



# Standards Oversight Council (SOC)

Developing effective technical standards that protect Wisconsin's natural resources

---

131 W. Wilson Street, #601, Madison, Wisconsin 53703  
(608) 441-2677 || Fax (608) 441-2676 || [socwisconsin.org](http://socwisconsin.org)

## **DNR 1072 Horizontal Directional Drilling Standard Team** **MEETING NOTES**

Thursday, April 8, 2021 ▲ 9:00am – 12:00pm ▲  
Virtual Meeting (online)

---

### **9:00 Welcome & Introduction** (Kate)

Goal: Welcome, and review today's meeting objective.

Objective: more progress on the details related to complex projects and the environmental resource risk, confirm the matching of risk to practices.

Attendance: Kate, Kim, John, Lance, Matt, Ann, Brad, Abby, Elliott, Geri, Mike, Sue, Amy

Absent: Dana

Guest: Huntjt (user did not clarify or respond when addressed)

### **Notes Review** (Kate, Team)

Goal: Review and approve 3/11/2021 draft meeting notes.

Team discusses and proposed edit that was highlighted in the draft Notes - For simplicity and symmetry in communicating the size thresholds Kim proposed using  $\geq 24$ " diam and  $\geq 1500'$  length for the large category. At the March meeting, we had discussed  $>1500'$  for large (where the "equal to" part was in the medium category). Team votes and agrees to this change to have large length category be  $\geq 1500'$ .

The issue of HOW to determine length is raised. Team prefers use of horizontal station distance (vs drill distance). **Brad** will draft language on this to include in the standard.

No further comments to the draft notes; Kate will finalize and post online.

### **Defining Complex Projects** (John, Matt, Susan, Brad)

Goal: Hear summary from breakout group on definitions for a "complex" project and what practices this would trigger. Team to provide input.

- This group reviews on-screen the language they created to help clarify what might constitute a "complex" project.

- This group proposes maintaining flexibility since complexity is really on a site-by-site basis depending on a combination of factors. Having flexibility is important for a variety of nuances though process to make the decision not yet confirmed. A combination of several small factors may also result in greater risk which would result in calling a project “complex”. The number of variables is rather large and we couldn’t list them all with the various combinations. In addition, some variables would be avoided after they are acknowledged (like if endangered species identified then avoid working during nesting period).
- This group also proposed that practices used for complex projects would be Considerations instead of Criteria. The practice descriptions previously drafted by the team had the practices as requirements and not recommendations. For the standard to have substance, complex projects would need requirements (as Criteria). Team discusses how to determine complexity (like, one very specific issue vs. additive risk from multiple factors) and how to assign appropriate practices by type and degree of complexity. Some flexibility needed to make a decision (need to specify by whom?) specific to each project.
- Brad reviews an example that was very complex although it would fit into our ‘small’ project category (8” diameter and 1000’ long). The drill needed to be deep due to steeper topography, and would be right at the top of bedrock. A combination of slope and proximity to rock increase risk.
- Recommendation was made to provide an example cross-section in the technical standard for a good visual.
- Team identifies that there might be factors (e.g. karst or sensitive resource) that would always require a specific practice; this breakout group will review practices associated with ‘complex’ projects to determine if characteristic other than ‘complex’ might be a more appropriate trigger or threshold.
- This breakout group will review the usage of “complex” in the technical standard and see if there are language adjustments and/or further clarifications to define complex as it is used in the different practice descriptions. They will also tighten up language in their work to clarify/define subjective terms like “soft” or “large change”). They will report back to the team with further proposed text and standard edits at the next meeting.

#### **Checklist Update (Ann, Elliot and Mike)**

Goal: Hear update from the group preparing checklist(s) to support the standard.

This breakout is working on 4 checklists:

1. Initial Design Site Walk-Through
2. Planning Site Walk-Through
3. HDD Pre-Construction Meeting
4. HDD Path Walk-Through

The checklists are expected to be an attachment to the standard—they would be easier to find on the DNR website and would go out for public review as part of the document.

The list and description of these practices' components will remain in the technical standard text. The checklists would be consistent with the associated practice descriptions' text in the standard and would be user-friendly lists or forms to pull out for the inspections or walk-throughs.

The checklists themselves wouldn't be required for use, rather they would be provided as examples since some users want to customize. The standard as currently written wouldn't require submittal of the checklists or equivalent, but to keep on hand.

If looking at these four practice descriptions side-by-side indicates edits for parallel level of detail, they will edit the standard text for team review.

This group will share draft checklists with the team for comment via email before 4/28.

#### **Outreach Update (Amy, Lance and Abby)**

Goal: Hear update from the group preparing the training plan.

This breakout group is has started drafting a PowerPoint presentation to help clarify the language and graphics we use in the technical standard and to park ideas that could eventually be used for training events.

The team helps fill in some gaps in details related to typical HDDs and the standard Purpose.

When it comes time for training (typically after publication, or just before), anyone on the team is invited to support outreach and training.

The stated standard Purpose does not include limiting the duration or severity of a release. The standard does include when development Spill Plan and Frac Out Plans are needed and what the plans need to contain specific to their project. The spill response would be situation-specific.

This group has prepared a graphic showing Levels of Planning and a flow chart to guide the user through the standard.

- The flow chart and Levels of Planning stages don't quite match the standard as it is currently written but the framework may apply (e.g., related to feasibility concerns, tiered approach with routine/enhanced/detailed segments for a project). One or both of these graphics may be used to frame the remaining standard work or alternately we can adjust the flow chart.
- Some of these details have not yet be decided or determined by the team but are presented for team reaction and discussion.

This breakout group will consider inviting specific team members to their breakout meeting to help provide details and fill additional gaps. This group will continue to refine their work as the technical standard details are worked out.

### **Environmental Resources (Kim, Ann, Team)**

Goal: Review and discuss options for environmental triggers to trigger identified practices.

The team will eventually need to define the terms, but we first look at the list of terms that are currently in the practice descriptions in the technical standard

- Some options: environmental resources, water resources, waters of the state, and wetlands and waterways. The draft text also includes sensitive resources and high-quality resources which may also be synonyms.
- “Waters of the state” is used in Kim and Amy’s program, and “wetlands and waterways” is used in Geri’s program. NR 103 has some definitions that are currently in the draft standard Glossary as a starting point; we’d want to maintain consistency with DNR rules, permits, and programs.
- Different use of terms may be appropriate depending on specific usage in the standard. We should review the language in the context it’s used to see if a different term may be more appropriate.
- Some of these terms are broader than just water—for example, “environmental resources” may include threatened and endangered species.
- We can also use this variety of terms, but we will need to define each and confirm each is used appropriate by those definitions.
- DNR has a resource list related to post-construction stormwater measures we could use as well. We may not want to rely too heavily on this since it is related to permanent construction whereas HDD is a temporary situation.
- Ann introduces the list of resources reviewed under the Utility General Permit (GP3) and where to find the information (largely SWDV). These may be used to define “high quality” and/or “sensitive water resources”.
  - Waterways: Wild river, fish spawning period restrictions (trout streams), Walleye Waters,
  - Wetlands: Great Lakes ridge & swale complexes, interdunal wetlands, coastal plain marshes, emergent wetlands w/wild rice, southern sphagnum bogs (visual observation), boreal rich fens, calcareous fens
  - If people have wetland in their project area, they are already having to do this assessment under the GP. However, when HDD is used to AVOID wetland impact, then they don’t necessarily do this GP review.
  - List in GP3 is limited. If we are going to itemize wetland or waterway types, then we may want to expand on this list with additional wetland and waterways. From previous team discussions, categories discussed by the team are: ORW/ERW, endangered resources, cultural resources, and dikes. Would we also include conveyance systems?

- We should also consider the RESULT of this evaluation--what additional practices are required if these are present? We should also keep in mind that the purpose of the research should result in something outcome (and confirm the outcomes are consistent with requirements for each resource type).
- We don't want the technical standard to be too lengthy or too complicated for all users to properly implement (e.g. small HDD companies).
- Assessment of some of the resources discussed are complicated and would need a wetland consultant to determine whether a project fits in to the definition of "highly susceptible". For example, ASNRI wetlands are not all mapped and the nuances within the ASNRI definitions are too complicated for general public so this wouldn't be a good requirement.
- WHEN to evaluate: It seems important for this evaluation to be done would this evaluation be done--Desktop Review step could be used to capture identification of the bulk of the resources. and have a consideration that if a resource has been identified as high quality (by DNR staff?). A map highlighting specific sensitive areas would helpful—especially the sensitive areas relative to the wider project.
- WHERE: Team will need to also discuss **how far away** from a resource would be considered the presence of that resource.
- A breakout group with **Geri, Ann** and **Amy** will look at the usage of these terms and see if they can reduce the list of terms, and confirm definitions and usage of the terms that are selected.

### Plan of Action (Kate, Kim)

Goal: Review action items and agenda items for next meeting (May 6, 2021).

#### Review Action Items:

- **Everyone:** Review and comment on standard! Send redlines to Kate by 4/28.
- **Kate:** finalize 3/11/21 notes and post online.
- **Kate:** prepare 4/8/21 draft meeting notes, Kim reviews, then full Team reviews.
- **Kim and Kate** will fine-tune the breakout group assignments and prepare May 6 agenda and. Kate will email the Team if there is follow-up action.
- **Brad** will add draft language to clarify how to measure length.
- Complex breakout group [**Brad, John, Matt** and **Susan**] – Review/refine existing work - reconsider if "complex" should be changed to a consideration in the standard or if there is a better way for practices currently triggered by "complex" to be called out as criteria. Provide edited documents (whether an update to previous work or edited tech standard file and table) to Kate by 4/28.
- Checklist breakout group [**Elliott** and **Mike**, some help from **Ann**] – Prepare checklists for the 3 walk-throughs and the pre-construction meeting; provide drafts for team review via email by 4/28.
- Outreach/training breakout group [**Amy, Abby** and **Lance**] – Continue refining outreach plan in conjunction with development of the standard. This is a longer-term item so there's no deadline before the next meeting.

- Resource terms breakout group [**Ann, Geri and Amy**] – Review existing draft standard to identify best and consistent terms (e.g. "water resources" vs "waters of the state" vs "wetlands and waterways" vs "sensitive resources" etc.). Change terminology where appropriate. Confirm (or edit) practice descriptions as appropriate, particularly where high-quality or sensitive resources are referenced. Send Kate the redlined technical standard and practice table with suggested changes by 4/28.

The next team meeting is May 6, 2021

- This will again be a virtual meeting on Zoom. For now, SOC and DNR are both not attending meetings in person, though this may change as more people are vaccinated and the number of COVID cases goes down.
- Agenda will be emailed to the team a week before the meeting.

**12:00 End**

### Parking lot for later discussion (includes topics from previous meetings):

1. Clarify measurement of HDD length – add station distance. [UNDERWAY]
2. Consider use of figures as examples in the standard – a cross-section and plan showing overall HDD plan with select areas with sensitive resources where additional practices would apply.
3. Develop a communication tool for determining which practices apply for a specific project (decision tree, matrix, flow chart, scorecard, etc.), including a combination of different risks.
4. What resources to use for clarifying/defining environmental sensitivity and where to find them (like DNR's SWDV and NRCS soil survey)? Be clear what "environmental sensitivity" is of concern (e.g. wetlands and waterways, rare species, cultural resources, etc.?) [UNDERWAY]
5. Clarify requirements for projects that have multiple stream crossings or different quality resources. Similarly, clarify requirements with multiple HDD runs separated by pits. Define the HDD "project."
6. Review language consistency related to bore/drill; make sure language is clear to be HDD drill. Suggestion made to change "bore" to "drill" or "drill path".
7. A smaller (12.75") pilot hole is often used to start HDD, then reaming tools used to increase diameter. Pilot and reaming tend to be when frac out occurs—suggestion to add this as a consideration.
8. Standard should also allow some flexibility for field modification. Site conditions sometimes discovered while in the field may result in a length change or discovery of geological conditions.
9. A checklist for the 3 walk-throughs (design phase, planning and pre-construction) could be an attachment to the standard or prepared for DNR to use as an example for the users. [UNDERWAY]
10. Clarify, reword, or and define subjective language – words such as low or high risk, complex, sensitive, large, small, qualified etc. [UNDERWAY]