ABSTRAK

Syaiiful Rizal Arsyad. 2022. *Desain Bronjong Untuk Perkuatan Tebing Sungai Lembung Somber Desa Lebbeng Barat Kecamtan Pasongsongan Kabupaten Sumenep*. Skripsi, Jurusan Teknik Sipil, Fakultas Teknik, Universitas Wiraraja Madura. (Pembimbing : **Cholilul Chayati, MT. & Dhani Andika Prayudi, MT.**)

Sungai Lembung Somber yang terletak di Desa Lebbeng Barat Kecamatan Pasongsongan, Kabupaten Sumenep, Provinsi Jawa Timur. Dimana Sungai lembung somber tersebut mengalami pengikisan tebing sungai atau erosi, sehingga mengakibatkan luapan air sungai naik ke permukaan. Kerusakan tebing sungai yang terjadi setiap tahunnya di sungai tersebut semakin parah terutama di musim penghujan.

Bagian kerusakan yang parah yaitu pada bagian tikungan sungai, dikarenakan aliran sungai pada tikungan sungai lebih cepat dibandingkan dengan sungai berpenampang lurus. Hal ini berdampak buruk bagi masyarakat, terutama yang tinggal di sekitar bantaran aliran sungai. Tingkat kerusakan tebing sungai perlu ditekan agar tidak menambah kerusakan lainnya.

Hasil perencanaan diperoleh desain bangunan pelindung tebing sungai, yaitu Bronjong dengan Dimensi Bangunan Bronjong di lokasi Sungai Lembung Somber, Desa Lebbeng Barat, Kecamatan Pasongsongan yaitu, berupa tinggi bangunan 7 m, dengan jumlah bronjong 17 trap pada sisi kiri, 15 trap pada sisi kanan, panjang bangunan 150 m.

Kata kunci : **Kecepatan Aliran, Erosi Tebing, Desain Perkuatan Tebing.**

ABSTRACT

Shaiiful Rizal Arsyad. 2022. **Gabion Design for Strengthening the Cliffs of the Lembung Somber River, West Lebbeng Village, Pasongsongan Regency, Sumenep Regency**. Thesis, Department of Civil Engineering, Faculty of Engineering, Wiraraja Madura University. (Supervisor : **Cholilul Chayati, MT. & Dhani Andika Prayudi, MT**.)

Lembung Somber River is located in West Lebbeng Village, Pasongsongan District, Sumenep Regency, East Java Province. Where the river is somber limbung experiences erosion of river cliffs or erosion, resulting in overflowing river water rising to the surface. The damage to the river cliffs that occurs every year in the river is getting worse, especially in the rainy season.

The severe part of the damage is in the bend of the river, because the flow of the river at the bend of the river is faster than that of a straight-section river. This has a bad impact on the community, especially those who live around the riverbanks. The extent of damage to river cliffs needs to be suppressed so as not to add other damage.

The results of the planning obtained the design of the river cliff protection building, namely gabions with the dimensions of the gabion building at the location of the Lembung Somber River, West Lebbeng Village, Pasongsongan District, namely, in the form of a building height of 7 m, with a total of 17 gabions on the left side, 15 traps on the right side, building length 150 m.

Keywords : **Flow Speed, Cliff Erosion, Cliff Strengthening Design.**