FR 457A Culvert Replacement

SITE #1 Station 42+40

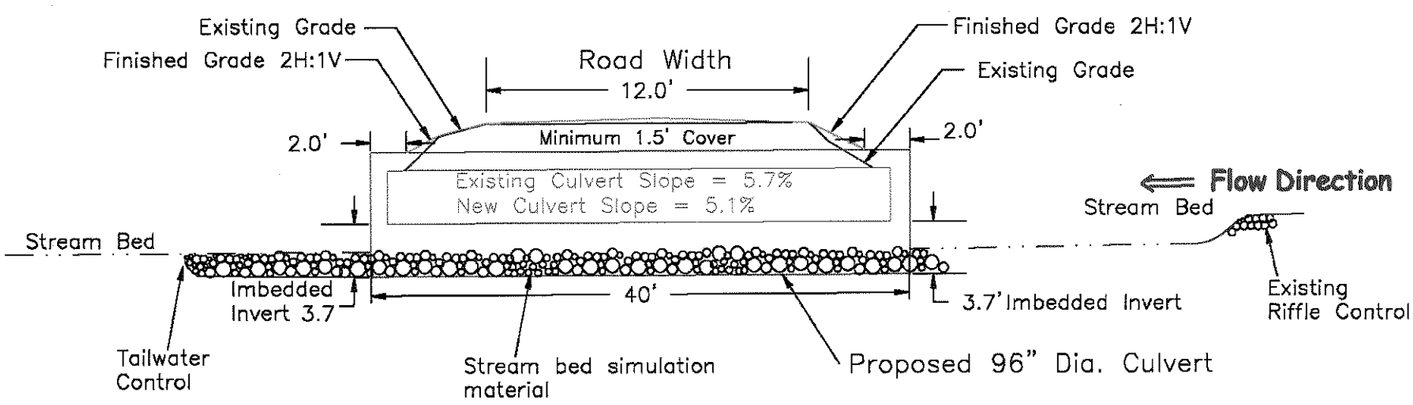
Stream Name: Unnamed tributary to Meade Run

Chapter 29 designation: High Quality–Cold Fishery/Wild Trout stream

Stream Impacts: Total length = 70' / Total square feet = 3150

Existing waterway opening: 7 square feet

New waterway opening: 26.5 square feet



Culvert Section

NOTES:

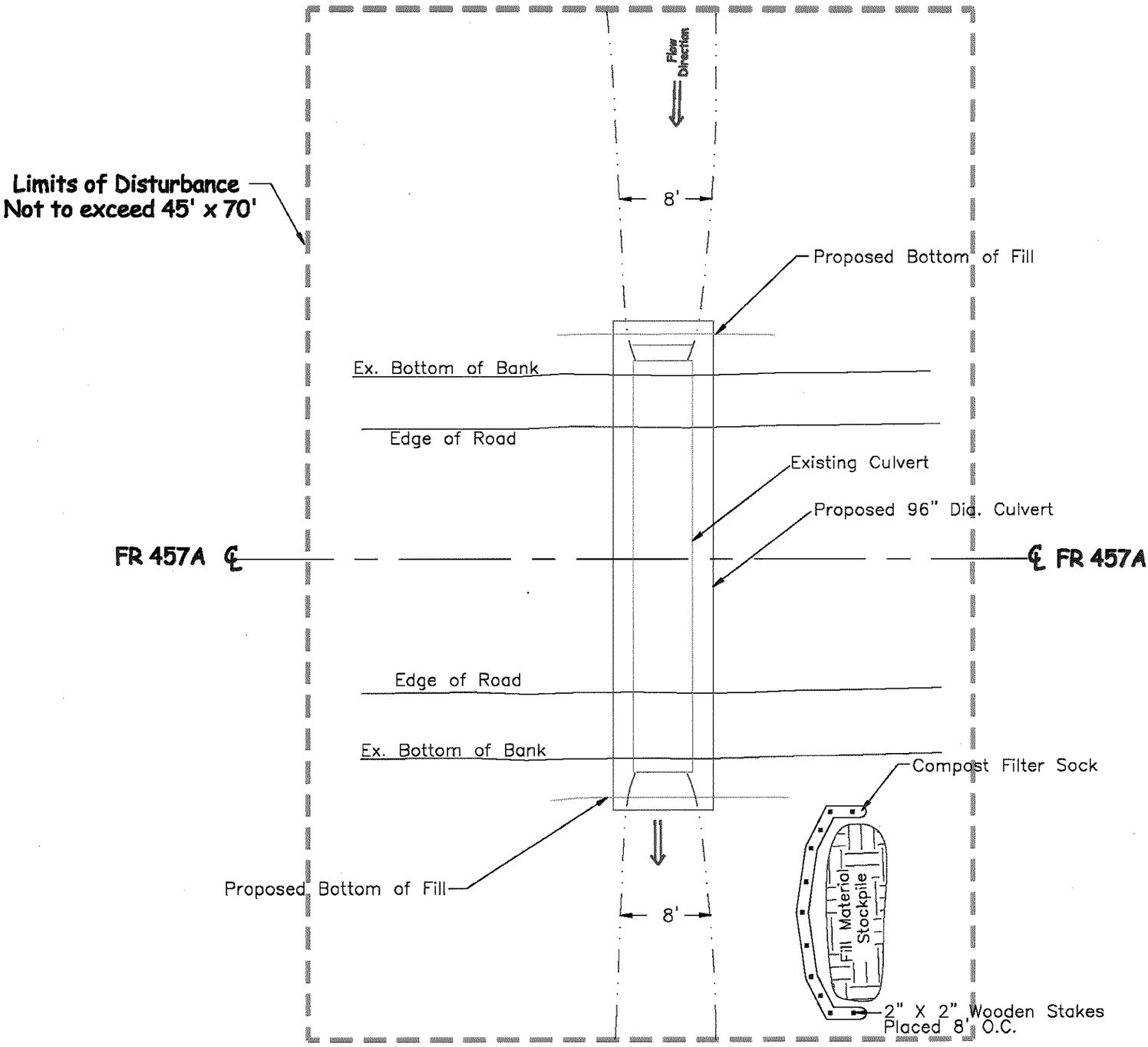
1. Bypass pump system will be used to divert stream for culvert installation and streambed construction in culvert.
2. Install proposed culvert with 3.7 ft imbeded inverts.
3. Grade transition of stream from the culvert to existing riffle control about 20 feet upstream. Large rocks and boulders will armor stream from head cutting. Slope stream banks to a grade of 2H:1V.
4. In–channel excavated material will be placed in the culvert to provide a subgrade material. 22 tons of R–5 riprap rock will be placed inside the inlet and outlet of the culvert using machinery. Material should be placed into the culvert as far as equipment will reach. Final placement of material inside the culvert will be completed by the Forest Service using hand labor. See SPS 705 Materials sheet.
5. Regrade roadway sides to a slope of 2H:1V or flatter.

DATE	02-03-2012
SCALE	NTS

FR 457A Culvert Replacement

SITE # 1 Station 42+40

Soils Classifications: HeF – Hartleton & Buchanan soils, 25–60 % slopes. Moderately well drained.



Plan View

NOTES:

1. If excavated material is to be stockpiled, install compost filter sock prior to excavation.
2. Keep stockpiled material away from the stream channel and ditches.
3. All excavated waste material shall be hauled off site and properly disposed.
4. All in channel excavation should be done from the top of the banks where possible.

DATE	02-03-2012
SCALE	NTS

FR 457A Culvert Replacement
SITE #2 Station 63+24

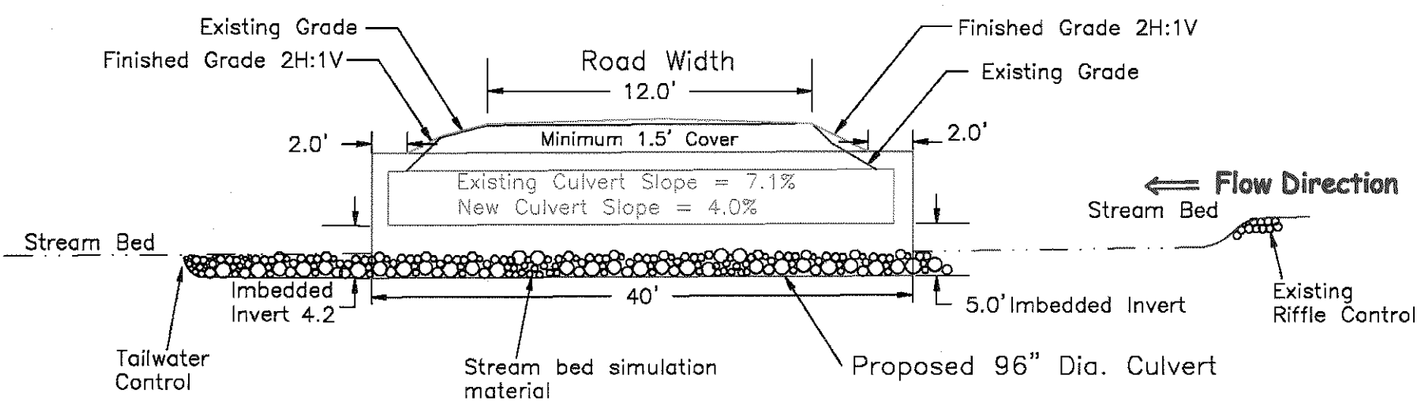
Stream Name: Unnamed tributary to Meade Run

Chapter 29 designation: High Quality–Cold Fishery/Wild Trout stream

Stream Impacts: Total length = 70' / Total square feet = 3150

Existing waterway opening: 7 square feet

New waterway opening: 26.5 square feet



Culvert Section

NOTES:

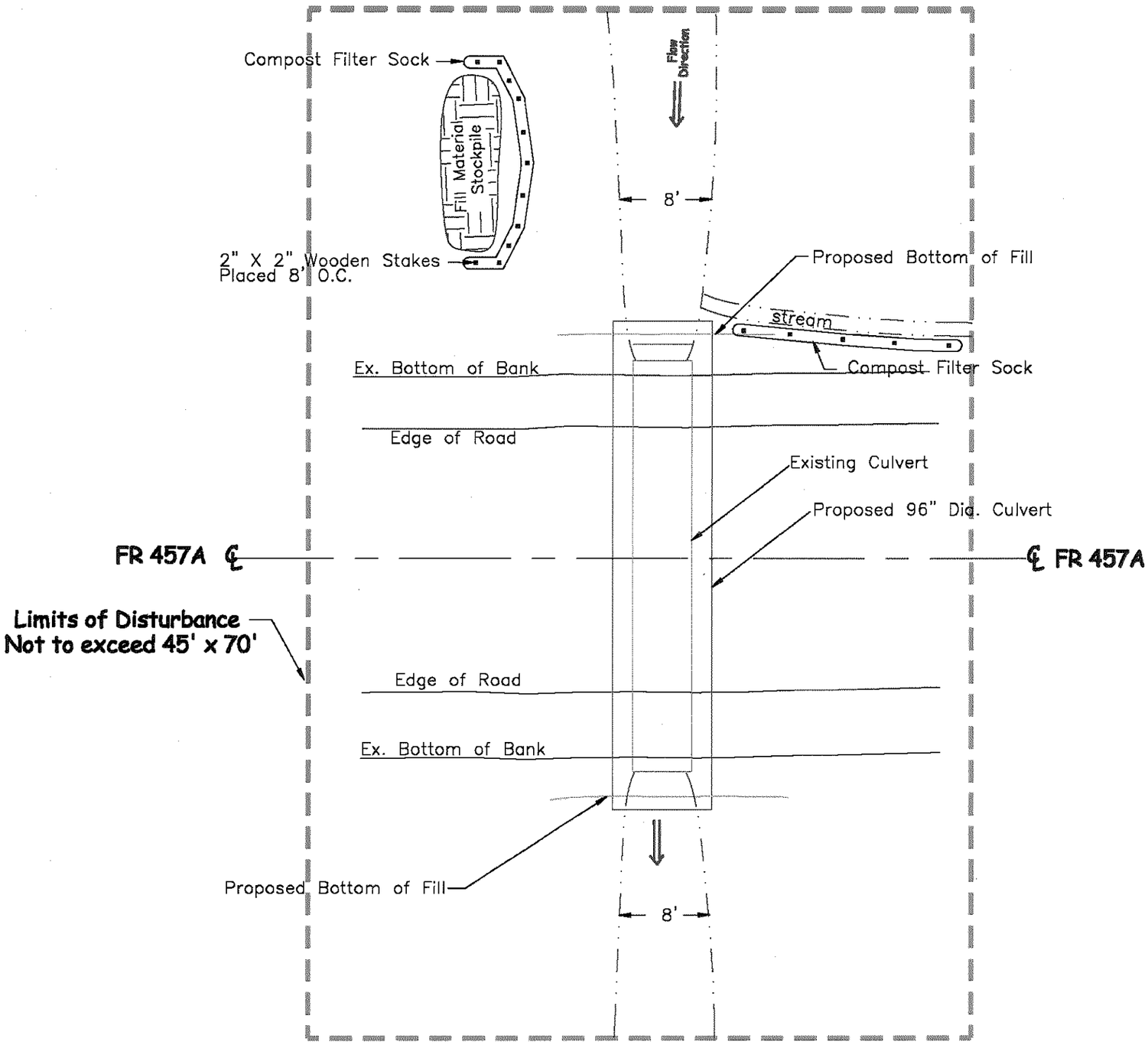
1. Bypass pump system will be used to divert stream for culvert installation and streambed construction in culvert.
2. Install proposed culvert 5.0 ft deeper at inlet and 4.2 ft deeper at outlet.
3. Grade transition of stream from the culvert to existing riffle control about 20 feet upstream. Large rocks and boulders will armor stream from head cutting. Slope stream banks to a grade of 2H:1V.
4. In–channel excavated material will be placed in the culvert to provide a subgrade material. 22 tons of R–5 riprap rock will be placed inside the inlet and outlet of the culvert using machinery. Material should be placed into the culvert as far as equipment will reach. Final placement of material inside the culvert will be completed by the Forest Service using hand labor. See SPS 705 Materials sheet.
5. Regrade roadway sides to a slope of 2H:1V or flatter.

DATE	02-03-2012
SCALE	NTS

FR 457A Culvert Replacement

SITE # 2 Station 63+24

Soils Classifications: BxD – Buchanan silt loam, 8–25 % slopes, stony. Moderately well drained.



Plan View

NOTES:

1. If excavated material is to be stockpiled, install compost filter sock prior to excavation.
2. Keep stockpiled material away from the stream channel and ditches.
3. All excavated waste material shall be hauled off site and properly disposed.
4. All in channel excavation should be done from the top of the banks where possible.

DATE	02-03-2012
SCALE	NTS