POTENTIAL APPLICATION OF WILDLIFE HABITAT EVALUATION PROCEDURES TO DESIGN RECLAMATION HABITATS: CASE STUDY FROM A 5 MILE LONG, 4-LANE HIGHWAY PROJECT¹

William A. Beimborn, George T. Reese and Linda J. Ealy²

Abstract. GAI Consultants, Inc., was contracted to design a wildlife habitat mitigation plan for a proposed Pennsylvania Department of Transportation (PennDOT) new four-lane highway construction project near Ebensburg, Pennsylvania. The highway is expected to be completed in late fall 1990.

Mitigation requirements were previously determined (as habitat units) through application of a Pennsylvania Modified Habitat Evaluation Procedure (PAM HEP) to the project area. Mitigation procedures were developed to offset habitat unit losses resulting from highway construction. These mitigation procedures consisted of habitat management techniques designed to maintain quality habitat where it existed and to provide quality habitat and/or specific habitat components where needed. Management techniques encompassing nearly 150 acres included the planting and/or thinning of vegetation to provide food and cover. Soils in the mitigation area were analyzed for compatibility with proposed plant species. Several unique deciduous and evergreen hedgegrow patterns were designed to provide cover and food for wildlife. Each hedgerow was composed of several different tree and shrub species placed in a spatial arrangement which provided maximum diversity while discouraging the movement of wildlife perpendicular to the highway mainline. A Pennsylvania Game Commission Seed mixture was adapted to these plantings to provide food for wildlife, stabilize the soil, and provide minimal competition to planted trees and shrubs.

¹Paper presented at 1990 Mining and Reclamation Conference and Exhibition, Charleston, West Virginia, April 23-26, 1990.

²Lead Environmental Specialist (Ph.D.) Environmental Specialist and Environmental Specialist, respectively, GAI Consultants, Inc., 570 Beatty Road, Monroeville, PA 15146. ` -