



## STANDARD OPERATING PROCEDURE: RIP RAP INSTALLATION

rev. April 2019

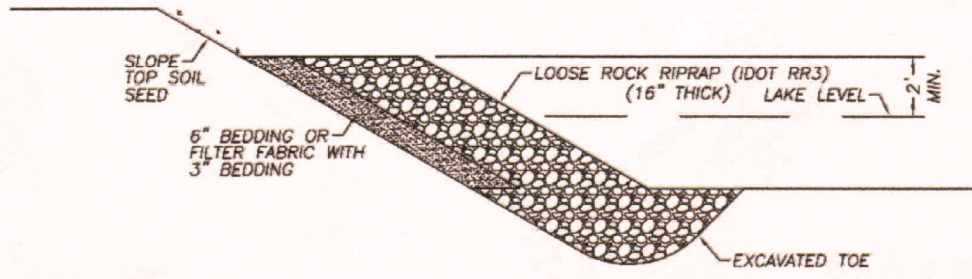
### 1. Purpose:

This procedure describes the installation protocols for shoreline rip rap placement used for erosion control. This procedure will be used for installation of all rip rap placed on Lost Lake shorelines. Shoreline property owners are responsible for maintaining their shoreline in a fashion that promotes soil erosion control to minimize lake impacts. This procedure will be followed when rip rap is used as an option for shoreline stabilization. Requests for variances to this procedure are subjected to submission to the board for review and final approval.

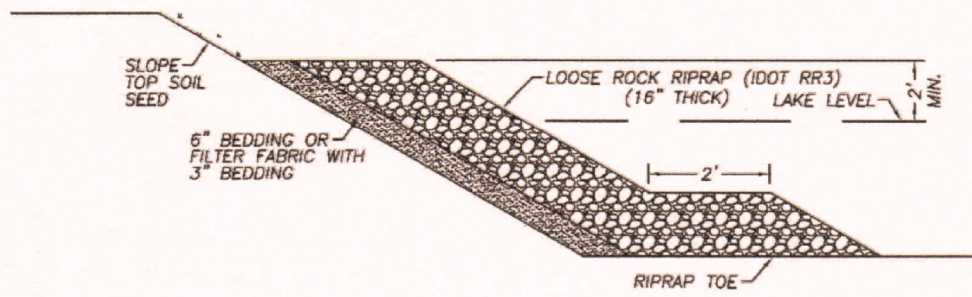
### 2. Procedure:

#### 2.1. Rip rap installation procedure:

- 2.1.1. A maximum of 2:1 slope is required for the installation of rip rap. If the shoreline is greater than a 2:1 slope, the shoreline must be graded to a 2:1 slope before rip rap is installed.
- 2.1.2. The rip rap will be installed to a minimum of 2 feet above normal pool elevation.
- 2.1.3. Rip rap is to be placed as soon as possible after grading to minimize erosion.
- 2.1.4. Installation of rip rap shall be placed 16 inches thick for shoreline stabilization and shall meet the criteria of IDOT RR#3 having an average size of 6-10 inches in diameter and shall not contain more than 10% fine.
- 2.1.5. Rip rap will be installed on filter fabric and/or bedding material (consisting of well graded gravel with a maximum size of 1 inch. If the property owner chooses not to use filter fabric, a minimum 6 inch thick layer of bedding material will be used. If fabric is installed, then a minimum of 3 inches of bedding material will be used.
- 2.1.6. Upon completion of the rip rap installation, re-seeding of the top soil above the rip rap is required.



TYPICAL CROSS SECTION - ALTERNATE NO. 1



TYPICAL CROSS SECTION - ALTERNATE NO. 2