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Loc Hoang Nguyen*, 155 S 1400 E Rm 233, Salt Lake City, UT 84112, and **Klaus Schmitt**, 155 E 1400 S Rm 233, Salt Lake City, UT 84112. *Boundary value problems for singular elliptic equations.*

We study the existence of positive solutions to singular elliptic boundary value problems involving the p -Laplace operator. We establish a sub-supersolution theorem and use an eigenfunction of the p -Laplacian to construct sub- and super-solutions. Our assumptions on the singular term are more relaxed than in some previous papers, even for the case $p = 2$, as we allow for non-monotone singular terms with blowup controlled by a power. We also allow for a parameter dependent term and study how its growth affects our existence result. (Received September 01, 2010)