presence or activities of other contractors working for the State.

**1.05.08—Vacant**

**1.05.09—Authority of Inspectors:** Inspectors employed by the Department are authorized to inspect all work done and all materials furnished for Project construction. Such inspection may extend to any part of the Project work, and to the preparation or manufacture of the materials to be used for same. In case of any dispute arising between the Contractor and the inspector as to materials furnished or the manner of performing work, the inspector has the authority to reject material or stop the work until the question at issue can be referred to and decided by the Engineer. The inspector is not authorized to revoke, alter, enlarge, relax, or release any requirements of the Contract, nor to approve or accept any portion of the Contract work, nor to issue instructions contrary to the Contract. The inspector shall in no case act as a foreman, or fulfill other duties for the Contractor. Any advice that the inspector may give to the Contractor shall not be construed as binding the Department in any way, nor as releasing the Contractor from its obligation to fulfill the terms of the Contract.

The conducting, failure to conduct, sufficiency, or accuracy of any inspection does not relieve the Contractor of its responsibility to perform the Project work properly, to monitor its work and the work of its subcontractors, and to institute and maintain quality control procedures appropriate for the proper execution of Project work.

**1.05.10—Inspection:** All materials and each part or detail of the Project work shall be subject at all times to inspection by the Engineer. Such inspection may include mill, plant, shop or other types of inspection; and any material furnished under the Contract is subject to such inspection. The Engineer shall be allowed access to all parts of the work and shall be furnished with such information and assistance by the Contractor as the Engineer deems necessary to make complete, detailed and timely inspections.

The Contractor shall always notify the Engineer of its intention to perform work on the Project, including the nature of the particular work it intends to perform, at least 48 hours before the Contractor commences that work. If, after receiving such notice, the Engineer decides that he needs more than 48 hours to arrange for and conduct inspection related to that work, he shall so notify the Contractor, and the Contractor shall refrain from commencing the work until the Engineer has arranged for such inspection. The Contractor may not commence any portion of its work without prior related inspection by the Engineer unless the Engineer agrees otherwise. In the absence of such advance agreement by the Engineer, any work done or material used without inspection by a Department representative may be ordered exposed for examination and testing, and then corrected or restored, all at the Contractor’s expense.

If, at any time before the Department's acceptance of the Project, the Engineer requests the Contractor to remove or uncover any portion of the Project work for inspection by the Engineer, the Contractor shall do so. After such inspection is completed, the Contractor shall restore such portions of the work to the condition required by the Contract as construed by the Engineer. If the work or material exposed and inspected under this provision proves acceptable to the Engineer, the Department shall pay the Contractor for any removal, uncovering or restoration of its previous Contract work. The Department shall pay the Contractor for such removal, uncovering, and restoration of the prior work as extra work. If the work or material exposed and inspected proves, in the opinion of the Engineer, not to conform with Contract requirements, the Contractor shall be responsible for the costs of the removal, uncovering, correction and restoration of the work and material in accordance with the Contract or as the Engineer requires.

**1.05.11—Removal of Defective or Unauthorized Work:** Work that does not conform to the requirements of the Contract shall be remedied in a manner acceptable to the Engineer or removed and replaced at the Contractor's expense in a manner acceptable to the Engineer.

No work shall be done without appropriate lines and grades having been established in the field. Work

done contrary to the instructions of the Engineer, work done beyond the lines shown on the plans, or extra work done without the Engineer's prior written direction to perform it will be considered as unauthorized and the Department will not pay for it. Work so done may be ordered removed or replaced at the Contractor's expense.

If the Contractor fails to comply with any order of the Engineer made under the provisions of this Article, the Engineer has the authority to cause unacceptable or unauthorized work to be remedied or removed and replaced by a party or parties other than the Contractor, and to deduct the costs of such activities from any monies due or to become due to the Contractor from the Department or any other agency of the State.

**1.05.12—Payrolls:** The Contractor shall furnish to the Engineer certified copies of payrolls showing the names of its employees working on the Project, the specific days and hours and number of hours that each of them has spent in doing so, and the amount paid to each person for said work. If the Engineer so directs, such payrolls shall also include the rental rates paid for rented trucks or other equipment used for Project work. This requirement shall also apply to the work of any subcontractor having a subcontract for any part of the Project work.

Every Contractor or subcontractor performing Project work is required to post the relevant prevailing wage rates as determined by the State Labor Commissioner and, on federal aid projects, those determined by the United States Secretary of Labor. The wage rate determinations shall be posted in prominent and easily accessible places at the work site.

**1.05.13—Examining and Copying Contractor's Records:** The Contractor shall permit the Department and its duly-authorized representatives to examine and copy all documents and other records of the Contractor that are relevant to charges for extra work, alleged breaches of Contract, or any formal or informal claim for additional compensation or for damages in connection with the Project.

With the exception noted below, the Contractor shall also permit the Department to examine and copy such of its documents and other records pertaining to the Project as the Department may deem necessary in order to determine whether or not the Contractor has complied with all laws, regulations and other governmental mandates, e.g., those relating to labor compliance, affirmative action programs, and equal employment opportunity. Documents and other records relating to the Project, if they were created prior to the opening of bids for the Contract, and if they are sought by the Department only for the purpose of confirming such compliance with legal requirements, shall, however, not be subject to examination by the Department pursuant to this Article without the consent of the Contractor.

The Contractor further agrees that it shall keep all documents and other records relating to the Project at least until the expiration of 3 years after the date of acceptance of the Project by the Department, as designated in a "Certificate of Acceptance of Work and Acceptance of Project" (CON-13), issued by the Department. If any claims are brought by the Department or the Contractor prior to that expiration, however, the Contractor shall keep all such records until the Department has given the Contractor a full and final release from all pending and potential claims regarding the Project. If the Contractor does not so keep any such records, it may not assert any formal or informal claim for compensation or damages that could have been substantiated or disproven with such records.

The Contractor shall ensure that the requirements of this provision are made applicable to its subcontractors and suppliers, for the State's benefit, by including the operative language of this Article in its Project subcontracts and purchase agreements.

**1.05.14—Termination for Convenience Clause:** The State may terminate the Contract whenever the Engineer determines that such termination is in the best interests of the State. Any such termination shall be effected by delivery to the Contractor of a written Notice of Termination specifying the extent to which performance of work under the Contract is terminated and the date upon which said termination shall be effective.

In the case of such a termination, the Department will pay the Contractor at the Contract unit prices for the actual number of units or items of Contract work completed prior to the effective date of termination, or as may be agreed by the parties for such items of work partially completed. No claim for loss of overhead or anticipated profits shall be allowed.

When the volume of work completed is too small to compensate the Contractor under Contract unit prices for its related expenses, the Department may consider reimbursing the Contractor for such expenses.

Materials obtained by the Contractor for the Project, if they have been inspected, tested as required, and accepted by the Engineer, but have not been incorporated into the Project construction, shall, if the Engineer and the Contractor so agree, be purchased by the Department from the Contractor at their actual cost as shown by receipted bills. To this cost shall be added all actual costs for delivery at such points of

delivery as may be designated by the Engineer, as shown by actual cost records. If the Engineer does not agree to purchase such materials, the Department shall reimburse the Contractor for any reasonable restocking fees and handling costs incurred by the Contractor in returning said materials to the vendor.

Termination of the Contract shall not relieve the Contractor of its responsibilities for the completed Project, nor shall it relieve the Contractor's surety of its obligation concerning any claims arising out of the work performed, until the requirements of Article 1.08.13 and 1.08.14 have been met.

**1.05.15—Markings for Underground Facilities:** In conformance with Section 16-345 of the Regulations of the DPUC, the Contractor is responsible for notifying "Call Before You Dig" prior to commencing any excavation, including milling, reclamation or trenching; and the Contractor shall install a warning tape located a minimum of 12 inches (300 millimeters) above all conduits, wires, cables, utility pipes, drainage pipes, underdrains, or other facility, unless the excavation's depth, other underground facilities, or other engineering considerations make this minimum separation unfeasible. The warning tape shall be of durable impervious material, designed to withstand extended underground exposure without material deterioration or fading of color. The tape shall be of the color assigned to the type of facility for surface markings and shall be durably imprinted with an appropriate warning message. The tape shall also comply with the specific requirements of the utility that owns the facility.

All tapes, unless otherwise directed by the specific utility, shall be detectable to a depth of at least 3 feet with a commercial radio-type metal locator.

Assigned colors are:

Green—Storm and sanitary sewers and drainage systems, including force mains and other non-hazardous materials

Blue—Water

Orange—Communication lines or cables, including, but not limited to, those used in, or in connection with, telephone, telegraph, fire signals, cable television, civil defense, data systems, electronic controls and other instrumentation

Red—Electrical power lines, electrical power conduits and other electrical power facilities, traffic signals and appurtenances and illumination facilities

Yellow—Gas, oil petroleum products, steam, compressed air, compressed gases and all other hazardous material except water

Brown—Other

Purple—Radioactive materials

Payment for warning tapes shall be included in the bid price for the pay item of the specific facility for which the tape is used.

**1.05.16—Dimensions and Measurements:** The Contractor or one of its subcontractors shall verify each dimension that is needed in order to ensure that its work complies with the Contract, and must do so before ordering any material or doing any work for which such dimension is needed. Such dimensions include, but are not limited to, dimensions given on the plans, as well as dimensions of structures in place prior to Project construction or installed in the course of construction. The Contractor or any subcontractor that finds a discrepancy or error in dimensions must report it promptly to the Engineer and may proceed with affected work only after receiving clarification and direction from the Engineer regarding the matter. Any costs for delays, changes, cutting or repairs that are incurred due to the Contractor's failure to observe the above requirements shall be borne by the Contractor.

**1.05.17—Welding:** The Contractor shall ensure that all welding of materials permanently incorporated into the work, and welding of materials used temporarily during construction of the work is performed in accordance with the following codes:

- <u>American Welding Society (AWS) Structural Welding Code – Steel – ANSI/AWS D1.1:</u> Miscellaneous steel items that are statically loaded including but not limited to columns, and floor beams in buildings, railings, sign supports, cofferdams, tubular items, and modifications to existing statically loaded structures.
- <u>AWS Structural Welding Code – Aluminum – AWS D1.2/D1.2M:</u> Any aluminum structure or member including but not limited to brackets, light standards, and poles.
- <u>AWS Structural Welding Code – Sheet Steel – AWS D1.3/D1.3M:</u> Sheet steel and cold-formed members 0.18 in.(4.6 mm) or less in thickness used as, but not limited, to decking and stay-in-place forms.

- AWS Structural Welding Code – Reinforcing Steel – AWS D1.4/D1.4M: Steel material used in the reinforcement of cast-in-place or pre-cast Portland cement concrete elements including but not limited to bridge decks, catch basin components, walls, beams, deck units, and girders.
- AASHTO/AWS – Bridge Welding Code, AASHTO/AWS D1.5/D1.5M: Steel highway bridges and other dynamically loaded steel structures. Also includes sign supports, and any other fracture critical structure.

The edition governing the work shall be in effect on the date the Contract was advertised for solicitation of bids.

The Contractor is responsible to provide a Certified Welding Inspector in accordance with the above noted codes. The cost for this service is included in the general cost of the work.

All welders shall be certified by the Engineer in accordance with Section 6.03.