

GENERAL INFORMATION

Prior to commencement of construction, the Department of Transportation and Infrastructure Renewal will locate on site those primary control points, bench marks, center line of proposed road, and limits of the right-of-way which are necessary to delineate the right-of-way and to facilitate layout of the work. The Department will be responsible for the correctness of any information and any layout provided.

The Contractor shall assume full responsibility for layout of alignment, elevations and dimensions of each and all parts of the work. The Contractor shall provide qualified personnel, necessary materials and equipment to lay out and establish all lines and grades necessary.

Where changes to the layout are required due to site conditions exposed during construction, the Department shall provide such changes to the Contractor as construction proceeds. The Contractor shall include such changes in the work and will not be compensated for any survey work due to such changes, unless authorized by the Department.

In the case of the destruction or removal of stakes, marks and reference points, they will be replaced by the Contractor at no cost to the Department.

The Contractor shall protect all primary control points from disturbance. If for any reason the Department is required to replace any primary control points previously provided and identified by the Department, then an amount at the rate of \$100.00 per hour per survey crew will be withheld from Progress payment to the Contractor for the survey work redone by the Department. For the purpose of this specification, "survey crew" shall mean, those personnel required to complete the survey task, up to a maximum of four persons, one of which is classified as an Engineering Survey Technician.

The Contractor shall not be eligible for any claim for delay resulting from destruction of primary control points.

Before commencing work, the Contractor shall satisfy themselves as to the meaning of primary control points, stakes, marks and measurements.

The Contractor shall not take advantage of any apparent error or omission in the survey control provided by the Department but shall immediately bring such apparent error or omission to the attention of the Engineer.

The Department will conduct periodic checks to verify the accuracy and correctness of the completed excavations, subgrade, and embankments (ie: With reference to theoretical cross sections and any applicable tolerances).

SURVEY FOR STRUCTURE *(This information is supplemental to the General Information)*

The Department will provide two (2) primary control points with horizontal co-ordinates and elevations adjacent to the site of the structure.

After all girders and cross bracing are fixed in place and prior to commencement of form work construction, the Contractor shall take a profile on the centerline of the top of all girders at all locations where screed elevation is shown on the plans. The profile shall be submitted to the Project Engineer. The Project Engineer will advise the Contractor within three (3) working days of having received the girder profiles that the screed elevations shown on the plans are correct or the Contractor will be provided revised screed grades at that time.

The following deviations shall be the maximum acceptable when compared to that shown on the plans:

- i. The top surface of each bearing pad shall be within 5mm.
- ii. The horizontal distance between adjacent centerline of bearings along a girder, as measured along the centerline of the girder, shall be within 25mm.
- iii. The horizontal distance between adjacent centerline of bearings, measured transverse to the structure, shall be within 5mm and the maximum accumulated deviation over the full width of the structure shall be less than 20mm.

SURVEY FOR GRADING AND GRAVELLING *(This information is supplemental to the General Information)*

The Department will provide a minimum of two (2) primary control points with horizontal coordinates and elevations adjacent to the site. In addition, the Department will provide the following:

1.1 HORIZONTAL ALIGNMENT AND VERTICAL ALIGNMENT

All Horizontal and Vertical Alignment is the responsibility of the Contractor. The Department will provide the Contractor with horizontal and vertical control points at each end of the project limits. The Department will provide the Contractor with available survey information.

1.2 CLEARING

If clearing is required, the Contractor shall be provided with a list indicating the centerline stations (at 20 metre intervals or as required), corresponding offset limits and type of clearing required. This information shall be made available to the Contractor within 5 working days after the Pre-Construction Job Meeting.

1.3 GRUBBING

If grubbing is required, the Contractor shall be provided with a list indicating the centerline stations (at 20 metre intervals or as required), corresponding offset limits and type of grubbing required. This information shall be made available to the Contractor within 5 working days after the Pre-Construction Job Meeting.

The extent of grubbing permitted shall be determined by the Contractor's pre-approved Work Progression Schedule.

1.4 DRAINAGE STRUCTURES

The Contractor shall be provided with a list describing the inside dimensions of all foreseeable drainage structures on the Contract. In addition, this list shall indicate approximate values for the following: centerline station, skew angle, and length of structure. This information shall be made available to the Contractor within 5 working days after the Pre-Construction Job Meeting. The list shall be updated accordingly as construction proceeds.

The Contractor is responsible for all survey work required for culvert installation. Payment for supply and installation of pipe for underground drainage structures will be based on the length (per metre) of pipe satisfactorily installed.

1.5 SUBGRADE

The Contractor shall be provided with a list indicating shoulder offset distances and subgrade grades at centerline stations and at both shoulders (at 20 metre intervals or as required). If grade changes or changes to theoretical cross sections are required, the Contractor shall be provided with a revised grade list within 1 working day after the Department has decided that such changes are necessary.

When the Contractor has completed subgrade construction, including staking and grading, of sections 500 metres or greater in length, to within the tolerance specified in Division 2, Section 11, Subsection 5.0 of the Department's Standard Specifications, they shall notify the Department of the areas that are ready for final inspection. The Department shall check the subgrade and inform the Contractor within 1 working day whether or not the subgrade conforms to the established grades within the tolerance specified in Division 2, Section 11, Subsection 5.0 of the Standard Specifications.

The Contractor shall receive written approval from the Department prior to commencement of the graveling operation.

1.6 GRANULAR MATERIALS

After the Contractor has received approval from the Department to proceed with the graveling operation, they shall notify the Department of their intent to commence application of gravel. Within 2 working days after having received notice, the Department shall provide the Contractor with a list indicating shoulder offset distances and gravel grades at centerline stations and at both shoulders (at 20 metre intervals or as required). If grade changes are required, the Contractor shall be provided with a revised grade list within 1 working day after the Department has decided that such changes are necessary.

When the Contractor has completed graveling, including staking and grading, of sections 500 metres or greater in length to within the tolerances specified in Division 3, Section 2, Subsection 5.0 of the Department's Standard Specifications, they shall notify the Department of the areas that are ready for final inspection. The Department shall check each class of gravel and inform the Contractor within 1 working day whether or not the gravel conforms to the established tolerances specified in Division 3, Section 2, Subsection 5.0 of the Standard Specifications.

The Contractor shall receive written approval from the Department prior to commencement of further gravelling operations, for successive gravel classes.