

## **SECTION 105—CONTROL OF WORK**

### **105.01 - Notice to Proceed**

Unless otherwise indicated in the Contract, the date of the Notice to Proceed will be the date of contract execution. The State Contract Engineer will contact the Contractor on the date of contract execution to inform him of such action. The State Contract Engineer will confirm this date in the Letter of Contract execution. This Letter of Contract Execution will be distributed to Department personnel involved in the administration of the Contract and to the Contractor. The Contractor shall begin work within 15 days of the date of contract execution unless the Notice to Proceed date is otherwise indicated in the Contract, in which case the Contractor shall begin work within 15 days of the date of the Notice to Proceed indicated in the Contract.

Contract Time will commence on the date of the Notice to Proceed. The Letter of Contract Execution will identify the Chief Engineer's authorized representative, who is responsible for written directives and changes to the Contract. The Engineer will contact the Contractor after notice of award to arrange a pre-construction conference.

In the event the Contractor, for matters of his convenience, wishes to begin work later than 15 days from the date of Notice to Proceed he shall make such a request in writing to the Engineer promptly after the execution of the Contract. If the Contractor's requested start date is acceptable to the Department, the Contractor will be notified in writing; however, the Contract fixed completion date will not be adjusted but will remain binding. The Contractor's request to adjust the start date for the work on the Contract will not be considered as a basis for claim that the time resulting from Contractor's requested start date, if accepted by the Engineer, is insufficient to accomplish the work nor shall it relieve the Contractor of his responsibility to perform the work in accordance with the scope of work and requirements of the Contract. In no case shall work begin before the Department executes the Contract. The Contractor shall notify the Engineer at least 24 hours prior to the date on which he plans to begin the work.

### **105.02 - Pre-Construction Conference**

Within 14 days after notification of award the Contractor shall attend a pre-construction conference scheduled by the Engineer to discuss the Contractor's planned operations for prosecuting and completing the work within the time limit of the Contract. At the pre-construction conference the Engineer and the Contractor will identify in writing the authorities and responsibilities of project personnel for each party. The pre-construction conference may be held simultaneously with the scheduling conference when the Engineer so indicates this in advance to the Contractor. When these are simultaneously held, the Contractor shall come prepared to discuss preparation and submittal details of the progress schedule in accordance with the requirements of the Contract.

The Engineer will be responsible for setting the conference agenda, conducting discussions and ensuring that minutes of the conference are taken and later timely distributed to all attendees. The pre-construction conference will be the venue to review the contract plans and documents. To that end, the conference agenda may include but not be limited to discussions on the general sequence of work, including the expected primary work tasks as defined by the Contractor, and proposed means and methods for the entire scope of work, potential problems or impacts, constructability issues, special considerations such as limitations and access issues, agreements with local agencies or governments, utility impacts or relocations including railroads, coordination with schedules of the utilities and subcontractors and associated work, sources and delivery of critical materials, submittals required by Contract documents including shop drawings, location of field office, labs, etc., environmental concerns including permits and erosion and siltation efforts, maintenance of traffic issues and EEO\DBE\MBE requirements.

The Contractor shall provide the Engineer with a list of all equipment available for use in the prosecution of the work on the contract at the pre-construction conference or no later than one week prior to the first monthly progress estimate. The make, model, size, capacity, and year of manufacture shall be listed for each piece of equipment. Where possible the Contractor shall provide this list in an electronic format. This list may take the form of the Contractor's fleet list of equipment. The Contractor shall provide the Engineer an updated list of equipment as changes occur.

### **105.03 – Authorities of Project Personnel**

#### **(a) Authority of Engineer**

During prosecution of the work, the Engineer will answer all questions that may arise as to the quantity, quality, and acceptability of materials furnished and work performed; rate of progress of the work; interpretation of the plans and Specifications; acceptable fulfillment of the Contract by the Contractor; disputes and mutual rights between contractors; and compensation.

The Engineer has the authority to suspend the work wholly or in part if the Contractor has created conditions that are unsafe or fails to correct conditions that are unsafe for workers or the general public or fails to carry out the provisions of the Contract. The Engineer may also suspend work for such periods as he may deem necessary because of catastrophic or extraordinary weather in accordance with the definition of such in Section 108.04, conditions considered unsuitable for prosecution of the work, or any other condition or reason deemed to be in the public interest.

The Engineer may issue written clarifications or directives that either enhance or alter the Contract Documents. The Engineer may order such work as may be necessary to complete the Contract satisfactorily.

#### **(b) Authority of Inspector.**

Inspectors employed by the Department are authorized to inspect all work performed and materials furnished. Inspection may extend to all or any part of the work and to the preparation, fabrication, and manufacture of the materials to be used. The Inspector is not authorized to alter or waive the provisions of these Specifications or make changes in the plans.

The Inspector is not authorized to make final acceptance of the project, approve any operation or item, or act as foreman for the Contractor. However, the Inspector will have the authority to reject defective work and material and suspend work that is being improperly performed, subject to the concurrence of the Engineer. Such inspection shall not relieve the Contractor of any obligation to furnish acceptable materials or provide completed construction that is in accordance with the requirements of the Contracts.

The Inspector will exercise only such additional authority as may be delegated by the Engineer. The Engineer will advise the Contractor in writing of delegations of authority that will affect his operations.

### **105.04 – Gratuities**

Gifts, gratuities, or favors shall not be given or offered by the Contractor to personnel of the Department. A gift, gratuity, or favor of any nature whatsoever or offer of such by the Contractor to personnel of the Department shall be a violation of this provision.

The Contractor shall not employ any personnel of the Department for any services without the prior written consent of the Engineer.

If the Engineer determines after investigation that the Contractor or the Contractor's employees, representatives, or agents of any person acting in his behalf have violated this provision, the Contractor may, at the discretion of the Chief Engineer, be disqualified from bidding on future contracts with the Department for a period of six months from the date of the Chief Engineer's determination of such a violation. Any implicated employees, agents, or representatives of the Contractor may be prohibited from working on any contract awarded by the Department for the period of disqualification.

### **105.05 - Character of Workers, Work Methods, and Equipment**

#### **(a) Workers**

Workers shall have sufficient skill and experience to perform properly the work assigned to them. Workers engaged in special or skilled work shall have sufficient experience in such work and in the operation of equipment required to perform it properly and satisfactorily.

Any person employed by the Contractor or any subcontractor who, in the opinion of the Engineer, does not perform his work in a proper and skillful manner or is intemperate or disorderly shall, when directed in writing by the Engineer, be removed by the Contractor or subcontractor employing the person and shall not be employed again on any portion of the work without the written approval of the Engineer. If the Contractor fails to remove the person or furnish suitable and sufficient personnel for proper prosecution of the work, the Engineer may withhold all monies

that are or may become due the Contractor and may suspend the work until the Contractor has complied with the Engineer's directive.

**(b) Equipment**

Equipment shall be of sufficient size and in such mechanical condition as to comply with the requirements of the work and produce a satisfactory quality of work. Equipment shall be such that no damage to the roadway, adjacent property, other highways or to danger to the public will result from its use. The Engineer may order the removal and require replacement of unsatisfactory equipment.

**(c) Work Methods**

When methods and equipment to be used by the Contractor are not prescribed in the Contract, the Contractor is free to use whatever methods or equipment he feels will accomplish the contract work in conformity with the requirements of the Contract.

When the Contract specifies that construction be performed by the use of particular methods and equipment, they shall be used unless others are authorized by the Engineer. If the Contractor desires to use a different method or type of equipment, he may request permission from the Engineer to do so. The request shall be in writing and shall include a full description of the methods and equipment he proposes to use and an explanation of the reasons for desiring to make the change. If permission is not given, the Contractor shall use the specified methods and equipment. If permission is given, it will be on the condition that the Contractor shall be fully or equipment, the Engineer determines that the work produced does not conform to the requirements of the Contract, the Contractor shall discontinue the use of the substitute method or equipment and shall complete the remaining construction with the specified methods and equipment. The Contractor shall remove any deficient work and replace it with work of the specified quality or take such other corrective action as the Engineer may direct. No change will be made in the basis of payment for the construction items involved or the contract time limit as the result of authorizing or denying a change in methods or equipment under these provisions.

**105.06 – Subcontracting**

No portion of the Contract shall be subcontracted or otherwise disposed of without the written consent of the District Administrator or his designee.

The Contractor shall perform with his own organization work amounting to not less than 30 percent of the original contract value unless otherwise noted in the Contract.

The Contractor shall not subcontract any part of the contract work to a contractor who is not prequalified with the Department in accordance with the requirements of Section 102.01, unless otherwise indicated in the Contract. This restriction does not apply to contract specialty items, consultants, manufacturers, suppliers, or haulers. Consent to subcontract or otherwise dispose of any portion of the contract work shall not relieve the Contractor of any responsibility for the fulfillment of the entire Contract.

**105.07 - Cooperation of Contractor**

The Contractor shall give the work the constant attention necessary to facilitate quality and progress and shall fully cooperate with the Engineer, Inspector, and other contractors involved in the prosecution of the work. If any portion of a project is located within the limits of a municipality, military installation, or other federally owned property; the Contractor shall cooperate with the appropriate officials and agents in the prosecution of the work to the same extent as with the Department.

The Contractor shall have on the project at all times during prosecution of work a competent Superintendent capable of reading and understanding the plans and Specifications and experienced in the type of work being performed who shall receive instructions from the Engineer or his authorized representatives. The Superintendent shall have full authority to execute the orders and directions of the Engineer without delay and supply promptly such materials, equipment, tools, labor, and incidentals as may be required.

**105.08 - Cooperation With Regard to Utilities**

The adjustment of utilities consists of the relocation, removal, replacement, rearrangement, reconstruction, improvement, disconnection, connection, shifting, or altering of an existing utility facility in any manner.

Existing utilities within the Department's knowledge at the design stage of the project will be indicated on the plans. Where possible, arrangements for adjusting these utilities will be made by the Department prior to project construction. Existing private and public utilities that require adjustment will be adjusted by the utility owner or if denoted in the Contract, shall be adjusted by the Contractor as a contract item. The new location of such utilities will not normally be shown on the plans. Some utilities may remain or be adjusted within the construction limits simultaneously with project construction operations.

The Contractor shall coordinate project construction with planned utility adjustments and take all necessary precautions to prevent disturbance of the utility facilities. The Contractor shall report to the Engineer any failure on the part of the utility owner to cooperate or proceed with the planned utility adjustments.

The Contractor shall perform contract utility work in a manner that will cause the least inconvenience to the utility owner and those being served by the utility owner.

Existing, adjusted, or new utility facilities that are to remain within the right of way shall be properly protected by the Contractor to prevent disturbance or damage resulting from construction operations. If during prosecution of the work the Contractor encounters an existing utility that requires adjustment he shall not interfere with the utility but shall take the proper precautions to protect the facility and shall promptly notify the Engineer of the need for adjustment.

If the Contractor desires the temporary or permanent adjustment of utilities for his own benefit, he shall conduct all negotiations with the utility owners and pay all costs in connection with the adjustment.

When delays, inconvenience, or damage sustained by the Contractor are deemed by him to be attributable to interference by utility appurtenances, or the operation of moving the same, written requests from the Contractor for an extension of time will be considered provided there has been a delay to either the critical path or the controlling item of work. Such delays shall be demonstrated by an impact analysis of the Contractor's schedule.

If it is determined that interference by utility appurtenances caused a delay of such magnitude or otherwise altered project operations so as to increase significantly the Contractor's cost of performing the work, the Engineer will consider additional compensation limited to the actual costs incurred by the Contractor. Actual costs will not include unabsorbed office overhead unless the delay or impact adversely affects the critical path or controlling item of work to such extent that the fixed completion date is delayed. Prior to the Engineer's review, the Contractor shall present sufficient documentation to substantiate fully the request for additional compensation. Such documentation shall be furnished in sufficient detail as requested by the Engineer. Nothing herein shall be construed as requiring the payment of additional compensation.

#### **105.09 - Cooperation Among Contractors**

The Department may at any time contract or approve concurrent contracts for performance of other work on, near, or within the same geographical area of the work specified in an existing contract. Contractors shall not impede or limit access to such work by others.

When separate contracts are awarded within the limits of one project, contractors shall not hinder the work being performed by other contractors. Contractors working on the same project shall cooperate with each other. In case of dispute, the Engineer will be the referee, and his decision will be binding on all parties.

When contracts are awarded to separate contractors for known concurrent construction in a common area, the contractors, in conference with the Engineer, shall establish a written joint schedule of operations. The schedule shall be based on the limitations of the individual contracts and the joining of the work of one contract with the others. The schedule shall set forth the approximate dates and sequences for the several items of work to be performed and shall ensure completion within the contract time limit. The schedule shall be submitted to the Engineer for review and approval no later than 30 days after the award date of the later contract and prior to the first monthly progress estimate. The schedule shall be agreeable to, signed by, and binding on each contractor. The Engineer may allow modifications of the schedule when benefit to the contractors and the Department will result.

Any modification of the schedule shall be in writing, mutually agreed to and signed by the contractors, and shall be binding on the contractors in the same manner as the original agreement.

If the contractors fail to agree on a joint schedule of operations, they shall submit their individual schedules to the Engineer, who will prepare a schedule that will be binding on each contractor.

The joint schedule and any modification thereof shall become a part of each contract involved. The failure of any contractor to abide by the terms of the joint schedule will be justification for declaring the contractor in default of his Contract.

Each contractor shall assume all liability, financial or otherwise, in connection with his Contract and shall protect and save harmless the Commonwealth from any and all damages and claims that may arise because of any inconvenience, delay, or loss he experiences as a result of the presence and operations of other contractors working in or near the work covered by his Contract. He shall also assume all responsibility for any of his work not completed because of the presence or operation of other contractors.

Except for an extension of the contract time limit, the Department will not be responsible for any inconvenience, delay, or loss experienced by the Contractor as a result of his failure to gain access to the work at the time contemplated. When the failure to gain access is not due to any fault or negligence of the Contractor, an extension of the contract time limit will be allowed on the basis of the amount of time delayed.

The Department will not assume any responsibility for acts, failures, or omissions of one contractor that delay the work of another except as provided herein.

**105.10 - Plans and Working Drawings**

(a) **General**

The Contractor will be supplied with two copies of the executed Contract. The Department’s *Road and Bridge Specifications* and the Department’s *Road State and Bridge Standards* will be available for purchase by the Contractor from the office of the Contract Engineer.

(b) **Plans**

Plans will be furnished to the Contractor without charge as follows:

Original Contract Amount in Dollars		Number of Plan Sets	
From	To	Full Size	Half Size
0	1,999,999	4	6
2,000,000	4,999,999	6	8
5,000,000	9,999,999	8	10
10,000,000+		10	10

Plan revisions issued while the project is under construction will be furnished to the Contractor in the same sizes and number

The Contractor shall keep one complete set of plans, standard drawings, contract assemblies, and Specifications available on the project at all times. For maintenance projects, certain sign projects, and other projects having no field office or on which the Contractor has no office, the Contractor shall keep one complete set of plans, contract assemblies, and Specifications with him while prosecuting the work. In the event items of work are required as per the Standard Drawings, the Contractor shall also keep the appropriate Standard Drawings on the project during the performance of that work.

Plans consisting of general drawings and showing such details as are necessary to give a comprehensive understanding of the work specified will be furnished by the Department. Except as otherwise shown on the plans, dimensions shown on the plans are measured in the respective horizontal or vertical planes. Dimensions that are affected by gradients or vertical curvatures shall be adjusted as necessary by the Contractor to accommodate actual field conditions and shall be specifically denoted as “field adjusted” on the working drawings. Failure on the part of the Contractor to so denote field adjustments on the working drawings shall not relieve the Contractor of the responsibility to accommodate and incorporate such existing conditions into the finished work.

(c) **Working Drawings**

The Contractor shall furnish working drawings to the extent, detail and number as may be required by the Contract requirements. The Contractor shall submit to the Department for review nine sets of required working drawings unless otherwise indicated in the Contract requirements. Working drawings and submittals shall be identified by the complete state project and job designation number, as well as the federal project number if applicable. Items or component materials shall be identified by the specific contract item number and Specification reference in the Contract. Any changes from the requirements of the Contract shall be specifically denoted, together with justification, and submitted to the Engineer for review. Working drawings shall be submitted in sufficient time to allow for review, discussion and correction prior to the beginning of the work

they reference. Work shall not be performed or materials ordered prior to the completion of the Department's review of the working drawings.

Reviewed working drawings will be returned to the Contractor within 30 days from the date of receipt by the Department. If a railroad, municipality, or other entity as specified in the Contract or on the plans is required to review the working drawings, the reviewed working drawings will be returned within 45 days from the date of receipt by the Department. If the working drawings are not returned by the time specified, no additional compensation will be allowed except that an extension of time in accordance with the requirements of Section 108.04 will be considered if the work element detailed by the working drawings is on the project critical path or involves a controlling item of work. Three sets of working drawings marked with any suggested modifications or comments will be returned to the Contractor. The other sets will be retained by the Department.

The Department's review of the Contractor's working drawings will relate to conformance to the requirements of the Contract. The review will not relieve the Contractor from responsibility for errors in the working drawings or from complying with the requirements of the Contract for a fully functional finished work item as specified or designed.

Deviations from the Contract requirements initiated by the Contractor shall be requested in writing and clearly identified on the working drawings. Explicit supporting justification shall be furnished specifically describing the reason for the requested deviations as well as any impact such deviations shall have on the schedule of work. Failure to address time or other impacts associated with the Contractor's request will be cause for rejection of the Contractor's request. Deviations from the Contract requirements shall not be made unless authorized by the Engineer. If authorized by the Engineer, such authorization shall not relieve the Contractor from the responsibility for complying with the requirements of the Contract for a fully functional finished work item as specified or designed.

If working drawings detailing a change(s) initiated by the Contractor require more than two resubmissions or revisions, the cost of additional reviews by the Department or its designated representative(s) will be assessed to the Contractor.

Upon completion of the requested work, working drawings indicating the actual as-constructed field conditions, if required, shall be supplied to the Department.

The cost of working drawings furnished by the Contractor shall be included in the cost of appropriate contract items.

The Contractor may authorize the fabricator in writing to act for him in matters relating to working drawings. Such authorization shall have the force and effect of any other representative of the Contractor's organization.

#### **1 Steel Structures**

Working drawings for steel structures, including metal handrails, shall consist of shop detail, erection, and other working drawings showing details, dimensions, sizes of units, and other information necessary for the fabrication and erection of metal work. Such drawings shall be signed and sealed by a Professional Engineer, holding a valid license to practice engineering in the Commonwealth of Virginia.

#### **2 Falsework**

Working drawings for falsework supporting a bridge superstructure shall be signed and sealed by a Professional Engineer, holding a valid license to practice engineering in the Commonwealth of Virginia.

#### **3 Concrete Structures and Prestressed Concrete Members**

Working drawings for concrete structures and prestressed concrete members shall provide such details as required for the successful prosecution of the work and which are not included in the plans furnished by the Department. Drawings shall include plans for items such as prestressing strand details and elongation calculations, location of lift points, falsework, bracing, centering, form work, masonry, layout diagrams and bending diagrams for reinforcing steel when necessary or when requested. Such drawings shall be

signed and sealed by a Professional Engineer, holding a valid license to practice engineering in the Commonwealth of Virginia.

**4 Lighting, signal and pedestal poles, overhead and bridge mounted sign structures, breakaway support systems, anchor bolts, framing units, panels, and foundations.**

Prior to fabrication or construction, the Contractor shall submit for review one original and six copies of each working drawing and design calculation for lighting, signal and pedestal poles, overhead and bridge mounted sign structures, breakaway support systems, anchor bolts, framing units, panels, and foundations. All sheets of these submittals shall include the Professional Engineer's signature and seal. Certification for foundations will be required only when the designs are furnished by the Contractor. The designs shall be in accordance with the specific editions of the AASHTO *Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals* as required in Section 700. Such designs shall be signed and sealed by a Professional Engineer, holding a valid license to practice engineering in the Commonwealth of Virginia.

**5 Reinforced Concrete Pipe**

When specified, and prior to manufacture of reinforced concrete pipe, the Contractor shall furnish to the Department a certification of the acceptability of the design of such pipe, as determined from a review that has been signed and sealed by a Professional Engineer holding a valid license to practice engineering in the Commonwealth of Virginia. Such certification shall cover all design data, supporting calculations and materials. Pipe designs previously certified or approved by the Department will not require recertification.

**105.11 - Conformity with Plans and Specifications**

Values for materials to be used in the work shall conform to the specified values or range of values specified in the Contract. Less than complete conformity may be tolerated if obtaining exact or complete conformity would not be feasible and if authorized by the Engineer.

Permissible tolerances for the elevation of subgrade and finished grade, and for the thickness of the various courses of pavement structure are specified in these Specifications. If permissive tolerances are exceeded or if consistent deviations from the plans or abrupt changes in grade occur, even though within the tolerances, the affected areas shall be reconstructed to conform to the specified tolerance and provide a smooth riding surface. When it is not feasible to reconstruct the areas, payment will be made in accordance with the requirements of the applicable specification for each material placed or adjusted in accordance with the provisions of Section 105.18.

When the plans require the finished surface to tie into any structural item whose elevation is fixed, the elevation of the finished surface must coincide with the elevation of the structural item.

**105.12 - Coordination of Plans, Standard Drawings, Specifications, Supplemental Specifications, Special Provisions, and Special Provision Copied Notes**

The plans, Standard Drawings, these Specifications, supplemental specifications, special provisions, special provision copied notes, and supplementary documents are parts of the Contract. These Contract documents are defined in Section 101 - Definitions. A requirement occurring in one shall be as binding as though occurring in all. They are intended to be complementary and to describe and provide for a complete work. In case of a discrepancy, the following order of priority will apply, with the highest governing item appearing first and the least governing item appearing last: . .

- (a) Special provision copied notes. The pay items and pay units listed in the proposal have the same status as special provision copied notes.
- (b) Special provisions
- (c) Plans
- (d) Supplemental Specifications.
- (e) Specifications
- (f) Standard Drawings. Calculated dimensions, unless obviously incorrect, will govern over scaled dimensions.

The Contractor shall not take advantage of any obvious or apparent error or omission in the plans or Specifications. If the Contractor discovers an error or omission, he shall immediately notify the Engineer.

The Engineer will then make such corrections and interpretations as may be deemed necessary for fulfilling the intent of the Contract. .

### **105.13—State Force Construction Surveying**

(a) **General Description:**

This work shall consist of the Department performing all surveying and providing surveying and stakeout sketches and information as detailed herein for the successful prosecution of work as indicated on the plans and as directed by the Engineer. Stakeout work will be in accordance with the details and requirements of the Department's Survey Manual and the provisions herein. Survey services will be provided to the extent detailed herein for Construction and for Minimum Plan projects. . .

(b) **Request for Survey Services:**

Once the Contractor requests survey services, the Department will begin the requested work within 3 working days. The Contractor shall not expect the Department survey party to work in the field during adverse weather conditions that could be detrimental to the survey equipment or paperwork, therefore the Contractor shall plan the need for such services accordingly. .

It shall be the Contractor's responsibility to preserve all Department furnished centerline or baseline controls, references and location benchmarks. After initial stakeout, an hourly charge equal to the current hourly rate for Department survey services per district will be billed to the Contractor for resetting stakes where the cause for the resetting of such stakes is due to the fault of the Contractor or his operations. This rate will also apply to travel time to and from the project. .

If the Contractor requests stakes after the initial staking and he is not ready to accommodate such work, the Contractor will be billed the hourly rate for Department survey services per district measured in travel time to and from the project. Such fees will be billed to the Contractor on the next monthly estimate. .

(c) **Contractor Responsibility for Examination of Data:**

It shall be the responsibility of the Contractor to examine all surveying work provided by the Department for accuracy. Should a disagreement involving the accuracy of stakeout or survey work arise during construction, the Contractor shall within 24 hours provide written notice to the Engineer, precisely describing and documenting the discrepancy. The Engineer will determine the validity of the Contractor's assertion in the notice, respond to the Contractor within 3 working days of receipt of the Contractor's notice and provide direction on how to proceed. The Engineer will give consideration to an extension of time in accordance with the requirements of Section 108.04 of the Specifications or provide additional compensation as deemed appropriate after documentation and evidence to the Engineer's satisfaction if the following occurs:

- 1 There are delays to the project as a result of inaccurate stakeout information provided or a controlling item of work by the Department where such delays adversely impact the critical path of the work or,
- 2 where extra expense is encountered by the Contractor to correct elements of defective survey work by the Department, and
- 3 where written notice is provided by the Contractor within the timeframe specified. Failure to furnish written notice of such a discrepancy within the timeframe specified will invalidate any later claim for time impact or costs by the Contractor unless specifically waived by the Engineer.

(d) **Survey Services Furnished:**

1 **Construction (C) Projects:**

a. **Survey Stakeout Descriptions:**

Unless otherwise stated the Department will provide required horizontal and vertical controls for the proper construction stakeout of the project. The Contractor shall preserve all horizontal and vertical controls furnished by the Department.

The following surveying work will be performed by the Department:

- (1.) **Digital Terrain Model (DTM) and Construction Cross-Sections:** Original location Digital Terrain Model (DTMs) will be provided by the Department and will serve as a basis of payment for earthwork. The Contractor shall be responsible for



taking construction DTMs or cross-sections of areas that, in their determination, do not agree with the Department furnished original location DTMs. The Contractor shall submit the disputed DTM information to the Engineer for verification prior to any excavation by the Contractor in these alleged areas of change. The DTM information furnished by the Department and submitted by the Contractor shall be compatible to the Department's current DTM format.

- (2.) **Borrow Pits:** All borrow pit DTM's or cross-sections, originals and finals, will be secured by the Department. The Contractor is encouraged to also secure DTM's or cross-sections of borrow areas. A claim of discrepancy in borrow volume will not be considered by the Engineer unless survey data was obtained and submitted by the Contractor to substantiate his claim.
- (3.) **Horizontal and Vertical Control for Bridges:** Certified plats, field notes, coordinates and computations will be furnished to the Contractor by the Department prior to the Contractor beginning work on these structures.
- (4.) **Horizontal and Vertical Controls for all Box Culverts, all Pipe Culvert Installations (including single and multiple line installations) with total hydraulic openings equivalent to 12.6 square feet and larger, and for all closed systems such as storm sewers, and sanitary sewers regardless of size:** The Department will stake all such installations. Certified Plats will be furnished to the Contractor prior to the Contractor beginning work on these culvert structures. The notes, coordinates, or computations used to support the platted information will be furnished to the Contractor with the certified plat. For the purposes of identifying those pipe culvert installations please refer to the areas (hydraulic openings) shown in the PB-1 Standards for the respective sizes of pipes specified on the plans. Where multiple lines of pipes are shown, the areas of the pipe sizes will apply to the total areas of the number of lines specified in the plans. For box culverts refer to the sizes shown in the BC-1 Standards to determine areas of total hydraulic opening.
- (5.) **Horizontal and Vertical Control for Pipe Culvert Installations (including single and multiple line installations) having total hydraulic openings equivalent to 3.1 square feet and up to 12.5 square feet:** The Department will be responsible for staking horizontal and vertical control for pipe culvert installations having a total hydraulic opening equivalent to 3.1 square feet and up to 12.5 square feet. Sketches will be furnished to the Contractor prior to the Contractor beginning work on these culvert structures. For the purposes of identifying those pipe culvert installations please refer to the areas (hydraulic openings) shown in the PB-1 Standards for the respective sizes of pipes specified on the plans. Where multiple lines of pipes are shown, the areas of the pipe sizes shall apply to the total areas of the number of lines specified in the plans. For box culverts refer to the sizes shown in the BC-1 Standards to determine areas of total hydraulic opening.
- (6.) **Horizontal and Vertical Control for additional centerlines or baselines for roadways, ramps, loops and connections:** Upon written request from the Contractor the Department will provide horizontal and vertical controls for additional centerlines or baselines for roadways, ramps, loops and connections.
- (7.) **Grading and paving construction:** The Department will provide fine grade or other grade stakes required for the construction of the project as the work progresses except as stated herein.

Fine grade stakes will be set on all projects on which the plans show a definite grade line. Fine grade hubs will be set on at least one side with distances and grades referenced to the finished centerline grade. Typically, on curves, the Department will provide the distances and elevations to each edge of pavement and centerline through the transitions and the distances and elevations to the edge of pavement only (straight-line super) through full super portions of the curve.

On projects where grading and paving is performed under the same contract, only one set of fine grade stakes will be provided to the Contractor. Fine grade stakes may be used for fine grade and paving grade.

On Secondary Road projects, fine grade stakes will be provided by the Department

only on those projects having curb and gutter or as directed by the Engineer.

Special design ditches will be staked with an offset and cut to the centerline of the ditch. Radius points for pavement flares at connections will be staked only if requested by the Contractor.

The Department will set all slope stakes. Upon written request from the Contractor cut/fill sheets for slope stakes will be furnished by the Department to the Contractor within 3 working days of the survey party's arrival at the project site or a timeframe agreed upon by the Contractor and the Engineer after reviewing the length and complexity of the project.

- (8.) **Right of way and boundary stakeout affecting property ownership:** Right of Way will be staked by the Department prior to the start of the project. Right of way stakes will be placed at a minimum of 100-foot intervals on each side of the roadway or as directed by the Engineer and the stakes will be marked with both the station and offset back to centerline. All final boundary stakeout will be performed by the Department's survey party
- (9.) **Setting right-of-way monuments:** Final right of way monumentation will be performed by the Department in accordance with the following:
  - a) RM-1: The Department will furnish and install RM-1 right-of-way monuments in accordance with the Road and Bridge Standards.
  - b) RM-2: The Department will furnish and install RM-2 right-of-way monuments and optional locator posts, including the required caps, in accordance with the Road and Bridge Standards.
  - c) Other monumentation: The Department will determine if an alternative form of permanent monumentation will be used if RM-1 or RM-2 monuments are unsuitable for marking the right-of-way at various locations. The Department will indicate this alternative monument usage on the final as-built plan in accordance with the Department's Survey Manual.

Where available, electronic data files along with paper sketches and drawings will be furnished by the Department when requested in writing by the Contractor. All electronic data files furnished to the Contractor will be in the format of the Department's current computer hardware and software or a format fully compatible with such hardware and software.

Additional surveying work and supplemental layout work shall be performed by the Contractor as needed to successfully complete the work. The Contractor shall provide and protect temporary construction benchmarks within the construction limits. Temporary construction benchmarks shall be located not farther than 500 feet apart for the total length of the project or as indicated on the plans. Temporary construction benchmarks that are disturbed during construction operations shall be reestablished by the Contractor at no additional cost to the Department. All drawings, field notes, and computations from such survey work performed by the Contractor shall be submitted to the Engineer.

## 2 Minimum Plan (M) Projects:

### a. Survey Stakeout Descriptions:

Unless otherwise stated, the Department will provide required horizontal and vertical control for the proper construction stakeout of the project. The Contractor shall preserve all horizontal and vertical controls furnished by the Department.

The following surveying work will be performed by the Department:

- (1.) **Digital Terrain Model (DTM) and Construction Cross-Sections:** "M" projects are based on plan quantities; therefore DTM and construction cross-sections are not required, except for borrow pits.  
Should the Engineer determine at any time that an actual measurement is warranted, the Department will make the necessary measurement in the field.
- (2.) **Borrow Pits:** All borrow pit DTM's, originals and finals, will be secured by the Department. The Contractor is encouraged to also secure DTM's or cross-sections of borrow areas. A claim of discrepancy in borrow volume

will not be considered by the Engineer unless survey data was obtained by the Contractor to substantiate his claim.

- (3.) **Horizontal and vertical control for bridges:** Certified plats, field notes, coordinates and computations will be furnished to the Contractor prior to the Contractor beginning work on these structures.
- (4.) **Horizontal and Vertical Control for all Box Culverts, all Pipe Culvert Installations (including single and multiple line installations) with a total hydraulic openings equivalent to 12.6 square feet and larger, and for all closed systems such as storm sewers, and sanitary sewers regardless of size:** The Department will stake all such installations. Certified Plats for these stakeouts will be furnished to the Contractor prior to the Contractor beginning work on these culvert structures. The notes, or computations used to support the platted information will be furnished to the Contractor with the certified plat. For the purposes of identifying those pipe culvert installations please refer to the areas (hydraulic openings) shown in the PB-1 Standards for the respective sizes of pipes specified on the plans. Where multiple lines of pipes are shown, the areas of the pipe sizes will apply to the total areas of the number of lines specified in the plans. For box culverts refer to the sizes shown in the BC-1 Standards to determine areas of total hydraulic openings.
- (5.) **Horizontal and Verticals Control for Pipe Culvert installations (including single and multiple line installations) having total hydraulic openings equivalent to 3.1 square feet and up to 12.5 square feet:** The Department will be responsible for staking horizontal and vertical controls for pipe culvert installations having a total hydraulic opening equivalent to 3.1 square feet and up to 12.5 square feet. Sketches will be furnished to the Contractor prior to the Contractor beginning work on these culvert structures. For the purposes of identifying those pipe culvert installations please refer to the areas (hydraulic openings) shown in the PB-1 Standards for the respective sizes of pipes specified on the plans. Where multiple lines of pipes are shown, the areas of the pipe sizes will apply to the total areas of the number of lines specified in the plans. For box culverts refer to the sizes shown in the BC-1 Standards to determine areas of total hydraulic opening
- (6.) **Grading and paving construction:** The Department will provide fine grade or other grade stakes required for the construction of all projects except as stated herein as the work progresses. Slope stakes are not required on "M" projects

Fine grade stakes will be set on all projects on which the plans show a definite grade line. Fine grade hubs will be set on at least one side with distances and grades referenced to the finished centerline grade. Typically, on curves, the Department will provide the distances and elevations to each edge of pavement and centerline through the transitions and the distances and elevations to the edge of pavement only (straight-line super) through full super portions of the curve.

On projects where grading and paving is performed under the same contract, only one set of fine grade stakes will be provided by the Department.. Fine grade stakes may be used for fine grade and paving grade.

On Secondary Road projects, fine grade stakes will be provided by the Department only on those projects having curb and gutter or as directed by the Engineer.

Special design ditches will be staked with an offset and cut to the centerline of the ditch. Radius points for pavement flares at connections will be staked only if requested by the Contractor.

- (7.) **Right of way and boundary stakeout affecting property ownership:** Right of Way will be staked by the Department prior to the start of the job. Right of way stakes will be placed at a minimum of 100-foot intervals on each side of the roadway or as directed by the Engineer and the stakes will be marked with both the station and offset back to centerline. All final boundary stakeout will be performed by the Department survey party.
- (8.) **Setting right-of-way monuments:** Final right of way monumentation will be performed by the Department in accordance with the following:
- a) RM-1: The Department will furnish and install RM-1 right-of-way monuments in accordance with the Road and Bridge Standards.
  - b) RM-2: The Department will furnish and install RM-2 right-of-way monuments and optional locator posts, including the required caps, in accordance with the Road and Bridge Standards.
  - c) Other monumentation: The Department will determine if an alternative form of permanent monumentation will be used if RM-1 or RM-2 monuments are unsuitable for marking the right-of-way at various locations. The Department will indicate this alternative monument usage on the final as-built plan in accordance with the Department's Survey Manual.

#### **105.14 - Maintenance During Construction**

The Contractor shall prosecute his work so as to avoid obstructions to traffic to the greatest extent practicable. The Contractor shall provide for the safety and convenience of the general public and residents along the roadway and the protection of persons and property.

Highways closed to traffic shall be protected by barricades and other warning devices as required by the Engineer. Barricades and warning devices shall be illuminated where required during periods of darkness and low visibility. The Contractor shall erect warning devices in advance of a location on the project where operations or obstructions may interfere with the use of the road by traffic and at all intermediate points where the new work crosses or coincides with an existing roadway. The Contractor shall maintain sign faces and reflective surfaces of warning devices in a clean and visible condition. The Contractor shall cover or remove signs when the messages thereon are not applicable. Barricades, warning signs, lights, temporary signals, and other protective devices shall conform to the requirements of Section 512.

The Contractor shall maintain the work from the beginning of construction operations until final acceptance. Maintenance shall be inherent to the continuous and effective work prosecuted day by day with adequate equipment and forces to such end that the roadway and structures are sustained in a safe and satisfactory condition at all times.

When a Contract specifies placing a course on another course or subgrade previously constructed, the Contractor shall maintain the previous course or subgrade in accordance with the contract requirements during all construction operations.

The road shall be kept open to all traffic while undergoing improvements, unless otherwise permitted in the Contract. The Contractor shall keep the portion of the project being used by public, pedestrian, and vehicular traffic in such condition that traffic will be safely and adequately accommodated. However, removal of snow and control of ice on roads open to public travel will be performed by the Department.

The Contractor shall bear all costs of performing maintenance work before final acceptance and of constructing and maintaining necessary approaches, crossings, intersections, and other features without direct compensation except as provided for herein. When the Contractor confines his operation to the surface of the roadway and reasonable width of the shoulder and the surface is disturbed or damaged by his operations or equipment, he shall be responsible for the restoration and maintenance of the surface that is disturbed or damaged.

The Contractor shall keep the portions of the road being used by the public free from irregularities and obstructions that could present a hazard or annoyance to traffic. When directed by the Engineer, allaying of dust shall be performed and paid for in accordance with the requirements of Section 511. Holes in hard surface pavements shall be filled with approved asphalt patching material.

- (a) **Detours:** Detours may be indicated on the plans or in the special provisions or may be used with the approval of the Engineer. Unless otherwise designated in the contract, the Contractor will

furnish and erect all directional markings for through traffic on off-project detours authorized or requested by the Engineer. Detours over existing state roads will be designated, marked, and maintained by the Department. If any project is located wholly or in part within the corporate limits of a municipality and through traffic is to be detoured at the request of the municipality, the municipality will provide and maintain the detours within the corporate limits and will furnish and erect all directional markings. The provision of detours and marking of alternate routes will not relieve the Contractor of the responsibility for ensuring the safety of the public or from complying with any requirements of these Specifications affecting the rights of the public within his contract limits, including those concerning lights and barricades. Maintenance of all other detours shall be the responsibility of the Contractor.

Right of way for temporary highways, diversion channels, sediment and erosion control features or bridges required by these provisions will be furnished by the Department.

- (b) **Maintenance of Traffic During Suspension of Work:** During any suspension of work, the Contractor shall temporarily open to traffic such portions of the project and temporary roadways as may be agreed upon by the Contractor and Engineer.
- (c) **Flagging Traffic:** Certified flaggers shall be provided in sufficient number and locations as necessary for control and protection of vehicular and pedestrian traffic in accordance with the requirements of the *Virginia Work Area Protection Manual (VWAPM)*. Flaggers shall be able to communicate to the traveling public in English while performing the job duty as a flagger at the flagger station. Flagger shall use sign paddles to regulate traffic in accordance with the requirements of the *VWAPM*.

Certification for flaggers will be awarded upon a candidate's satisfactory completion of an examination. Certification cards shall be carried by flaggers while performing flagging duties. Flaggers found not to be in possession of their certification card shall be removed from the flagging site and operations requiring flagging will be suspended by the Engineer. Further, flaggers performing duties improperly will have their certifications revoked.

- (d) **Delays:** Unless indicated in the Contract Documents or otherwise approved by the Engineer, two-way traffic shall be maintained at all times. The Contractor shall not stop traffic without permission of the Engineer.

If one-way traffic is approved, the Contractor shall provide flaggers to direct the traffic. When specified in the Contract as a pay item, pilot vehicles shall be furnished in accordance with the requirements of Section 512. Upon request from the Contractor and where deemed appropriate by the Department, the Department will install traffic signals that may be used for the control of one-way traffic. The Contractor shall pay the costs of installation, electrical service, maintenance or repair work, and a predetermined rental charge per day for the signals and removal when no longer needed.

- (e) **Connections and Entrances:** Connections with other roads and public and private entrances shall be kept in a reasonably smooth condition at all times.

Stabilization or surfacing material shall be applied to connections and entrances. When specified in the Contract, such material will be paid for at the contract unit price for the specific material. Where such material is not specified in the Contract and determined to be required by the Engineer, the cost for stabilization or surfacing material will be handled in accordance with the provisions of Section 109.05.

The Contractor shall schedule construction operations so that approved continuous access is provided for all property adjacent to the construction when the property is shown on the plans to require access. When frontage roads are shown on the plans, they shall be constructed prior to the closing of any access routes unless other approved access is provided and is acceptable to the property owner.

Connections or entrances shall not be disturbed by the Contractor until necessary. Once connections or entrances have been disturbed, they shall be maintained and completed as follows:

1. **Connections:** Connections that had an original paved surface shall be brought to a grade that will smoothly and safely accommodate vehicular traffic through the intersection, using temporary pavement as soon as practicable after connections are disturbed. Connections that had an original unpaved surface shall be brought to a grade that will smoothly and safely accommodate vehicular traffic through the intersection, using either the required material or a

temporary aggregate stabilization course that shall be placed as soon as practicable after connections are disturbed.

If there are delays in prosecution of work for connections, connections that were originally paved shall have at least two lanes maintained with a temporary paved surface. Those that were not originally paved shall be maintained with a temporary aggregate stabilization course.

2. **Entrances:** Entrances shall be graded concurrently with the roadway with which they intersect. Once an entrance has been disturbed, it shall be completed as soon as is practicable, including placing the required base and surface course or stabilization. If the entrance must be constructed in stages, such as when there is a substantial change in the elevation of the roadway with which it intersects, the surface shall be covered with a temporary aggregate stabilization course or other suitable salvaged material until the entrance can be completed and the required base and surface or stabilization course can be placed.
- (f) **Grading Operations:** When the Contractor elects to complete the rough grading operations for the entire project or exceed the length of one full day's surfacing operations, the rough grade shall be machined to a uniform slope from the top edge of the existing pavement to the ditch line.

When the surface is to be widened on both sides of the existing pavement, construction operations involving grading or paving shall not be conducted simultaneously on sections directly opposite each other.

The surface of pavement shall be kept free from soil and other materials that might be hazardous to traffic. Prior to opening of new pavement to traffic, shoulders shall be roughly dressed for a distance of 3 feet from the edge of the paved surface.
- (g) **Obstruction Crossing Roadways:** Where the Contractor places obstructions such as suction or discharge pipes, pump hoses, steel plates or any other obstruction that must be crossed by vehicular traffic, they shall be bridged as directed by the Engineer at the Contractor's expense. Traffic shall be protected by the display of warning devices both day and night. If operations or obstructions placed by the Contractor damage an existing traveled roadway, the Contractor shall cease operations and repair damages to the roadway at no additional cost to the Department.
- (h) **Patching Operations:** Where existing hydraulic cement concrete pavement is to be patched, the operation of breaking and excavating old pavement shall extend for a distance of not more than two miles. Patching shall be coordinated with excavating so that an area of not more than one-half mile in which excavated patches are located shall be left at the end of any day's work. Necessary precautions shall be taken to protect traffic during patching operations.
- (i) **Temporary Structures:** The Contractor shall construct, maintain, and remove temporary structures and approaches necessary for use by traffic. Unless otherwise specified in the Contract, the cost of these operations shall be included in pay items for the new structure. After new structures have been opened to traffic, temporary structures and approaches shall be removed. The materials contained therein shall remain the property of the Contractor.

The proposed design of temporary structures shall be submitted to the Engineer prior to the beginning of construction in accordance with the requirements of Section 105.10.
- (j) **Failure To Maintain Roadway or Structures:** If the Contractor fails to remedy unsatisfactory maintenance immediately after receipt of a notice by the Engineer, the Engineer may proceed with adequate forces, equipment, and material to maintain the project. The cost of the maintenance, plus 25 percent for supervisory and administrative personnel, will be deducted from monies due the Contractor for the project.
- (k) **Haul Route:** The Contractor shall select haul routes between the project and material source(s) that will minimize disturbance to the community. The Contractor shall furnish to the Engineer, for review, his plan for the haul route and for minimizing the adverse effects of hauling operations on persons who reside adjacent to the haul route or persons who otherwise use a portion of the haul route for ingress or egress to their residential or work area.—The Department may select alternate haul routes, divide the hauling traffic over several routes, and impose other restrictions deemed necessary to minimize the impact of the hauling operation on local residents.
- (l) **Opening Sections of Projects to Traffic**

When specified in the Contract or when directed by the Engineer, certain sections of the work may be opened to traffic. Such opening shall not constitute acceptance of the work or any part thereof or a waiver of any provision of the Contract.

On any section of the work opened by order of the Engineer where the Contract does not provide for traffic to be carried through the work the Contractor will not be required to assume any expense entailed in maintaining the road for traffic. Such expense will be borne by the Department or will be compensated for in accordance with the requirements of Section 109.05. Repair of slides and repair of damage attributable to traffic will be compensated for in accordance with the requirements of Section 109.05. Slides shall be removed by the Contractor in accordance with the requirements of Section 303.

On any section of the work opened by order of the Engineer where the Contract does not provide for traffic to be carried through the work, any additional cost for the completion of other items of work that are required because of the changed working conditions will be compensated in accordance with the requirements of Section 109.05.

If the Contractor is not continuously prosecuting the work to the satisfaction of the Engineer, he shall not be relieved of the responsibility for maintenance during the period the section is opened to traffic prior to final acceptance. Any expense resulting from the opening of such portions under these circumstances, except slides, shall be borne by the Contractor. The Contractor shall conduct the remainder of the construction operations so as to cause the least obstruction to traffic.

#### **105.15 - Removing and Disposing of Structures and Obstructions**

The Contractor shall remove and dispose of or store, as directed by the Engineer, fences, buildings, structures, or encumbrances within the construction limits unless separate pay items for this work are included in the Contract. Payment for these operations will be in accordance with the requirements of Section 301.03. Materials so removed, including existing drains or pipe culverts, shall become the property of the Contractor, with the exception of those materials to be stored or delivered to the Department or others as designated in the Contract.

- (a) **Signs:** The Contractor shall relocate all signs within the construction limits that conflict with construction work as approved by the Engineer. Signs that are not needed for the safe and orderly control of traffic during construction as determined by the Engineer shall be removed and stored at a designated location within the project limits. The removed signs shall be stored above ground in a manner that will preclude damage and shall be reinstalled in their permanent locations prior to final acceptance. If any of the removed signs are not to be reinstalled, the Contractor shall notify the Engineer at the time the signs have been properly stored. Such signs will be removed from the storage area by the Department. Any sign that is damaged or lost because of the fault of the Contractor shall be repaired or replaced at his expense. Costs for removing, storing, protecting, and reinstalling such signs shall be included in the price bid for other items in the Contract, and no additional compensation will be made.
- (b) **Mailboxes and Newspaper Boxes:** When removal of mailboxes and newspaper boxes is made necessary by construction operations, the Contractor shall place them in temporary locations so that access to them will not be impaired. Prior to final acceptance, boxes shall be placed in their permanent locations as designated by the Engineer and left in as good condition as when found. Boxes or their supports that are damaged through negligence on the part of the Contractor shall be replaced at his expense. The cost of removing and resetting boxes shall be as specified in the Contract.

#### **105.16 – Cleanup**

Removal from the project of rubbish, scrap material, and debris caused by the Contractor's personnel or construction operations shall be a continuing process throughout the course of the work. The work site shall have a neat, safe and orderly appearance at all times.

Before final acceptance, the highway, borrow pits, quarries, disposal areas, storage areas, and all ground occupied by the Contractor in connection with the work shall be cleaned of rubbish, surplus materials, and temporary structures, except in the case where the property is owned or controlled by the Contractor. All parts of the work shall be left in a neat, safe and orderly condition.

Within 30 days after final acceptance, the Contractor shall remove his equipment, materials and debris from the right of way and property adjacent to the project that he does not own or control.

#### **105.17 - Inspection of Work**

Inspection will be performed at critical stages. However, all stages, materials, and details of the work are subject to inspection. The Contractor shall provide the Engineer and Inspectors with full and safe access to

all parts of the work and shall be furnished such information and assistance by the Contractor as are required to make a complete, timely and detailed inspection. The Engineer and his appointed representatives shall have ready access to machines and plant equipment used in processing or placing materials.

Prior to the beginning of operations, the Engineer will meet with the Contractor to establish an understanding of the critical stages of work that shall be performed in the presence of the Inspector. In order for the Department to schedule inspection of the work, the Contractor shall keep the Engineer informed of planned operations in accordance with the requirements of Section 108.03

If the Engineer requests it, the Contractor shall remove or uncover such portions of the finished work as may be directed at any time before final acceptance. The Contractor shall restore such portions of the work to comply with the appropriate contract specification requirements. If the work exposed is acceptable, the uncovering or removing and replacing the covering or making good the parts removed will be paid for as extra work in accordance with the requirements of Section 104.03. If the work is unacceptable, the cost of uncovering or removing and replacing the covering or making good the parts removed shall be borne by the Contractor.

When any unit of government, political subdivision, or public or private corporation is to pay a portion of the cost of the work specified in the Contract, its representatives shall have the right to inspect the work. The exercise of this right shall not be construed as making them a party or parties to the Contract or conferring on them the right to issue instructions or orders to the Contractor.

If materials are used or work is performed without inspection by an authorized representative of the Department, the Contractor may be ordered to remove and replace the work or material at his own expense unless the Department's representative failed to inspect the work or material after having been given reasonable notice in writing that the material was to be used or the work was to be performed.

If an inspection reveals that work has not been properly performed, the Contractor will be so advised and he shall immediately inform the Department of his schedule for correcting such work and the time when a reinspection can be made.

#### **105.18 - Removal of Unacceptable and Unauthorized Work**

Work that does not conform to the requirements of the Contract will be considered unacceptable work.

Unacceptable work shall be remedied or removed as determined by the Engineer and replaced in an acceptable manner at the Contractor's expense. The Engineer may accept the work at a reduced price when acceptance is considered to be in the best interest of the public.

Work that is done contrary to the instructions of the Engineer, contrary to the requirements of the Contract, beyond the lines shown on the plans or as designated by the Engineer except as specified herein, or without authority will be considered unauthorized and will not be paid for. Such work may be ordered removed or replaced at the Contractor's expense.

The Contractor shall not perform destructive sampling or testing of the work without written authorization of the Engineer. Unauthorized destructive sampling or testing will cause the work to be considered unacceptable.

In the event the Contractor is granted authorization to perform destructive sampling or testing, the Contractor shall obtain the approval of the Engineer for the method and location of each test prior to beginning such sampling or testing. In addition, destructive sampling and testing shall be performed in the presence of the Engineer.

If the Contractor fails to comply immediately with any order of the Engineer made under the provisions of this Section, the Engineer will have the authority to cause unacceptable work to be removed and replaced and to deduct the cost from any monies due or to become due the Contractor.

#### **105.19 - Submission and Disposition of Claims**

Early or prior knowledge by the Department of an existing or impending claim for damages could alter the plans, scheduling, or other action of the Department or result in mitigation or elimination of the effect of the act objected to by the Contractor. Therefore, a written statement describing the act of omission or commission by the Department or its agents that allegedly caused damage to the Contractor and the nature of the claimed damage shall be submitted to the Engineer at the time of each and every occurrence that the Contractor feels gives it the right to make a claim or prior to the beginning of the work upon which a claim and any subsequent action will be based. The written statement shall clearly inform the Department that it is a "notice of intent to file a claim." If such damage is deemed certain in the opinion of the Contractor to



result from his acting on an order from the Engineer, he shall immediately take written exception to the order. Submission of a notice of intent to file a claim as specified shall be mandatory. Failure to submit such notice of intent shall be a conclusive waiver to such claim for damages by the Contractor. An oral notice or statement will not be sufficient nor will a notice or statement after the event.

In addition, at the time of each and every occurrence that the Contractor feels gives it the right to make a claim or prior to beginning the work upon which a claim and any subsequent action will be based, the Contractor shall furnish the Engineer an itemized list of materials, equipment, and labor for which additional compensation will be claimed. Only actual cost for materials, labor and equipment will be considered. The Contractor shall afford the Engineer every facility for keeping an actual cost record of the work. The Contractor and the Engineer shall compare records and bring them into agreement at the end of each day. Failure on the part of the Contractor to afford the Engineer proper facilities for keeping a record of actual costs will constitute a waiver of a claim for such extra compensation except to the extent that it is substantiated by the Department's records. The filing of such notice of intent by the Contractor and the keeping of cost records by the Engineer shall in no way establish the validity of a claim.

Upon completion of the Contract, the Contractor may, within 60 days after the final estimate date established by the Department pursuant to Virginia Code, § 33.1-386, deliver to the Department a written claim, which must be a signed original claim document along with three legible copies of the claim document, for the amount he deems he is entitled to under the Contract. For the purpose of this Section, the final estimate date shall be that date set forth in a letter from the Department to the Contractor sent by certified mail and shall be considered as the date of notification of the Department's final estimate. Regardless of the manner of delivery of the claim, the Department must receive and have physical possession of the Contractor's written claim within the 60 day period that commences with the final estimate date. Submittals received by the Department either before the final estimate date or after the 60 day period shall not have standing as a claim. The claim shall set forth the facts upon which the claim is based. The Contractor shall include all pertinent data and correspondence that may substantiate the claim. Only actual cost for materials, labor and equipment will be considered. If the Contractor makes a claim, the Department shall have the right, at its expense, to review and copy all of the Contractor's non-privileged project files and documents, both electronic and paper, for use in analyzing the claim. Within 90 days from the receipt of the claim, the Department will make an investigation and notify the Contractor by certified mail of its decision. However, by mutual agreement, the Department and Contractor may extend the 90-day period for another 30 days.

If the Contractor is dissatisfied with the decision, he shall notify the Commissioner in writing within 30 days from receipt of the Department's decision that he desires to appear before him, whether in person or through counsel, and present additional facts and arguments in support of his claim. The Commissioner will schedule and meet with the Contractor within 30 days after receiving the request. However, the Commissioner and Contractor, by mutual agreement, may schedule the meeting to be held after 30 days but before the 60th day from the receipt of the Contractor's written request. Within 45 days from the date of the meeting, the Commissioner will investigate the claim, including the additional facts presented, and notify the Contractor in writing of his decision. However, the Commissioner and Contractor, by mutual agreement, may extend the 45-day period for another 30 days. If the Commissioner deems that all or any portion of a claim is valid, he shall have the authority to negotiate a settlement with the Contractor subject to any approvals required by the *Code of Virginia*.

Any monies that become payable as the result of claim settlement after payment of the final estimate will not be subject to payment of interest unless such payment is specified as a condition of the claim settlement.

The Contractor shall submit a certification with any claim using the following format:

Pursuant to *Code of Virginia*, I hereby certify that this contract claim submission for Virginia Department of Transportation Project \_\_\_\_\_ in \_\_\_\_\_ County, Virginia is a true and accurate representation of additional costs and/or delays incurred by (name of Contractor) in the performance of the required contract work. Any statements made, and known to be false, shall be considered a violation of the Virginia Governmental Frauds Act, punishable as allowed by the Virginia Code for a Class 6 Felony.

(Company)

By:

As officer or duly appointed agent of (Company)

*Title:*

*Date:*

*State Of:*

*City/County of \_\_\_\_\_, To-Wit:*

*I, the undersigned, a Notary Public in and for the City/ County and State aforesaid, do hereby certify that \_\_\_\_\_, whose name is signed to the foregoing instrument, bearing date of the \_\_\_\_\_ day of \_\_\_\_\_, 20\_, has this day acknowledged the same before me in my City/ County and State aforesaid.*

*Given under my hand this \_\_\_\_\_ day of \_\_\_\_\_, 20\_.*

*Notary Public:*

*My commission expires:*

Claims submitted during the statutory period for submitting contract claims and submitted without the certification described above shall not have standing as a claim and shall not be considered by the Department.