SECTION 01150

MEASUREMENT AND PAYMENT

PART 1 - GENERAL

1.1 DESCRIPTION

A. For all items other than those to be paid for by lump sum amounts, after the work is completed and before final payment is made therefore, the Engineer will make final measurements to determine the quantities of various items of work accepted as the basis for final settlement. Payment for quantities on a lump sum project will be made to the Contractor only with the authorization of Change Order approved by the Owner and the Contractor.

B. The Contractor, in case of unit-price items, shall be paid for the actual amount of work accepted and the actual amount of materials in place, as shown by final measurement except as provided for in Section 01150.1.2.A.

C. All units of measurement shall be standard U.S. convention as applied to the specific items of work by tradition and as interpreted by the Engineer.

D. Once each month the Resident Project Representative will prepare two "Monthly Progress Reports" which shall also be signed by both the Resident Project Representative and Contractor's Representative.

E. These complete forms will provide the basis of the Engineer’s monthly quantity estimate upon which payment will be made.

1.2 SCOPE OF PAYMENT

A. Payments to the Contractor will be made for the actual quantities of the Contract items performed and accepted in accordance with the Contract Documents unless the bid item is specified as “plan quantity”, in which case quantity shown on the bid sheet as “approximate quantity” is considered final and no adjustment will be made. Upon completion of construction, if these actual quantities (other than “plan quantities”) show either an increase or decrease from the quantities given in the Proposal Form, the Contract Unit Prices will still prevail, except as provided hereinafter.

B. The Contractor shall accept in compensation, as herein provided, in full payment for furnishing all materials, labor, tool, equipment, and incidentals necessary to the completed work and for performing all work contemplated and embraced by the Contract; also for all loss or damage arising from the nature of the work, or from the action of the elements, or from any unforeseen difficulties which may be
encountered during the execution of the work and until its final acceptance by the Owner, and for all risks of every description connected with the execution of the work, except as provided herein, also for expenses incurred in consequence of the suspension of the work as herein authorized.

C. The payment of any partial estimate or of any retained percentage except by and under the approved final invoice, in no way shall diminish the obligation of the Contractor to repair or renew any defective parts of the construction or to be responsible for all damage due to such defects.

1.3 PAYMENT FOR INCREASED OR DECREASED QUANTITIES

A. When alterations in the quantities of work not requiring supplemental agreements, as hereinbefore provided for, are ordered and performed, the Contractor shall accept payment in full at the Contract price for the actual quantities of work done. No allowance will be made for anticipated profits. Increased or decreased work involving supplemental agreements will be paid for as stipulated in such agreements.

1.4 OMITTED ITEMS

A. Should any items contained in the proposal form be found unnecessary for the proper completion of the work contracted, the Engineer may eliminate such items from the Contract, and such action shall in no way invalidate the Contract, and no allowance will be made for items so eliminated in making final payment to the Contractor.

1.5 PARTIAL PAYMENTS

A. See General Conditions, Document 00700, Article 15, for payments to the Contractor, except as modified below.

B. Partial payments shall be made monthly as the work progresses.

1. Disregard references to "twenty days" and "ten days" in Paragraphs 15.01 and 15.03 of General Conditions, and replace with the following paragraph:

Measurement for work and materials to be paid for shall be completed as of the last Thursday of the calendar month for which payment is requested. On the first Thursday of the following month the Contractor shall submit to the Engineer a partial payment estimate filled out and signed by the Contractor covering the work performed during the period covered by the partial payment estimate and supported by such data as the Engineer may reasonably require. The Engineer will, therein seven (7) days after receipt of each partial payment estimate, either indicated in writing approval of
payment, and present the partial payment estimate to the Owner, or return the partial payment estimate to the Contractor indicating in writing the reasons for refusing to approve payment. In latter case, the Contractor may make the necessary corrections and resubmit the partial payment estimate to the Engineer once per month for approval. Any items not acceptable to the Engineer will be deleted and may be resubmitted with the next requisition. The Engineer will then submit within seven (7) days of approved Contractors revised payment request to the Owner. Within thirty (30) days after the receipt of funding, the Owner shall submit payment to the Contractor on the basis of the approved partial payment estimate less the retainage.

C. No monthly payments shall be required to be made when, in the judgment of the Engineer the work is not proceeding in accordance with the provisions of the Contract Documents, or when in this judgment the total value of the work performed since the last payment amounts to less than $5,000.

D. Retained amounts shall be limited, except where greater retention is necessary under specific circumstances specifically provided for in the Construction Contract, to the following schedule:

1. Disregard 15.01 B3, Article 15, Document 00700, General Conditions.
2. The retainage shall be an amount equal to 5% of said estimate. Upon substantial completion of the work, any amount retained may be paid to the Contractor. When the work has been substantially completed except for work which cannot be completed because of weather condition, lack of materials or other reasons for noncompletion, the Owner may make additional payments, retaining to all times an amount sufficient to cover the estimated cost of the work still to be completed. Retainage will not be held during the one-year warranty period.

E. Estimates of lump sum items shall be based on a schedule dividing each item into its appropriate component parts together with a quantity and a unit price for each part so that the sum of the products of prices and quantities will equal the contract price for the item. This schedule shall be submitted by the Contractor for, and must have the approval of, the Engineer before the first estimate becomes due.

1.6 PAYMENT FOR MATERIAL DELIVERED

A. Payment shall be made for all or part of the value of acceptable, non-perishable materials and equipment which are to be incorporated into bid items, have not been used and have been delivered to the construction site, or placed in storage places acceptable to the Owner. Prior to payment being made, submit to the Engineer, original invoices accompanied by receipted bills as proof of payment of all the value of the materials and/or equipment under consideration. Materials
and equipment when so paid for by the Owner, shall become the property of the Owner, and in the event of default on the part of the Contractor, the Owner may use, or cause to be used, these materials and equipment in the construction of the work. The Contractor shall be responsible for any damage to, or loss of, these materials and equipment. The amounts thus paid by the Owner shall reduce the estimated amounts due the Contractor as the material is used in the work.

B. No partial payment shall be made upon fuels, supplies, lumber, false work, or other materials, or on temporary structures of any kind which are not a permanent part of the contract.

1.7 INCIDENTAL WORK

A. Incidental work items for which separate payment is not measured include, but are not limited to, the following items:

1. Restoration of property.
2. Cooperation with other Contractors and others.
3. Temporary connections, re-connection, dewatering, pumping, and etc.
4. Utility crossings, unless otherwise paid for.
5. Minor Items -- such as pole restraint, replacement of fences, guard rails, rock wall, mailboxes, etc.
6. Steel and/or wood sheeting as required.
7. All other items shown on drawings, and contained in the specifications. Also included are addendum items.
8. Lot monumentation.
10. Cutting, removal, and disposal of existing pavement, piping, culverts, stones, etc.
11. Repair of existing utilities damaged during the course of construction.
12. Relocating signs.
13. Dust Control.

1.8 DESCRIPTION OF PAY ITEMS

A. The following sections describe the measurement of and payment for the work to be done under the respective items listed in the proposal.

B. Each unit or lump sum price stated in the Proposal shall constitute full compensation, as herein specified, for each item of the work completed.

C. All payment items are described in MDOT Standard specifications (11/14), MDOT special provisions and Division 1 & 2 specifications provided in the contract specifications. Payment of all items is described in this section. All work to be performed as shown on the drawings and described in these specifications is
intended to be covered by the items described in this section. All items not specifically described herein shall be considered incidental to the contract. No other pay items shall be considered. Method of measurement and basis of payment for pay items shall be as described in the State of Maine Department of Transportation Standard Specifications (latest edition) unless specifically noted otherwise in these specifications or on the plans. References to “the Department” shall be understood to mean “the Owner”.

For the following items, refer to MDOT specification sections unless otherwise noted. Any conflicts between MDOT specifications and those found in the project manual or plans shall favor the project manual or the plans.

**Item 201.111 – Clearing**
This item shall be paid for on a lump sum basis. This work shall include clear cutting, selective clearing and thinning, removing single trees, removing and disposing of all stumps and debris within the right-of-way limits as required for completion of construction. The Town will have first refusal to any timber encountered in the clearing.

Clearing associated with ditch construction shall be paid for separately.

**Item 203.2001 – Common Excavation – Plan Quantity**
Excavation of unsuitable material such as muck, as directed by Engineer, which are outside the excavation limits depicted within the plan set shall be paid at the common excavation unit price over and above the plan quantity.

Removal of existing pavement (if applicable) shall be included within this pay item. Disposal of pavement shall meet all local, State, and Federal laws.

Excavation associated with ditch construction shall be paid for separately.

**Item 211.30 – Ditch Excavation**
Ditch excavation includes excavating, removing brush, trees and stumps and disposing of excess materials. Any borrow material needed to complete the inslope rehabilitation will be considered incidental to this item.

**Item 304.103 – Aggregate Subbase Course Gravel – D Truck Measure**
Aggregate subbase course gravel will be measured in vehicles at 80% of the number of cubic yards accepted and used at the point of delivery, as shown by “Delivery Slips”.

Water and/or fines added to material to aid compaction and stabilization to prevent raveling and rutting shall be incidental to the work.

All testing pertaining to compacting including but not limited to field density tests, field proctors, gradations, etc. shall be paid for, scheduled and performed by the contractor and no separate payment shall be made.
Item 304.093 – Aggregate Base Course - Type A Crushed Truck Measure,
Aggregate base course gravel will be measured in vehicles at 80% of the number of cubic yards accepted and used at the point of delivery, as shown by “Delivery Slips”.

Water and/or fines added to material to aid compaction and stabilization to prevent raveling and rutting shall be incidental to the work.

All testing pertaining to compacting including but not limited to field density tests, field proctors, gradation, etc. shall be paid for, scheduled and performed by the contractor and no separate payment shall be made.

Item 307.32 – Full Depth Recycled Pavement (Untreated)
Any additional materials added to restore profile grade and/or cross slope shall be incidental to the work.

All testing pertaining to compacting including but not limited to field density tests, field proctors, etc. shall be paid for, scheduled and performed by the contractor and no separate payment shall be made.

Item 603.169 – 15” Culvert Pipe (Option III)
All materials necessary to extend culverts (if applicable), including connections, rings, etc. will be considered incidental to this item and no separate payment will be made.

Item 603.179 – 18” Culvert Pipe (Option III)
All materials necessary to extend culverts (if applicable), including connections, rings, etc. will be considered incidental to this item and no separate payment will be made.

Item 603.199 – 24” Culvert Pipe (Option III)
All materials necessary to extend culverts (if applicable), including connections, rings, etc. will be considered incidental to this item and no separate payment will be made.

Item 603.259 – 60” Culvert Pipe (Option III)
All materials necessary to extend culverts (if applicable), including connections, rings, etc. will be considered incidental to this item and no separate payment will be made. Any additional material needed to provide a “natural bottom” will be considered incidental to this item and no separate payment will be made.

Item 610.08 – Plain Rip Rap
The quantity of Plain Rip Rap measured for payment will be the number of cubic yards acceptably installed at the locations shown. All excavation, subgrade preparation, geotechnical fabric, backfill, and finish grading will be considered incidental to the item.
Item 615.0701 – Loam – Plan Quantity

Item 618.1401 – Seeding Method II – Plan Quantity

Item 619.1201 – Mulch – Plan Quantity

Item 627.711 – 4” W/Y Pavement Marking Line - Plan Quantity

Item 627.75 – White/Yellow Pavement & Curb Marking Line

Item 652.361 – Work Zone Traffic Control, Maintenance of Traffic Control Devices & Flaggers
This pay item includes full compensation for all days requiring flaggers. Hiring, transporting, equipping, supervising, and payment of all required flaggers and all overhead is considered incidental to this pay item and no separate payment will be made.

The Contractor will be required to submit a Traffic Control Plan (TCP) to the engineer 30 days prior to the start of construction. The TCP shall adhere to the Manual of Uniform Traffic Control Devices, MaineDOT “Standard Details”, and MaineDOT Standard Specifications. This item will include all work necessary for proper traffic control as approved in the project TCP and will include but is not limited to construction signage, flaggers, barricades, maintenance, drums, etc. Payment shall be based upon the percentage of project completion as determined by the Engineer.

656.75 – Temporary Soil Erosion & Water Pollution Control
This item shall consist of temporary erosion control and all work necessary to ensure no pollutants escape the work site or enter into protected water bodies.

This item also includes construction of the permanent stormwater management structures depicted in plans including the level lip spreaders. All level spreader excavation and associated materials necessary to construct level spreaders, shall be considered incidental to this item.

Item 659.1 - Mobilization
This item shall consist of preparatory work and operations including, but not limited to, those necessary for the movement of personnel, equipment, project signage, supplies and incidentals to the project site; and for all other work and operations which must be performed or costs incurred prior to beginning work on the various items on the project site.

Upon approval of all pre-construction submittals required for approval by this Contract, the Contractor will receive payment of 50% of the Lump Sum price for Mobilization. After the Engineer determines that the Work is 50% complete, the Contractor will receive the other 50% of the Lump Sum price for Mobilization.
The total sum of payments under this item shall not exceed the original total contract amount bid regardless of the fact that the Contractor may shut down his work on the project or move equipment away from the project and then back again.

END OF SECTION