

SECTION 02272

RIP RAP

PART 1 GENERAL

1.01 SCOPE OF WORK

This section pertains to the use of riprap for the protection of rivers, creeks and ditches from the effects of erosion and scouring. The work required consists of all materials, accessories, equipment, tools and labor required to install riprap.

1.02 REFERENCES

- A. Manual for Erosion and Sediment Control in Georgia (SCS Manual published by the State Soil and Water Conservation Committee of Georgia (latest edition).
- B. Georgia Department of Transportation Standard Specifications, Construction of Roads and Bridges (latest edition).

PART 2 PRODUCTS

2.01 RIP RAP

All stone for rip rap shall conform to the following tables for the type specified on the drawings as recommended by the Georgia DOT Standard Specifications, Section 603:

**TABLE NO. 1  
GRADED RIP RAP STONE**

Type Ga. D.O.T.	Screen Size inches (Sq. opening)			Common Uses	Filter Stone ASTM D- 448
	Max.	Avg.	Min.		
3	12	9	5	Creek Banks Pipe Outlets	6 or 57
1	24	12	7	Lakes & Shorelines, Rivers	3, 4 or 5

## 2.02 FILTER BEDDING STONE

Materials used for filter bed stone shall conform to the following table as recommended by the Georgia DOT Standard Specifications, Section 603:

**FILTER BEDDING STONE**

<b>ASTM D-448 TABLE 1</b>	<b>Normal Sizes (inches)</b>
3	2" - 1"
4	1 1/2"-3/4"
5	1" - 1/2"
6	3/4"-3/8"
57	1" - No. 4

## 2.03 GEO-TECHNICAL FILTER FABRIC

- A. As an alternate to filter bedding stone, the DEVELOPER/CONTRACTOR may use geo-technical filter fabric.
- B. Filter fabric shall have strength and engineering properties that meet or exceed those of MIRAFI 700X or PROPEX 1199, or equivalent. Filter fabric shall be as recommended by the Georgia DOT Standard Specifications, Section 171.

## 2.04 LOCALLY EXCAVATED ROCK

Rock excavated from the site may be used for work described under this section, provided that the quality and size requirements meet the requirements of Articles 2.01 and 2.02.

## 2.05 MATERIAL AVAILABILITY

The gradations of stone sizes listed in these tables are guidelines. Individual quarries may produce different gradations depending on local conditions. If gradations are different from those listed, DEVELOPER/CONTRACTOR is to notify the TOWN OF BRASELTON for approval prior to use on the project.

## PART 3 EXECUTION

### 3.01 STONE OR CONCRETE RIP RAP

- A. Prepare area to receive rip rap. Ensure area is sufficiently stable and compacted to receive the stone.
- B. Install either filter stone to thickness specified on drawings, or geo-technical filter fabric per manufacturer's recommendations.

- C. Upon completion of the filter bed preparation, the rip rap shall be dumped and handled into place to form a compact layer to a thickness as shown on the drawings. Tolerance for rip rap shall be plus 6 inches, with no under-tolerance permitted.

### 3.03 CLEAN-UP

- A. After installation is complete, the rip rap and the area surrounding the riprap shall be cleared of all debris.
- B. Grassing or mulch stabilization is to be installed on all disturbed areas after clean-up is complete.

END OF SECTION