Pending Federal Energy Regulatory Commission (FERC) approval, which also entails obtaining necessary state permits, pipeline construction will begin. In most cases, site preparation will not take place during the winter or critical migratory and nesting seasons.

PennEast is seeking issuance of a Certificate of Public Convenience and Necessity for the Project by August 2016. This timing will allow PennEast to begin the following in the third quarter 2016:

- Tree clearing in winter 2016 to avoid Indiana bat and other threatened and endangered species breeding periods;
- Compliance with the Migratory Bird Treaty Act;
- Installation of horizontal directional drilling segments; and
- Contractor yard preparation.

Construction activities for the mainline are scheduled to begin in spring 2017, pending specific construction windows imposed on the Project.

Construction of the approximately 118-mile PennEast Pipeline will take between seven months and one year. It is subject to many variables, including availability of material, labor and weather.
The U.S. Department of Transportation (DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA) regulates natural gas pipeline safety, including pipeline depth. The Pipeline will have a three-foot minimum cover of soil in all areas, except where rock prevents this depth. This depth of cover is in compliance with – and exceeds – DOT requirements (49 CFR §192 Section §192.327).

Rock encountered during trenching will be removed using one of the available rock removal techniques:

- Conventional excavation with a backhoe;
- Use of a bulldozer followed by backhoe excavation;
- Pneumatic hammering followed by backhoe excavation;
- Blasting followed by backhoe excavation; or
- Blasting surface rock prior to excavation.

From building new homes to constructing hospitals and highways, blasting is a technique commonly used in many development projects. For additional information on how PennEast will address pre-determined procedures and applicable regulations, see PennEast’s Pipeline Safety fact sheet.
Pipeline Installation

Once the PennEast team prepares the right of way (ROW) and digs the trench, the individual pipe joints are bent to fit the trench and then welded. The welding is highly controlled and performed by qualified welders using approved procedures.

Each weld is inspected visually. Ultrasonic images are processed on site to ensure the integrity of every weld. After the ultrasound inspection is complete and the weld approved, an epoxy coating is applied to each welded area. The coating on the entire pipe section is checked electronically and any needed repairs are made. Prior to placing the line into service, PennEast will perform a “hydrostatic” test. Hydrostatic testing involves filling the Pipeline with water and pressurizing it to a level higher than the maximum pressure at which the pipe will operate. This test pressure is held for a minimum of eight continuous hours. The testing will help ensure additional integrity of the welds and pipe material.

Crossing Streams and Rivers

PennEast has evaluated numerous specialized methods for pipeline construction for crossing waterbodies. PennEast proposes to cross waterbodies using a combination of trenchless crossing methods (i.e. HDD and bores), and dry-crossing methods. See PennEast’s “How We Cross Rivers and Streams” fact sheet for additional information.

Restoration

Restoration of the land surface begins as soon as the pipe is backfilled, first with subsoil and then with topsoil. Restoration includes replacing grade cuts to original contours, seeding, applying fertilizer, and mulching to replenish ground cover and minimize erosion. Temporary workspaces will be restored to their previous state.

Minimizing Agricultural Impacts

PennEast has developed an Agricultural Impact Minimization Plan (AIMP) to address agricultural concerns, such as: soil disturbance and topsoil segregation; drain tiles; irrigation systems; depth and cover; temporary roads and staging areas; dewatering activities; and restoration activities. If the best construction management practices within this plan do not fully address the issues on a specific parcel of agricultural land, PennEast will negotiate mitigation efforts directly with the landowner whose property is involved.

See PennEast’s AIMP at www.PennEastPipeline.com, under the “Working With Agriculture” section.

Quality Assurance

Independent, third-party inspectors will monitor construction. These inspectors check data as the line is built to ensure the Pipeline is installed at the required depth. If a pipeline is installed that does not meet the minimum depth requirement, adjustments will be made before the construction contractor leaves the Project. As an added assurance, depth restrictions will be incorporated into ROW agreements.

PennEast will employ the appropriate environmental controls into its pipeline construction procedures at all stream crossings, and each state’s Department of Environmental Protection must approve construction at stream crossings.

Once construction is completed, PennEast will implement a procedure known as hydrostatic testing. For the test, the Pipeline is filled with water and pressurized to a level higher than the maximum pressure at which the pipe will operate. This test pressure is held for a minimum of eight continuous hours and is an additional check to ensure the integrity of the welds and pipe material.

Surface Equipment

For the safe and reliable operation of the underground PennEast Pipeline, there will be some aboveground equipment. This equipment will consist of one compressor station, as well as remote-activated valves, test stations (for cathodic protection) and meter stations spaced along the line. Any such equipment will be contained in a fenced area.