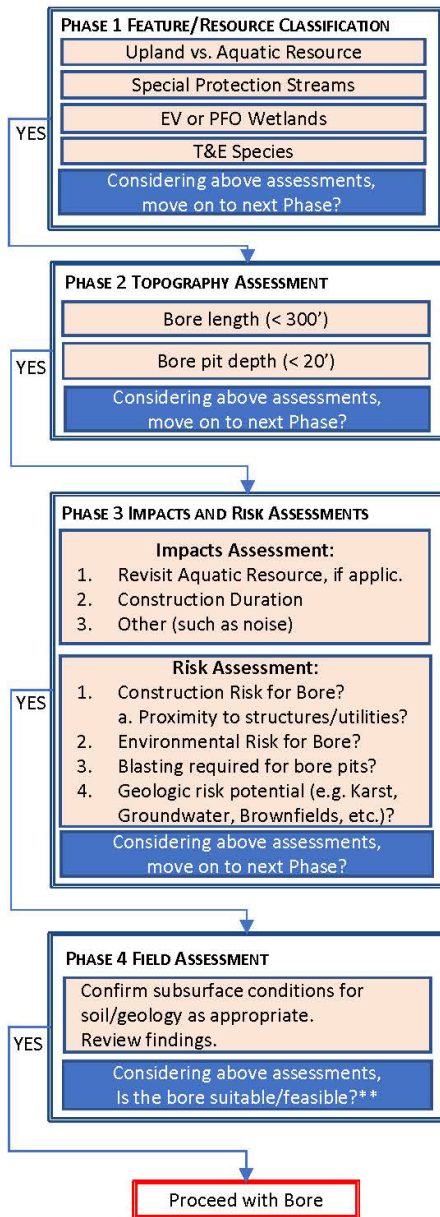


BORE & HORIZONTAL DIRECTIONAL DRILL (HDD) FLOWCHART

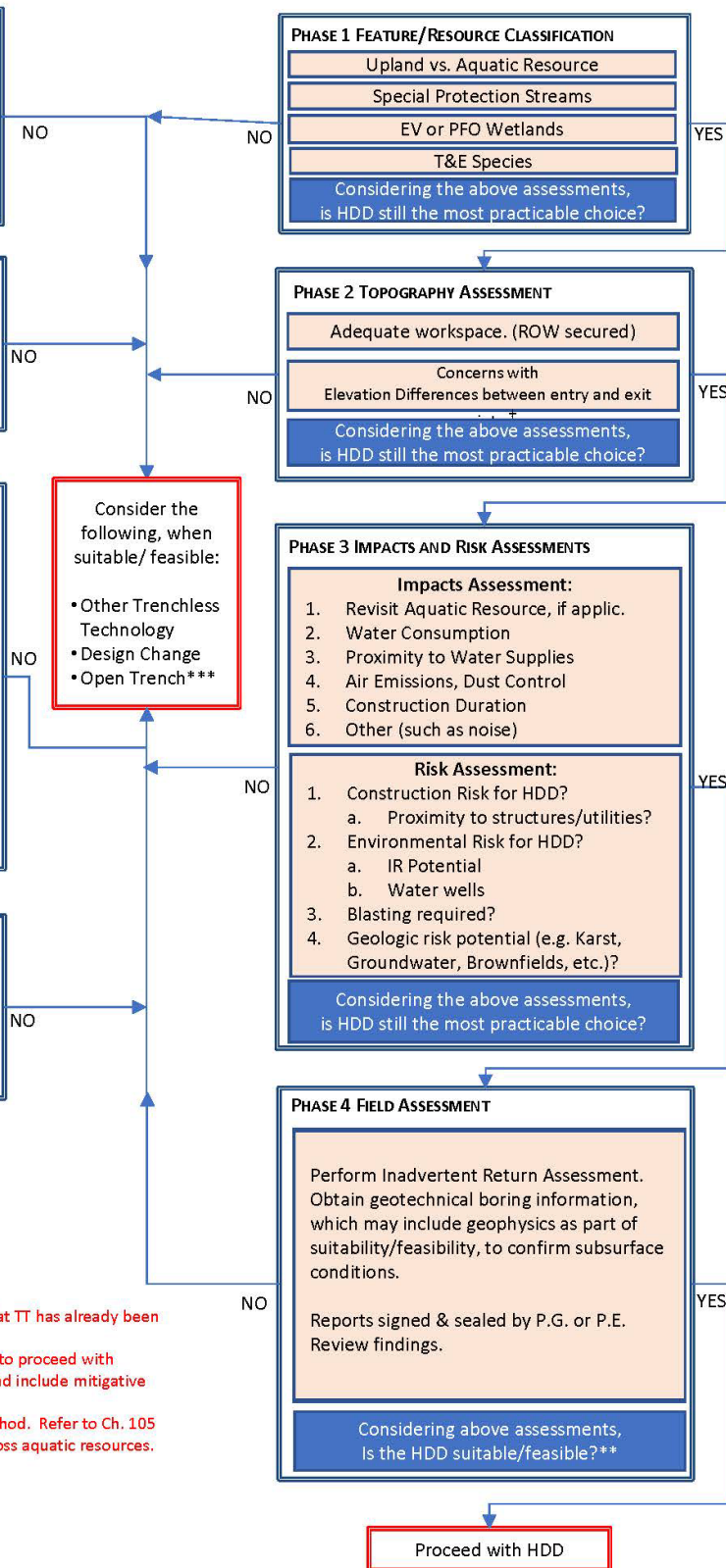
Site Suitability Assessment - A Tool for Trenchless Technology Assessment - This Flow chart is not meant to be a complete guide to assessment of risk associated with trenchless technology methods. This flow chart is meant to be used in conjunction with the DEP's *Trenchless Technology Technical Guidance Document* (310-2100-003). This flow chart may be considered when deciding what path to take (i.e., HDD, conventional bore, or open trench) along with the other tools in the *Trenchless Technology Technical Guidance Document*. Below, users may begin on either side of the chart at Phase 1. Phases 1 & 2 are considered Desktop Assessments, while Phases 3 & 4 are meant to be Field Assessments.

For more information, please visit the Bureau of Waterways Engineering & Wetlands <https://www.dep.pa.gov/Business/Water/Waterways/Pages/default.aspx> or visit the Trenchless Technologies webpage at <https://www.dep.pa.gov/About/Regional/RPCO/Pages/Trenchless.aspx>.

BORE ASSESSMENT*



HDD ASSESSMENT*



Consider the following, when suitable/ feasible:

- Other Trenchless Technology
- Design Change
- Open Trench***

* For those referring to this flowchart, it is presumed that TT has already been determined for consideration.

** When there are known risks and the decision is made to proceed with Bore/HDD, the narrative will need to clearly explain and include mitigative measures.

*** This is an assessment to determine appropriate TT method. Refer to Ch. 105 Alternatives Analysis for proposals to open trench across aquatic resources.

DRAFT

= Question # = Way Point # = End Point