

and erosion control measures will be installed prior to construction of the Project and maintained throughout the construction phase with specific measures addressing access road construction near sensitive environmental resources. These measures will be described in the Project SWPPP in the FEIS.

2.6.4 Foundation Construction

Turbine foundation construction would begin only after access roads to turbine locations are constructed. Foundation construction includes drilling, hole excavation, outer form setting, rebar and bolt cage assembly, casting and finishing of the concrete, removal of the forms, backfilling and compacting, if required, and foundation site area restoration.

A construction work area consisting of a temporary 150-foot radius around each turbine foundation is necessary for wind turbine assembly and erection. This will typically involve clearing and stripping/stockpiling topsoil. Backhoes will then excavate a foundation hole. In agricultural areas excavated subsoil and rock will be segregated from stockpiled topsoil. If bedrock is encountered it is anticipated it will be excavated with a backhoe. If this is not possible, drilling, pneumatic jacking, hydraulic fracturing or blasting, as a last resort, would excavate the bedrock. The Project geotechnical/civil engineer will specify the foundation type. Typical wind turbine foundations are approximately 7 to 10 feet deep and approximately 50 to 60 feet across, such as the one shown in Exhibit 2.6.1. Foundations typically require approximately 320 cubic yards (cy) of concrete. After the concrete is cured, it is backfilled with the excavated on-site material. Permanent loss of usable land will be restricted to the tower diameter, which for the Project is 20 feet. To provide adequate foundation for the erection cranes, a gravel crane pad (approximately 100 feet by 50 feet) will be constructed at the base of each tower. Excess subsoil or other excavated material generated from foundation work will be used to backfill or fine grade roads and wind turbine erection areas.

Exhibit 2.6.1 – Typical Turbine Foundation

