ARMOUR STONE

PART 1 GENERAL

1.1 Related Work

.1	All Division 1	Specification Sections
.2	Section 02311	Site Grading
.3	Section 02315	Excavating, Trenching & Backfilling
.4	Section 02911	Site Topsoil & Finish Grading

1.2 Description of Work

.1 Supply all labour, materials and equipment necessary for the placement of armour stone, filter fabric and granular backfill.

.2 Armour stone retaining wall shall consist of tightly placed armour stone, as required by the plans and shall include all necessary excavation, supplying and placing of the stone, all labour and equipment incidental to the Work.

1.3 Coordination

.1 Coordinate final grading with other Work and include refilling and compaction of settled and washed out areas to incorporate their specified Work.

1.4 Measurement for Payment

.1 Armour Stone will be measured as per the Bid Documents – Price Schedule where applicable.

1.5 Samples

.1 Provide one (1) sample of armour stone for approval. Unless otherwise noted, minimum size 600 x 600 x 300mm. Or if accepted as a sample alternative, high resolution photos may be approved. Finish exposed face as described under “finishes” elsewhere in this Section. Make samples until final approval is made by the Consultant.

.2 All Work shall match approved production run samples.

.3 Identify all samples with project name and number, date, description and all other pertinent information.

.4 Submit shop drawings indicating location of each unit in the finished Work, dimensions of each unit, reinforcing details, concrete strengths and admixtures, etc.

PART 2 PRODUCTS

2.1 Armour Stone

.1 All armour stone walls shall consist of squared natural limestone as supplied by a quarry acceptable to the City of Brampton. The exposed face will have a natural chipped appearance and be free of drill holes. Stone size shall be approximately 800mm wide x 600mm tall x 1000mm long unless otherwise noted.

2.2 Filter Fabric

.1 Terrafix R270 filter fabric or an approved alternate is to be used under and behind all armour stone Work.

2.3 Granular Backfill

.1 All granular base and fill material to be used for armour stone work shall be Type 1 (19mm Crusher Run Limestone).

PART 3 EXECUTION

3.1 Site Examination

.1 The Contractor shall report to the Consultant in writing, any conditions or defects encountered on site before or during construction which may adversely affect the armour stone wall's performance;

.2 Do not commence Work until such conditions or defects have been investigated and corrected.

3.2 Inspection, Certification, and Field Quality Control

.1 Stake out all Work for armour stone to the Consultant's approval.

.2 Have all excavation Work inspected and approved prior to installation of armour stone.

.3 All Work within watercourses shall be carried out in such a manner as to not adversely affect the natural environment of the stream. Care is to be taken by the Contractor to prohibit forces from causing construction debris, fuel, oil or any other pollutants from entering the stream. The Contractor shall not significantly increase the deposition rates of sediments downstream as a result of his construction activity. The Contractor will be held solely responsible

for any stream damage caused as a result of his Work. If the Contractor is proposing to construct any temporary stream alterations such as coffer dams or vehicle crossings in order to construct the Work, Contractor shall submit a scenario clearly stating the procedure (step by step procedures) prior to any such construction.

.4 All Works within a watercourse shall be carried out under Ontario Regulation 211/73 (Guidelines for Construction Affecting Water Courses, June 22, 1977.) and to the requirements of the governing Conservation Authority.

.5 Armour stone shall be placed with tight joints. Stagger joints on subsequent courses. Fill gaps between armour stone to eliminate potential settlement or washout problems. Where material is loose or gaps are not filled the contractor will fill the voids with a low slump mortar to the satisfaction of the Consultant.

.6 Perform sampling, inspection and tests in accordance with CAN3-A23-2 and to include:

.1 Making of standard slump tests

.2 Obtaining three standard specimens for strength test from each 100m3 (130 cu.yd.) of concrete or fraction thereof, of each design mix design of concrete placed in any one day. Verify that the test cylinders are stored in an enclosure, maintained at specified temperatures.

.3 Making compression tests of each set of three (3) specimens, one (1) at seven (7) days and two (2) at twenty-eight (28) days.

END OF SECTION - 04400