



FORK RUN TRAIL SYSTEM MASTER PLAN APPENDIX

**PREPARED FOR
GARRETT COUNTY**

Prepared By Penn Trails

Final Report Submitted August 7 2026



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TRAIL DESIGN PARAMETERS

Green Circle-Rated Mountain Bike Trail (Easy/Beginner)

Managed Uses		Design Parameters
MTB-Optimized Mixed Use (Hiking, Mountain Biking) Two-Way		
Tread	Target Width	60”
	Min. Width	36”
	Material	• Natural surface • Compacted mineral soil • Rock armor • Crushed stone • Structures such as boardwalk where indicated
	Obstacles	• Avoidable obstacles may be present • Unavoidable obstacles <2”
Grade	Average Linear Grade	<5%
	Short Pitch Maximum	10%
	Max. Sustained Grade	5%
Cross Slope	Target Cross Slope	5%
	Maximum Cross Slope	8%
Clearing	Height	8 feet
	Width	6-8 feet
Turns	Radius	Min. 15 feet

Blue Square-Rated Mountain Bike Trail (Intermediate)

Managed Uses		Design Parameters
MTB-Optimized Mixed Use (Hiking, Mountain Biking) Two-Way		
Tread	Target Width	24”
	Min. Width	18”
	Material	• Natural surface • Compacted mineral soil • Rock armor • Crushed stone • Structures such as boardwalk where indicated
	Obstacles	• Avoidable obstacles may be present • Unavoidable obstacles <8”
Grade	Average Linear Grade	<5%
	Short Pitch Maximum	15%
	Max. Sustained Grade	6%
Cross Slope	Target Cross Slope	5%
	Maximum Cross Slope	8%
Clearing	Height	8 feet
	Width	5-7 feet
Turns	Radius	Min. 8 feet

Black Diamond-Rated Mountain Bike Trail (Advanced)

Managed Uses		Design Parameters
MTB-Optimized Mixed Use (Hiking, Mountain Biking) Two-Way		
Tread	Target Width	24”
	Min. Width	12”
	Material	• Natural surface • Compacted mineral soil • Rock armor • Crushed stone • Structures such as boardwalk where indicated
	Obstacles	• Avoidable obstacles may be present • Unavoidable obstacles <15”
Grade	Average Linear Grade	<5%
	Short Pitch Maximum	15%
	Max. Sustained Grade	8%
Cross Slope	Target Cross Slope	5%
	Maximum Cross Slope	8%
Clearing	Height	8 feet
	Width	5-7 feet
Turns	Radius	Min. 8 feet

Walking Trail

Managed Uses		Design Parameters
Pedestrian-Only		
Tread	Target Width	36”
	Min. Width	24”
	Material	• Natural surface • Compacted mineral soil • Rock armor • Crushed stone • Structures such as steps where indicated
	Obstacles	• Avoidable obstacles may be present • Unavoidable obstacles <8”
Grade	Average Linear Grade	<5%
	Short Pitch Maximum	15%
	Max. Sustained Grade	8%
Cross Slope	Target Cross Slope	3%
	Maximum Cross Slope	5%
Clearing	Height	8 feet
	Width	5-7 feet
Turns	Radius	Min. 6 feet

Access Road

Managed Uses		Design Parameters
Mixed-Use (Hiking, Mountain Biking) Maintenance and Emergency Vehicles		
Tread	Target Width	96”
	Min. Width	72”
	Material	• Natural surface • Compacted mineral soil • Compacted aggregate • Rock armor • Mowed grass
	Obstacles	• Avoidable obstacles may be present • Unavoidable obstacles <3”
Grade	Average Linear Grade	<8%
	Short Pitch Maximum	15%
	Max. Sustained Grade	8%
Cross Slope	Target Cross Slope	3%
	Maximum Cross Slope	5%
Clearing	Height	12 feet
	Width	10-12 feet
Turns	Radius	15 feet

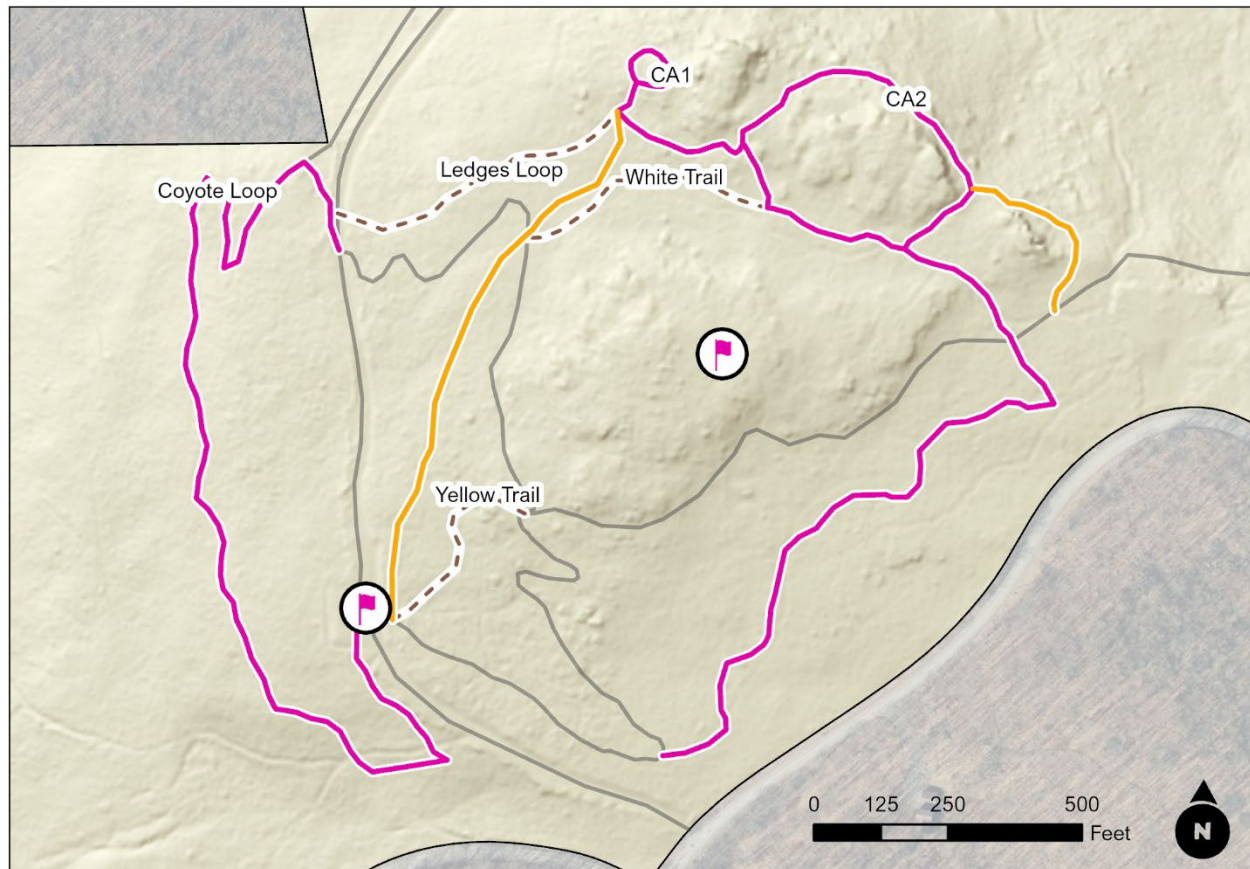
TRAIL DATA SHEETS

Trail data sheets have been compiled to support subsequent planning and design, funding acquisition, procurement, and implementation of proposed trail projects. The information presented is intended for planning purposes and should be refined and supplemented during project-specific design and development prior to procurement or construction.

Included Trail Data sheets:

1. TH (Trailhead Trails)
2. AR1 (Access Road)
3. S1 (Existing Red Trail)
4. S2 (Existing Silver Trail)
5. S3
6. S4
7. N1 (Existing Green and Beige Trails)
8. East Zone Trails (E1, S1 Connector, N1 Connector)
9. B1 (Upper Bridge Crossing)
10. B2 (Lower Bridge Crossing)

Fork Run Master Plan
Trail Data Sheet
Trail ID: TH Trail



PROPOSED TRAIL IMPROVEMENTS

Site Boundary	Proposed Trail Improvements	Fork Run Trails
Streams	New Trail	Proposed Trails
Planning Needed	Existing Trail	Existing Trails
	Closure	Closure

Notes:

1. This trail data sheet includes more than one trail section as part of a single construction phase.
2. Additional planning is needed for the parking area and a proposed future skills area. Associated improvement are not included in this data sheet

Fork Run Master Plan
Trail Data Sheet
Trail ID: TH Trail

Trail Design Parameters: Beginner and Intermediate Mountain Bike Trail (Green Circle and Blue Square), Walking Trail

Related Project Considerations: Closure of existing trail sections, interface with climbing area, connection to S1 and S2, connection and interface with primary trailhead, connection to AR1

Work Items

Item	Description	Unit	Quantity
1	Mobilization and Demobilization	LS	1
2	Existing Trail - Heavy-handed maintenance	LF	5,740
3	New Trail*	LF	1,470
4	Rock Armor*	LF	650
5	Technical Trail Features (TTFs)	EA	6
6	Trail Closure and Naturalization	LF	1,510

Notes

*Includes a 15% contingency to account for typical increase in final trail length over flagged corridor length during construction

Project Narrative

This project involves numerous trail sections located at the Fork Run primary trailhead. Together, they form approximately 1.41 miles (7,430 linear feet) of mixed-use trail (hiking and mountain biking) and pedestrian-only trail in the Fork Run Recreation Area. Mountain bike trails are intended to provide a cross-country style riding experience with avoidable TTFs constructed of natural stone and rot-resistant timber provided to aid skills development. Proposed improvements include heavy-handed maintenance on existing trail to establish sustainable bench cut natural surface trail with rollers, dips, grade reversals, and rock armoring. Erosion and sedimentation control measures include same-day stabilization.

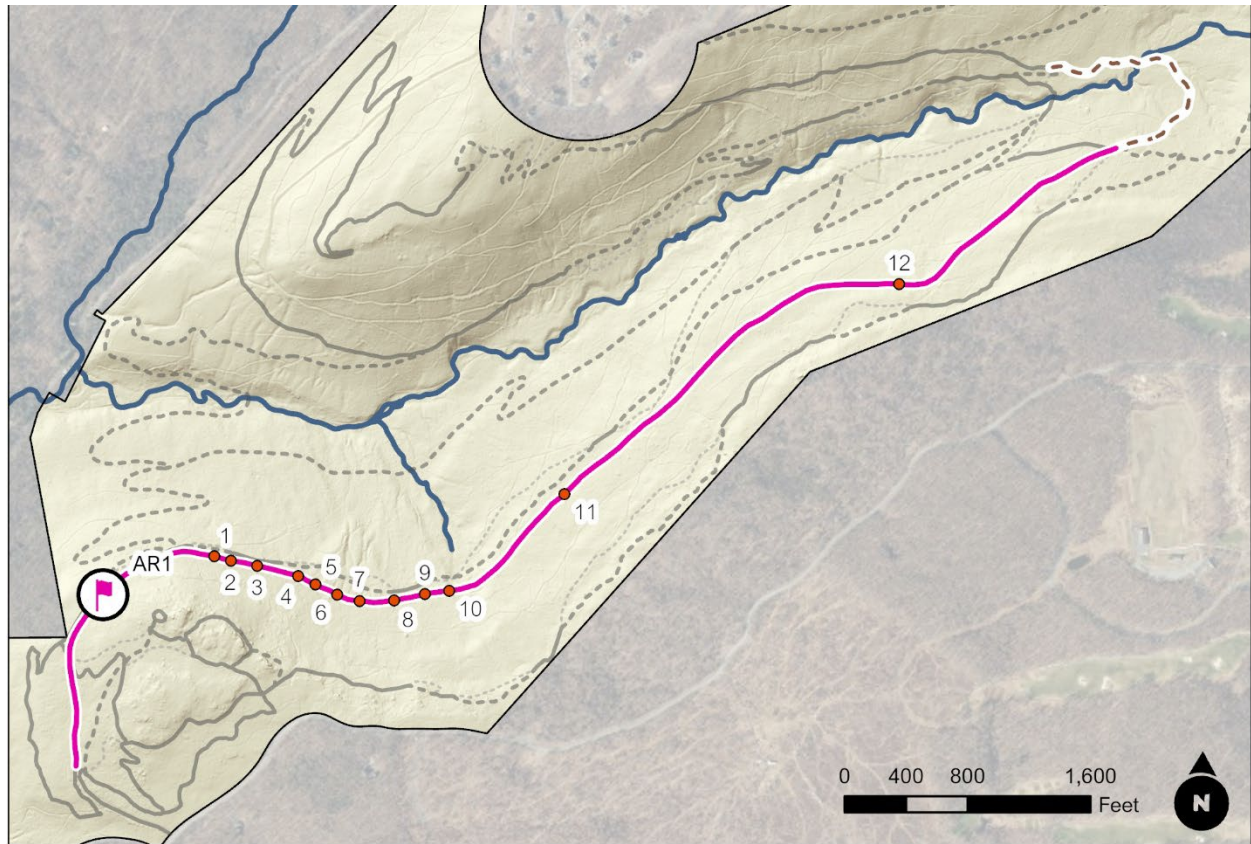
All work will occur on land owned by Garrett County or on land governed by an easement agreement under the Maryland Environmental Trust.

Project Goals

This project addresses the need for purpose-built mountain bike trails that provide opportunities for beginner to intermediate riders within Garrett County's regional trail context. These trail improvements will:

- Streamline the trails in the area immediately surrounding the primary parking area to improve user experience
- Improve existing trails to resolve erosion and safety issues
- Improve recreation access and options within the Fork Run property

Fork Run Master Plan
Trail Data Sheet
Trail ID: AR1



PROPOSED TRAIL IMPROVEMENTS

Site Boundary	Proposed Trail Improvements	Fork Run Trails
Streams	Existing Trail	Proposed Trails
Note	New Trail	Existing Trails
Planning Needed	Closure	Closure

Notes

1	Minor standing water
2	Minor standing water
3	Minor standing water
4	Minor standing water with ruts
5	Minor standing water
6	Existing culvert, functioning (assess)
7	Low spot, soggy (improve grading)
8	Channelized water with deficient culvert (redesign and replace)
9	Major standing water, regrade
10	Clogged culvert (redesign and replace)
11	Major drainage flows into road (design solution)
12	Major drainage issue (spans 700 ft to east, design solution needed)

Fork Run Master Plan
Trail Data Sheet
Trail ID: AR1

Trail Design Parameters: Access Road

Related Project Considerations: Connection to primary trailhead, S1, and S2.

Work Items

Item	Description	Unit	Quantity
1	Forest Road Assessment	LS	1
2	Engineering Design and Permitting	LS	1
3	Cost Estimation	LS	1

Project Narrative

AR1 is an approximately 1.70 mile (8,980 linear feet) access road that is also used as a mixed-use trail (hiking and mountain biking) in the Fork Run Recreation Area. The access road has numerous drainage deficiencies, primarily related to poor grading and undersized or failed culverts. This project is an assessment of the grading and drainage conditions that currently limit maintenance access and reduce recreational quality on the road. An Engineering study is proposed to assess known grading and drainage issues, identify others if they exist, and recommend improvements that will result in a stable and sustainable forest road surface. Work includes assessment of the existing forest road, design and permitting of recommended grading and drainage improvements, and cost estimation of proposed improvements.

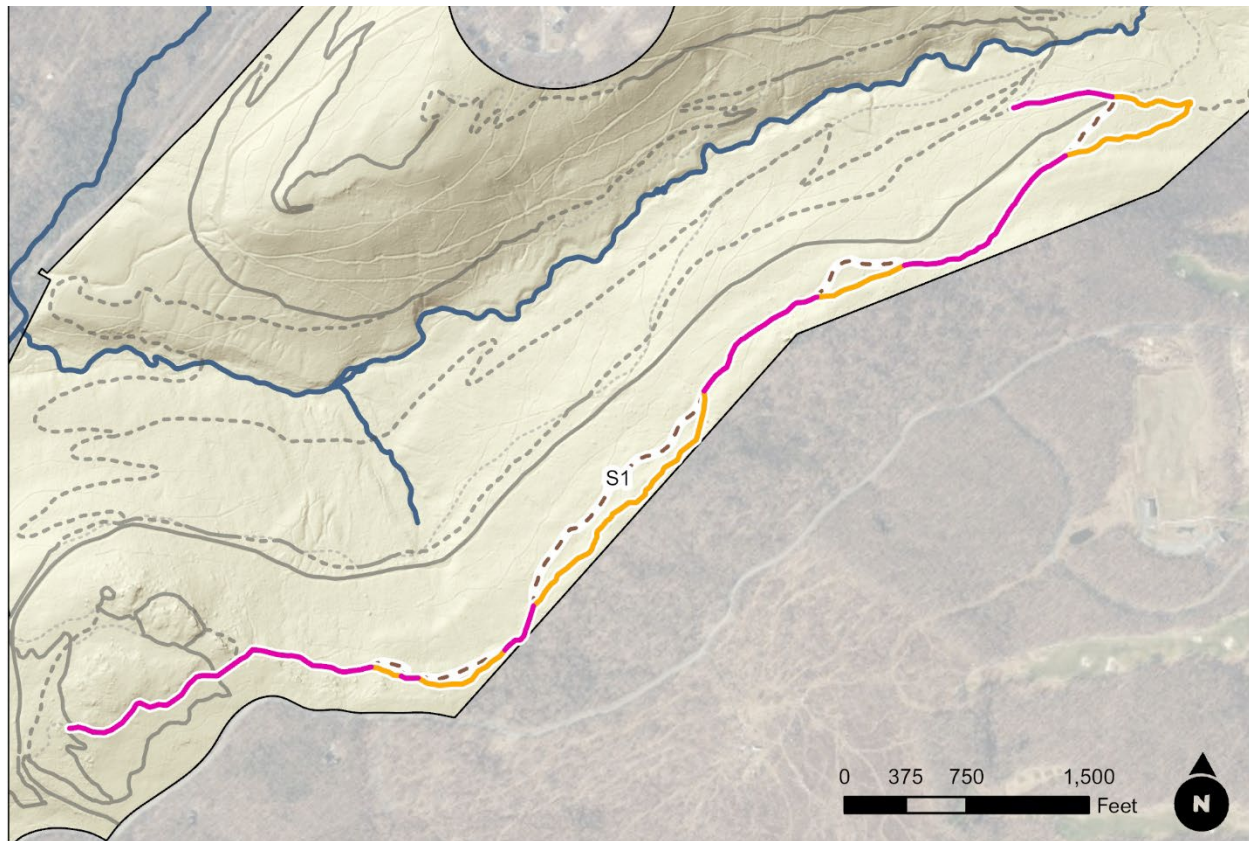
All work will occur on land owned by Garrett County or on land governed by an easement agreement under the Maryland Environmental Trust.

Project Goals

This project addresses the need to maintain a functioning and sustainable access road for emergency, maintenance, and forestry access. The forest road restoration that will result following planning and design will:

- Improve long-term sustainability, emergency, and maintenance access for the Fork Run trail system.
- Improve an existing trail to provide a more enjoyable recreational experience for trail users at Fork Run.

Fork Run Master Plan
Trail Data Sheet
Trail ID: S1



PROPOSED TRAIL IMPROVEMENTS

	Site Boundary	Proposed Trail Improvements	Fork Run Trails
	Streams		Existing Trail
	Note		New Trail
	Planning Needed		Closure
			Proposed Trails
			Existing Trails
			Closure

Fork Run Master Plan
Trail Data Sheet
Trail ID: S1

Trail Design Parameters: Intermediate Mountain Bike Trail (Blue Square)

Related Project Considerations: Realignment and closure of existing Red trail sections, connection and interface with primary trailhead trails, connection and interface with upper bridge crossing (B1)

Work Items

Item	Description	Unit	Quantity
1	Mobilization and Demobilization	LS	1
2	Existing Trail - Heavy-handed maintenance	LF	5,410
3	New Trail*	LF	4,560
4	Rock Armor*	LF	320
5	Technical Trail Features (TTFs)	EA	5
6	Trail Closure and Naturalization	LF	3,800

Notes

*Includes a 15% contingency to account for typical increase in final trail length over flagged corridor length during construction

Project Narrative

S1 is an approximately 2.02 mile (10,660 linear feet) mixed-use trail (hiking and mountain biking) in the Fork Run Recreation Area, optimized for riders with intermediate to advanced skills and intended to provide a cross-country/tech style riding experience. This project is a rebuild of the trail currently known as the Red Trail, which connects from the existing Acorn Trail near the primary parking area to an intersection with the existing Silver Trail near the existing bridge over Fork Run. Proposed improvements include heavy-handed maintenance on the existing trail and realignment of selected segments to create a sustainable bench cut natural surface trail with rollers, dips, and grade reversals, rock armoring, and the incorporation of up to 5 intermediate-level technical trail features into the treadway and corridor. TTFs may be constructed of natural stone and rot-resistant timber. Erosion and sedimentation control measures include same-day stabilization.

All work will occur on land owned by Garrett County or on land governed by an easement agreement under the Maryland Environmental Trust.

Project Goals

This project addresses the need for purpose-built mountain bike trails that provide opportunities for intermediate riders within Garrett County's regional trail context. This trail rebuild will:

- Improve an existing trail to provide a recreational experience consistent with Intermediate Cross Country Mountain Bike Trail (Blue Square) design parameters, with technical features suitable for intermediate to advanced riders.
- Improve long-term sustainability and user experience by realigning sections of the existing trail and reshaping existing tread to reduce average running grades, add grade reversals, and armor tread to reduce erosion.

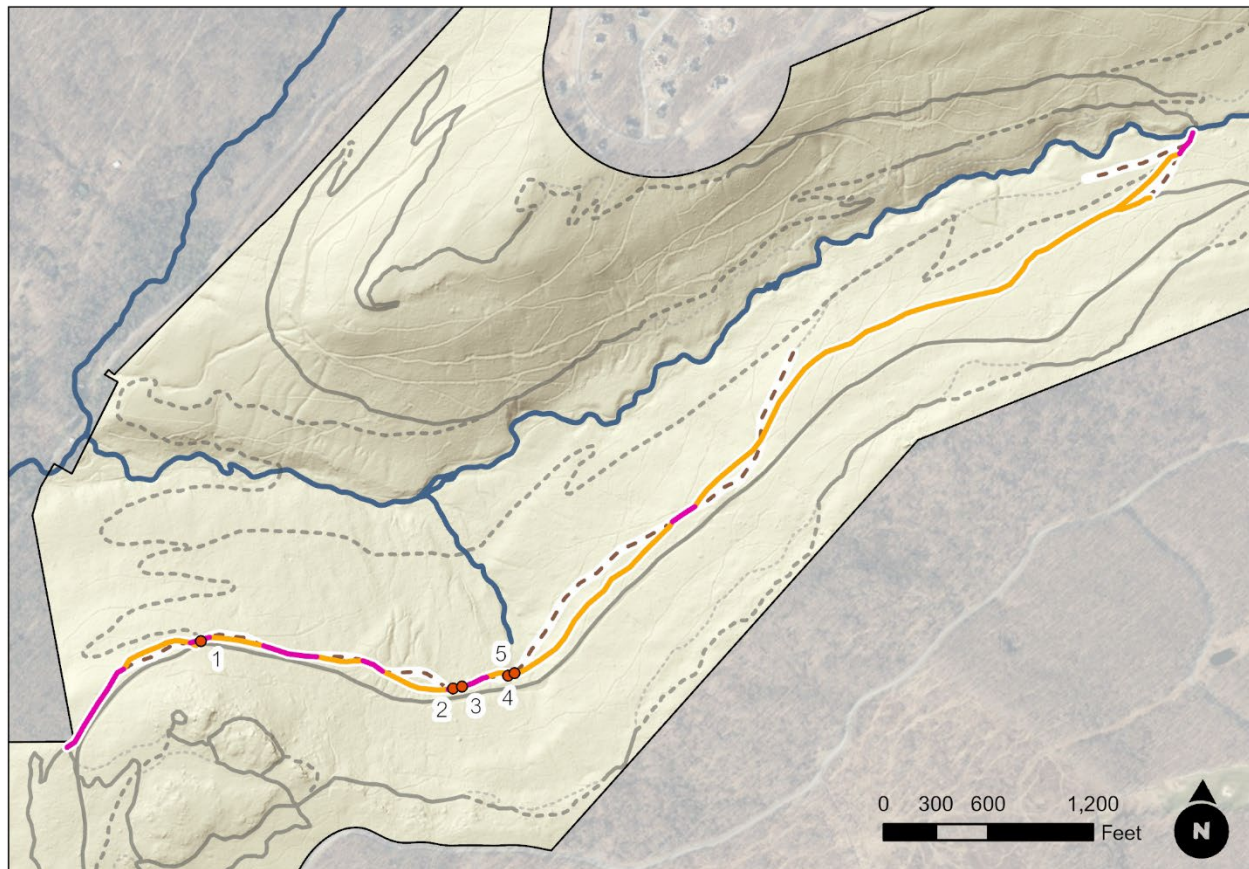
Fork Run Master Plan

Trail Data Sheet

Trail ID: S1

- Close and naturalize approximately 0.71 miles of existing trail.

Fork Run Master Plan
Trail Data Sheet
Trail ID: S2



PROPOSED TRAIL SYSTEM

Site Boundary	Proposed Trail Improvements	Fork Run Trails
Streams	Existing Trail	Proposed Trails
Note	New Trail	Existing Trails
	Closure	Closure

Notes

1. Junction/hub area with signage, short spur to road. Cribwall to support platform and spur.
2. Extend rock armor on each side, approx. 16ft total
3. Rebuild drainage and rock armor
4. Reroute drainage off road to natural swale, reuse armor rocks, reroute trail lower to remove high point
5. Lower grade of armor stone to create surface drainage (remove box culvert)

Fork Run Master Plan
Trail Data Sheet
Trail ID: S2

Trail Design Parameters: Intermediate Mountain Bike Trail (Blue Square)

Related Project Considerations: Realignment and closure of existing Silver trail sections, connection and interface with Coyote Loop and AR1, connection and interface with upper bridge crossing (B1)

Work Items

Item	Description	Unit	Quantity
1	Mobilization and Demobilization	LS	1
2	Existing Trail - Heavy-handed maintenance	LF	1,670
3	New Trail*	LF	7,660
4	Rock Armor*	LF	150
5	Technical Trail Features (TTFs)	EA	5
6	Rock Cribwall	LF	20
7	Trail Closure and Naturalization	LF	4,875

Notes

*Includes a 15% contingency to account for typical increase in final trail length over flagged corridor length during construction

Project Narrative

S2 is an approximately 1.77 mile (9,330 linear feet) mixed-use trail (hiking and mountain biking) in the Fork Run Recreation Area, optimized for riders with intermediate to advanced skills and intended to provide a cross-country/tech style riding experience. This project is a rebuild of the trail currently known as the Silver Trail, which connects the existing Coyote Loop near the primary parking area to the existing bridge crossing over Fork Run. Proposed improvements include heavy-handed maintenance on the existing trail and realignment of selected segments to create a sustainable bench cut natural surface trail with rollers, dips, and grade reversals, rock armoring, and the incorporation of up to 5 intermediate-level technical trail features into the treadway and corridor. TTFs may be constructed of natural stone and rot-resistant timber. Erosion and sedimentation control measures include same-day stabilization.

All work will occur on land owned by Garrett County or on land governed by an easement agreement under the Maryland Environmental Trust.

Project Goals

This project addresses the need for purpose-built mountain bike trails that provide opportunities for intermediate riders within Garrett County's regional trail context. This trail rebuild will:

- Improve an existing trail to provide a recreational experience consistent with Intermediate Cross Country Mountain Bike Trail (Blue Square) design parameters, with technical features suitable for intermediate to advanced riders.
- Improve long-term sustainability and user experience by realigning sections of the existing trail and reshaping existing tread to reduce average running grades, add grade reversals, and armor tread to reduce erosion.

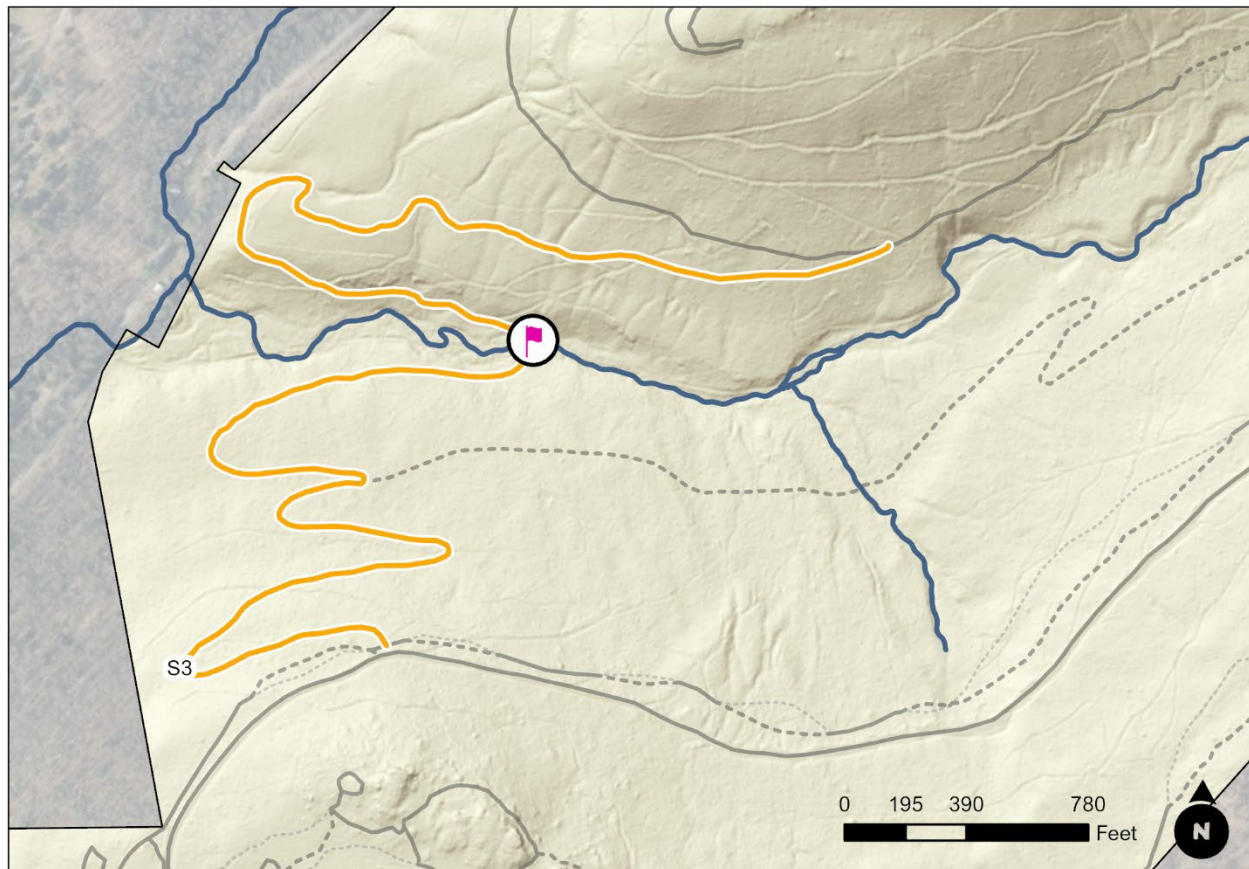
Fork Run Master Plan

Trail Data Sheet

Trail ID: S2

- Close and naturalize approximately 0.92 miles of existing trail.

Fork Run Master Plan
Trail Data Sheet
Trail ID: S3



PROPOSED TRAIL IMPROVEMENTS

Site Boundary	Proposed Trail Improvements	Fork Run Trails
Streams	Existing Trail	Proposed Trails
Note	New Trail	Existing Trails
Planning Needed	Closure	Closure

Notes:

The lower bridge crossing (BR1) is in need of further planning and design. Installation of the bridge is not included in the quantities and narrative for this trail.

Fork Run Master Plan
Trail Data Sheet
Trail ID: S3

Trail Design Parameters: Intermediate Mountain Bike Trail (Blue Square)

Related Project Considerations: Connection and interface with lower bridge crossing (B2), connection to N1

Work Items

Item	Description	Unit	Quantity
1	Mobilization and Demobilization	LS	1
3	New Trail*	LF	9,020
4	Rock Armor*	LF	1,500
5	Technical Trail Features (TTFs)	EA	6
6	Trail Closure and Naturalization	LF	0

Trail Design Parameters: Intermediate Cross Country Mountain Bike Trail (Blue Square)

Notes

*Includes a 15% contingency to account for typical increase in final trail length over flagged corridor length during construction

Project Narrative

S3 is an approximately 1.71 mile (9,020 linear feet) mixed-use trail (hiking and mountain biking) in the Fork Run Recreation Area, optimized for riders with intermediate to advanced skills and intended to provide a cross-country/tech style riding experience. This project connects from the existing Silver Trail near the primary parking area to an intersection with the existing Green Trail, crossing Fork Run with a new bridge crossing. Proposed improvements include a sustainable bench cut natural surface trail with rollers, dips, and grade reversals, rock armoring, and the incorporation of up to 6 intermediate-level technical trail features into the treadway and corridor. TTFs may be constructed of natural stone and rot-resistant timber. Erosion and sedimentation control measures include same-day stabilization.

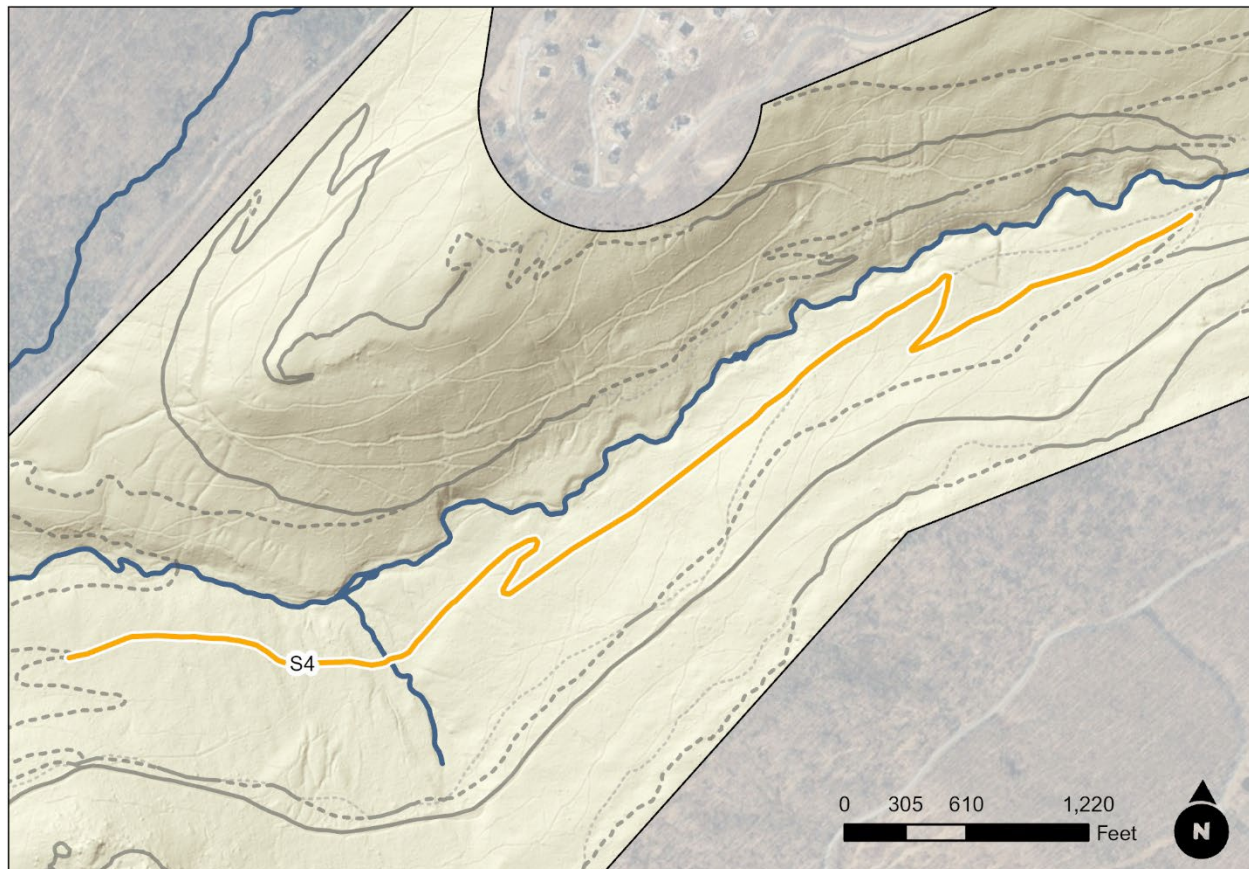
All work will occur on land owned by Garrett County or on land governed by an easement agreement under the Maryland Environmental Trust.

Project Goals

This project addresses the need for purpose-built mountain bike trails that provide opportunities for intermediate riders within Garrett County's regional trail context. This trail rebuild will:

- Add a new trail to Fork Run to provide a recreational experience consistent with Intermediate Cross Country Mountain Bike Trail (Blue Square) design parameters, with technical features suitable for intermediate to advanced riders.
- Improve recreational access and options within the Fork Run property

Fork Run Master Plan
Trail Data Sheet
Trail ID: S4



PROPOSED TRAIL IMPROVEMENTS

Site Boundary	Proposed Trail Improvements	Fork Run Trails
Streams	New Trail	Proposed Trails
	Existing Trail	Existing Trails
	Closure	Closure

Notes:

This trail is conceptual only and needs corridor flagging prior to construction.

Fork Run Master Plan
Trail Data Sheet
Trail ID: S4

Trail Design Parameters: Advanced Mountain Bike Trail (Black Diamond)

Related Project Considerations: Connection to S3 and S2

Work Items

Item	Description	Unit	Quantity
1	Mobilization and Demobilization	LS	1
3	New Trail*	LF	8,900
4	Rock Armor*	LF	1,200
5	Technical Trail Features (TTFs)	EA	8
6	Trail Closure and Naturalization	LF	0

Notes

*Includes a 15% contingency to account for typical increase in final trail length over flagged corridor length during construction

Project Narrative

S4 is an approximately 1.69 mile (8,900 linear feet) mixed-use trail (hiking and mountain biking) in the Fork Run Recreation Area, optimized for riders with advanced to expert skills and intended to provide a cross-country/tech style riding experience. This project connects from the proposed S3 trail on the eastern end of Fork to the existing Silver Trail (S2) near the existing bridge crossing over Fork Run. Proposed improvements include a sustainable bench cut natural surface trail with rollers, dips, and grade reversals, rock armoring, and the incorporation of up to 8 intermediate-level technical trail features into the treadway and corridor. TTFs may be constructed of natural stone and rot-resistant timber. Erosion and sedimentation control measures include same-day stabilization.

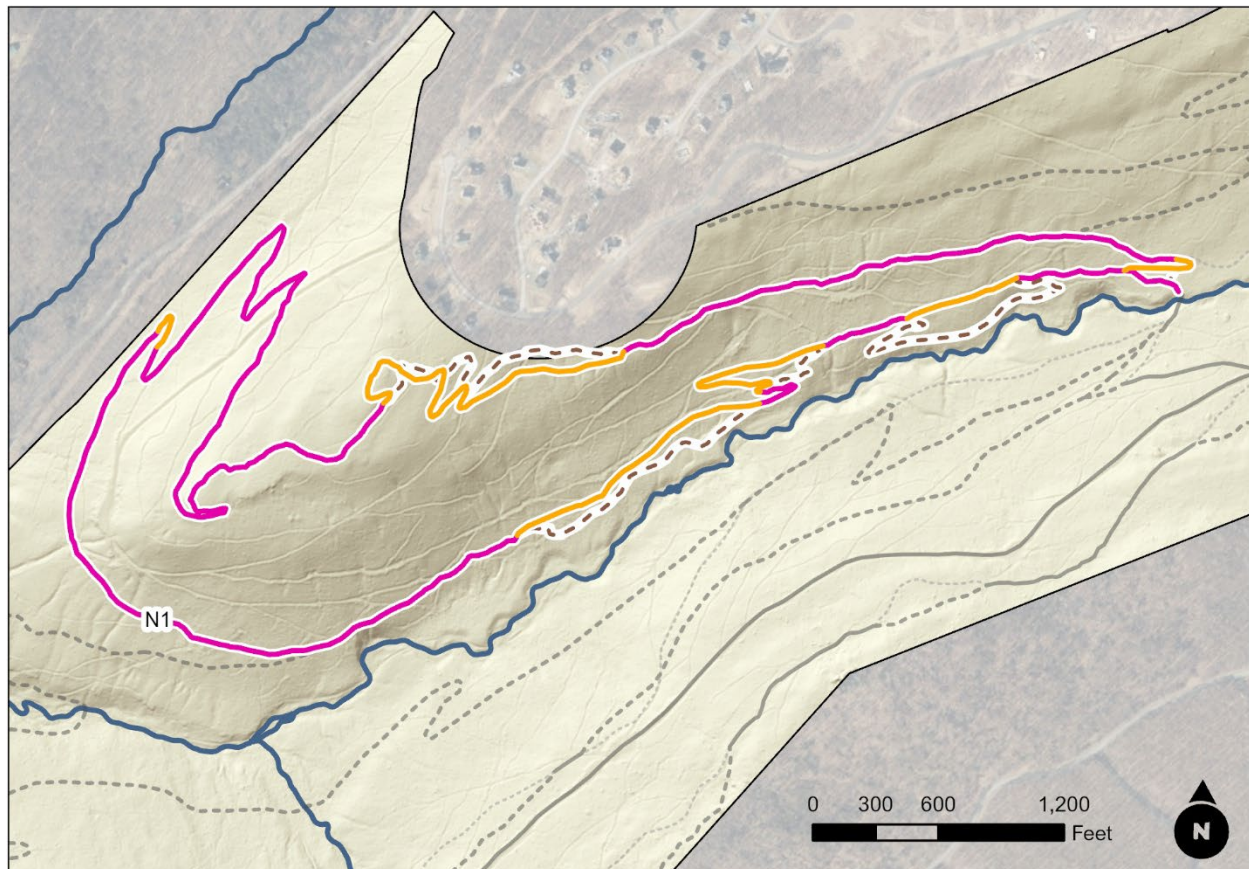
All work will occur on land owned by Garrett County or on land governed by an easement agreement under the Maryland Environmental Trust.

Project Goals

This project addresses the need for purpose-built mountain bike trails that provide opportunities for intermediate to expert riders within Garrett County's regional trail context. This new trail will:

- Add a new trail to Fork Run to provide a recreation experience consistent with Advanced Cross Country Mountain Bike Trail (Black Diamond) design parameters, with technical features suitable for advanced to expert riders.
- Improve recreational access and options within the Fork Run property

Fork Run Master Plan
Trail Data Sheet
Trail ID: N1



PROPOSED TRAIL IMPROVEMENTS

 Site Boundary	Proposed Trail Improvements	Fork Run Trails
 Streams	 New Trail	 Proposed Trails
	 Existing Trail	 Existing Trails
	 Closure	 Closure

Fork Run Master Plan
Trail Data Sheet
Trail ID: N1

Trail Design Parameters: Intermediate Mountain Bike Trail (Blue Square)

Related Project Considerations: Realignment and closure of existing Green and Beige trail sections, relocation of portion of Beige trail away from adjacent private property, connection and interface with upper bridge crossing (B1)

Work Items

Item	Description	Unit	Quantity
1	Mobilization and Demobilization	LS	1
2	Existing Trail - Heavy-handed maintenance	LF	13,080
3	New Trail*	LF	6,730
4	Rock Armor*	LF	790
5	Rock Cribwall	LF	16
6	Trail Closure and Naturalization	LF	3,800

Notes

*Includes a 15% contingency to account for typical increase in final trail length over flagged corridor length during construction

Project Narrative

N1 is an approximately 3.75 mile (19,810 linear feet) mixed-use trail (hiking and mountain biking) in the Fork Run Recreation Area, optimized for riders with intermediate to advanced skills and intended to provide a cross-country style riding experience. This project is a rebuild of the trails currently known as the Green and Beige Trails, which form a loop on the north half of Fork Run. Proposed improvements include heavy-handed maintenance on the existing trail and realignment of selected segments to create a sustainable bench cut natural surface trail with rollers, dips, and grade reversals, and rock armoring. Erosion and sedimentation control measures include same-day stabilization.

All work will occur on land owned by Garrett County or on land governed by an easement agreement under the Maryland Environmental Trust.

Project Goals

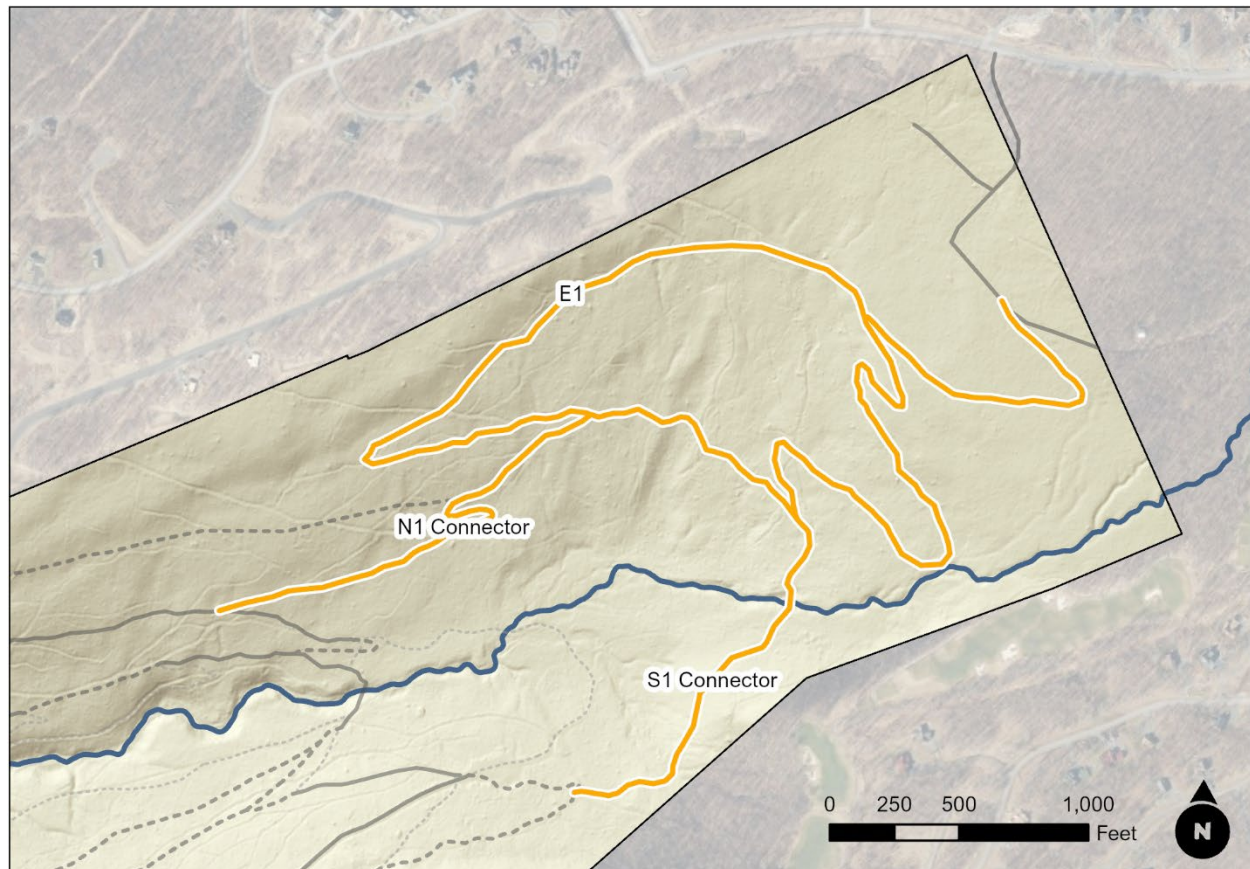
This project addresses the need for purpose-built mountain bike trails that provide opportunities for intermediate riders within Garrett County's regional trail context. This trail rebuild will:

- Improve an existing trail to provide a recreational experience consistent with Intermediate Cross Country Mountain Bike Trail (Blue Square) design parameters suitable for intermediate to advanced riders.
- Improve long-term sustainability and user experience by realigning sections of the existing trail and reshaping existing tread to reduce average running grades, add grade reversals, and armor tread to reduce erosion.
- Close and naturalize approximately 0.71 miles of existing trail.

Fork Run Master Plan

Trail Data Sheet

Trail ID: East Zone Trails (E1, S1 Connector, N1 Connector)



PROPOSED TRAIL IMPROVEMENTS

Site Boundary	Proposed Trail Improvements	Fork Run Trails
	 New Trail	 Proposed Trails
 Streams	 Existing Trail	 Existing Trails
	 Closure	 Closure

Notes:

This trail data sheet includes more than one trail section (E1, N1 Connector, and S1 Connector) because their construction should be completed in a single phase.

Fork Run Master Plan

Trail Data Sheet

Trail ID: East Zone Trails (E1, S1 Connector, N1 Connector)

Trail Design Parameters: Beginner and Intermediate Mountain Bike Trail (Green Circle and Blue Square)

Related Project Considerations: Connection and interface with proposed North Camp trailhead and parking area, connections to N1 and S1, connection to proposed HOA connector

Work Items

Item	Description	Unit	Quantity
1	Mobilization and Demobilization	LS	1
3	New Trail*	LF	18,135
4	Rock Armor*	LF	1,210
5	Technical Trail Features (TTFs)	EA	8
6	Trail Closure and Naturalization	LF	0

Notes

*Includes a 15% contingency to account for typical increase in final trail length over flagged corridor length during construction

Project Narrative

This project involves three trail sections, E1 (Green Circle), N1 Connector (Blue Square), and S1 Connector (Blue Square). Together, they form an approximately 3.43 mile (18,135 linear feet) mixed-use trail (hiking and mountain biking) loop in the Fork Run Recreation Area, optimized for riders with beginner to intermediate skills and intended to provide a cross-country style riding experience. This project connects from the North Camp trailhead to the existing Beige and Red trails. Proposed improvements include a sustainable bench cut natural surface trail with rollers, dips, and grade reversals, rock armoring, site-specific drainage features as required, and the incorporation of up to 8 intermediate-level technical trail features into the treadway and corridor. TTFs may be constructed of natural stone and rot-resistant timber. Erosion and sedimentation control measures include same-day stabilization.

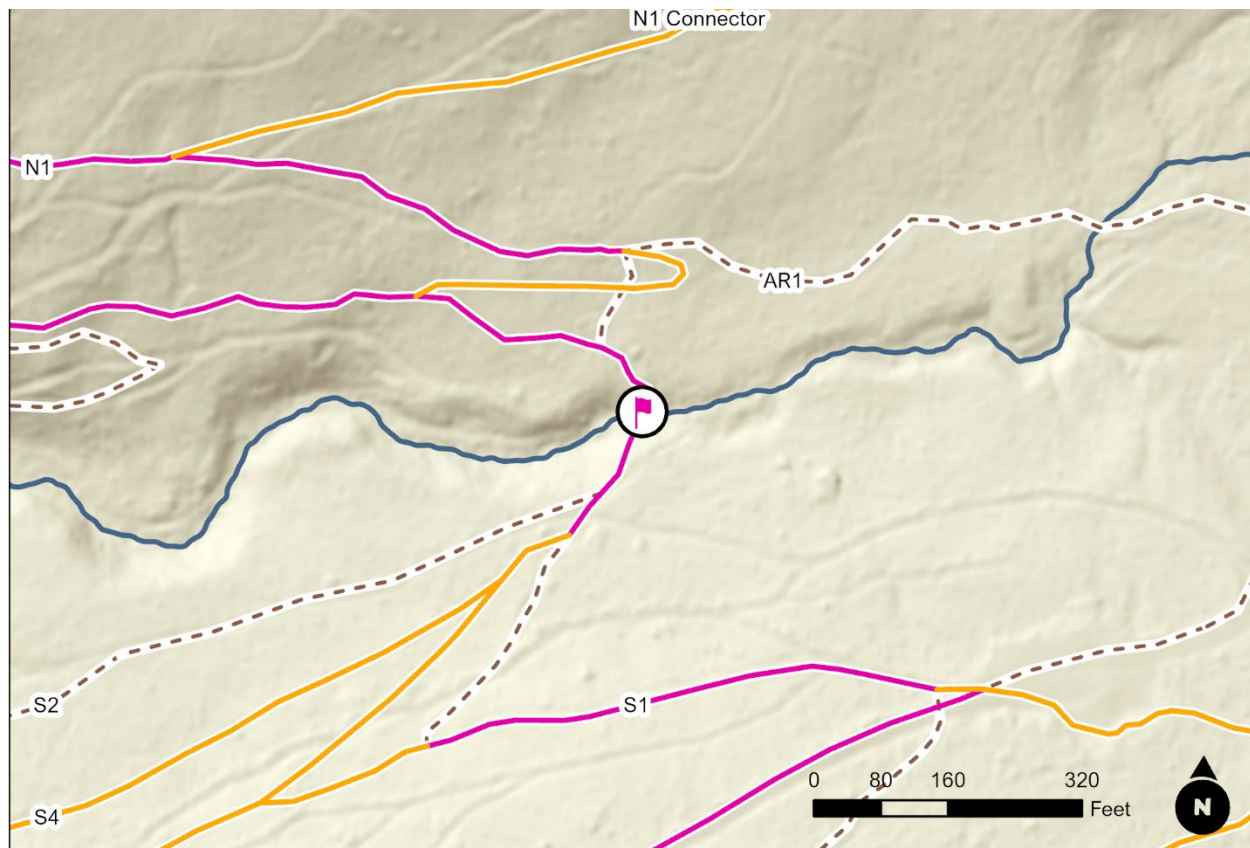
All work will occur on land owned by Garrett County or on land governed by an easement agreement under the Maryland Environmental Trust.

Project Goals

This project addresses the need for purpose-built mountain bike trails that provide opportunities for intermediate to expert riders within Garrett County's regional trail context. This trail rebuild will:

- Add a new trail to Fork Run to provide a recreation experience consistent with Beginner to Intermediate Cross Country Mountain Bike Trail (Green Circle and Blue Square) design parameters, with technical features suitable for beginner to intermediate riders.
- Improve recreation access and options within the Fork Run property

Fork Run Master Plan
Trail Data Sheet
Trail ID: B1 (Upper Bridge Crossing)



PROPOSED TRAIL IMPROVEMENTS

- | | |
|---|--|
|  Site Boundary | Proposed Trail Improvements |
|  Streams |  New Trail |
|  Planning Needed |  Existing Trail |
| |  Closure |

Fork Run Master Plan
Trail Data Sheet
Trail ID: B1 (Upper Bridge Crossing)

Related Project Considerations: Connections to adjacent trails

Work Items

Item	Description	Unit	Quantity
1	Footing Evaluation	LS	1
2	Pedestrian Bridge and Abutment Design	LS	1
3	Engineering Design and Permitting	LS	1
4	Cost Estimation	LS	1
5	Construction Administration	LS	1

Project Narrative

B1 is existing bridge crossing over Fork Run that is comprised of two sections measuring 20 feet and 28 feet. The existing bridge is constructed of dimensional lumber with telephone poles used for stringers, and set on concrete abutments affixed to large boulders. The bridge has reached the end of its service life and needs to be replaced. The replacement bridge should accommodate one-way traffic for pedestrians and mountain bikes, and does not need to accommodate vehicles. Assumed clear width for the bridge is 48”.

An Engineering study is proposed to assess the existing bridge abutments to determine if they can be reused, design new footings or abutments as needed, and design a replacement bridge structure. The replacement structure may be constructed from fiberglass-reinforced plastic (FRP), steel, lumber, timber, or any combination of these materials. The final design should balance overall value, recreational experience, user safety, longevity, and aesthetic cohesiveness with the natural setting. The scope also includes permitting for the proposed bridge, cost estimation of proposed improvements, and construction administration to assist with procurement document preparation, the procurement process, and to oversee and inspect installation of the bridge on behalf of Garrett County.

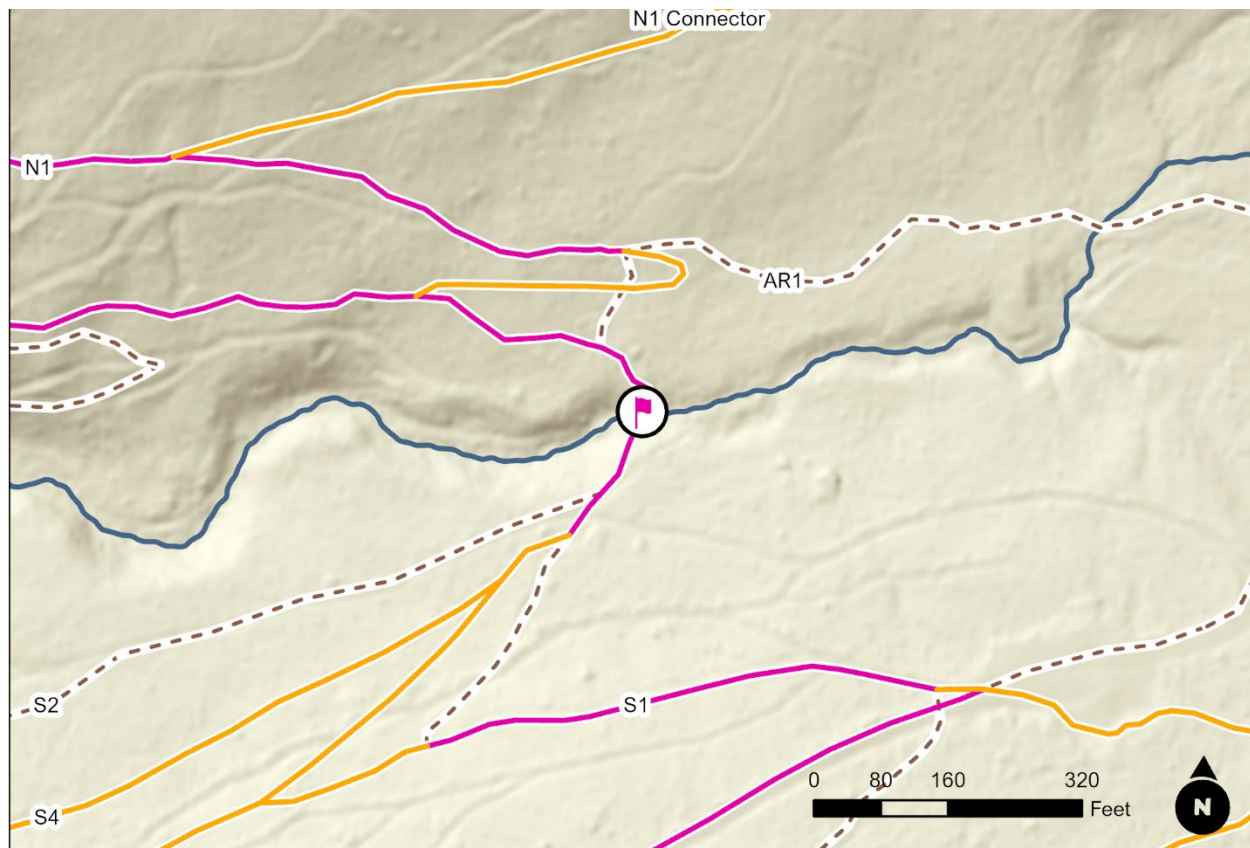
All work will occur on land owned by Garrett County or on land governed by an easement agreement under the Maryland Environmental Trust.

Project Goals

This project addresses the need to replace the existing bridge over Fork Run for recreation, emergency, maintenance, and forestry access. The design documentation that will result following planning and design will:

- Improve long-term sustainability, recreation, emergency, and maintenance access for the Fork Run trail system.
- Improve an existing trail to provide a more enjoyable recreational experience for trail users at Fork Run.

Fork Run Master Plan
Trail Data Sheet
Trail ID: B2 (Lower Bridge Crossing)



PROPOSED TRAIL IMPROVEMENTS

- | | |
|-----------------|------------------------------------|
| Site Boundary | Proposed Trail Improvements |
| Streams | New Trail |
| Planning Needed | Existing Trail |
| | Closure |

Fork Run Master Plan
Trail Data Sheet
Trail ID: B2 (Lower Bridge Crossing)

Related Project Considerations: Connections to adjacent trails

Work Items

Item	Description	Unit	Quantity
1	Geotechnical Investigation	LS	1
2	Pedestrian Bridge and Abutment Design	LS	1
3	Engineering Design and Permitting	LS	1
4	Cost Estimation	LS	1
5	Construction Administration	LS	1

Project Narrative

B2 is proposed bridge crossing over Fork Run that is estimated to require a single bridge section approximately 30-40 feet in length. The proposed bridge should accommodate one-way traffic for pedestrians and mountain bikes and does not need to accommodate vehicles. Assumed clear width for the bridge is 48”.

An Engineering study is proposed to complete investigation necessary to design the bridge and associated bridge abutments at the selected location. The bridge structure may be constructed from fiberglass-reinforced plastic (FRP), steel, lumber, timber, or any combination of these materials. The final design should balance overall value, recreational experience, user safety, longevity, and aesthetic cohesiveness with the natural setting and the proposed B1 Upper Bridge Crossing replacement. The scope also includes permitting for the proposed bridge, cost estimation of proposed improvements, and construction administration to assist with procurement document preparation, the procurement process, and to oversee and inspect installation of the bridge on behalf of Garrett County.

All work will occur on land owned by Garrett County or on land governed by an easement agreement under the Maryland Environmental Trust.

Project Goals

This project addresses a second bridge crossing that will expand recreational opportunities at Fork Run and provide additional emergency, maintenance, and forestry access. The design documentation that will result following planning and design will:

- Improve long-term sustainability, recreation, emergency, and maintenance access for the Fork Run trail system.
- Improve the trail system to provide a more enjoyable recreational experience for trail users at Fork Run.

COST ESTIMATES

Project	Status	Total Length (LF)	Total Length (MI)	Construction Cost	Additional Planning and Design	Construction Administration
Trailhead Zone	Concept	7,430	1.41	\$70,850	\$10,500	\$8,510
S1	Flagged	10,660	2.02	\$84,840	-	\$10,180
S2	Flagged	9,330	1.77	\$81,380	-	\$9,770
S3	Flagged	9,020	1.71	\$126,140	-	\$15,140
S4	Concept	8,900	1.69	\$122,800	\$8,000	\$14,740
N1	Flagged	19,810	3.75	\$153,290	-	\$18,390
E1	Flagged	13,915	2.64	\$131,000	-	\$15,720
HOA Connector	Concept	3,140	0.59	\$50,260	\$4,500	\$6,030
N1 Connector	Flagged	2,340	0.44	\$18,480	-	\$2,220
S1 Connector	Flagged	1,880	0.36	\$28,280	-	\$3,390
Upper Bridge	Concept	-	-	\$40,200	\$60,000	TBD
Lower Bridge	Concept	-	-	\$40,200	\$60,000	TBD
Parking Area	Concept	-	-	-	\$30,000	TBD
Access Road	Concept	8,980	1.70	TBD	\$100,000	TBD
Total		95,405	18.07	\$947,720	\$273,000	\$104,090

Notes

1. *Totals* include all planning, design, and construction costs that can be reasonably estimated as of the date of this report. Construction costs for projects requiring additional planning and design are not included and will be developed during subsequent phases.
2. Cost estimates provided in 2026 dollars
3. A minimum 15% contingency is recommended for all project phases
4. For construction, add mobilization costs of \$15,000-\$25,000 to the budget for each individual construction phase
5. Projects with *Concept* status require additional planning or design prior to construction.

SAMPLE PROCUREMENT LANGUAGE

**FORK RUN TRAIL SYSTEM MASTER PLAN
SAMPLE PROCUREMENT DOCUMENTATION LANGUAGE**

2.3 Responsibilities and Tasks

The Contractor shall provide all labor, equipment, tools, supervision, and materials necessary to complete the Work as described. Quantities are approximate; final alignments shall be determined in the field by the Contractor in consultation with the Project Manager.

2.3.1 Layout of Improvements

1. The Contractor shall place and establish stakes and markers for control and guidance of construction operations.
2. The Contractor shall be responsible for all measurements required for execution of the Work.

2.3.2 Materials

1. Materials shall mean equipment, machinery, product, component, or any other item incorporated in the Work.
2. Materials furnished by the Contractor shall be of the type and quality described in these specifications. Substitutions require prior written approval by the County.
3. Locally sourced materials shall be maximized; imported materials (aggregate, geotextiles) may be used as approved.

2.3.3 Power and Water

1. The Contractor shall make all necessary arrangements to provide power and water required for construction purposes.
2. At contract termination, all temporary distribution lines shall be removed.
3. Contractor shall call for existing utility locates if necessary.

2.3.4 Staging Area

1. Staging areas for on-site storage of equipment and materials shall be approved by the County prior to mobilization.
2. Prior to entering the site, each piece of equipment must be pressure-washed to remove debris (soil, vegetation, seeds).

2.3.5 Preservation of Vegetation

1. The Contractor shall exercise care to preserve the natural landscape.
2. Clearing shall be limited to trail tread and approved features; unnecessary destruction or scarring shall be repaired or replanted at the Contractor's expense.

2.3.6 Clean-Up

1. Due to the public nature of the park, clean-up is critical.

FORK RUN TRAIL SYSTEM MASTER PLAN
SAMPLE PROCUREMENT DOCUMENTATION LANGUAGE

2. The Contractor shall maintain a clean, safe work site and perform final clean-up over the project limits, including touch-up, patching, and removal of construction debris.

2.3.7 Earthwork and Trail Construction

1. Excavation, stripping, and backfilling are subsidiary to the Work and shall not be paid separately.
2. Excavation shall conform to the trail design parameters.
3. Trail tread shall conform to the trail design parameters.
4. Rock armoring, armored switchbacks, and choke/corral features shall be incorporated where needed to control shortcutting and erosion.
5. Boulder cribwall shall be incorporated where needed to retain either the trail tread or the trail backslope.
6. Technical trail features (TTFs), up to the specified quantity, shall be intentionally designed and constructed to provide a safe, durable, and repeatable riding experience. Existing natural features, including bedrock, logs, individual rocks, roots, or other incidental terrain, shall not be considered TTFs unless intentionally modified and incorporated into a constructed feature.
7. Surfaces shall be compacted with suitable tools or equipment to form a durable tread.

2.3.8 Trail Closure

1. Where specified, trail closure shall consist of naturalization of the existing trail corridor to discourage continued use of the trail.
2. The Contractor shall place rocks, logs, branches, and other natural debris in the trail corridor to create barriers and obstacles
3. Naturalization shall include spreading of duff and leaf matter in the treadway

2.3.9 Drainage and Backfill

4. Contractor shall excavate drainage features as instructed by the County.
5. Backfill shall consist of mineral soil, free of organics, compacted in lifts ≤ 6 inches, and placed to the required grades.

2.3.10 Erosion Control

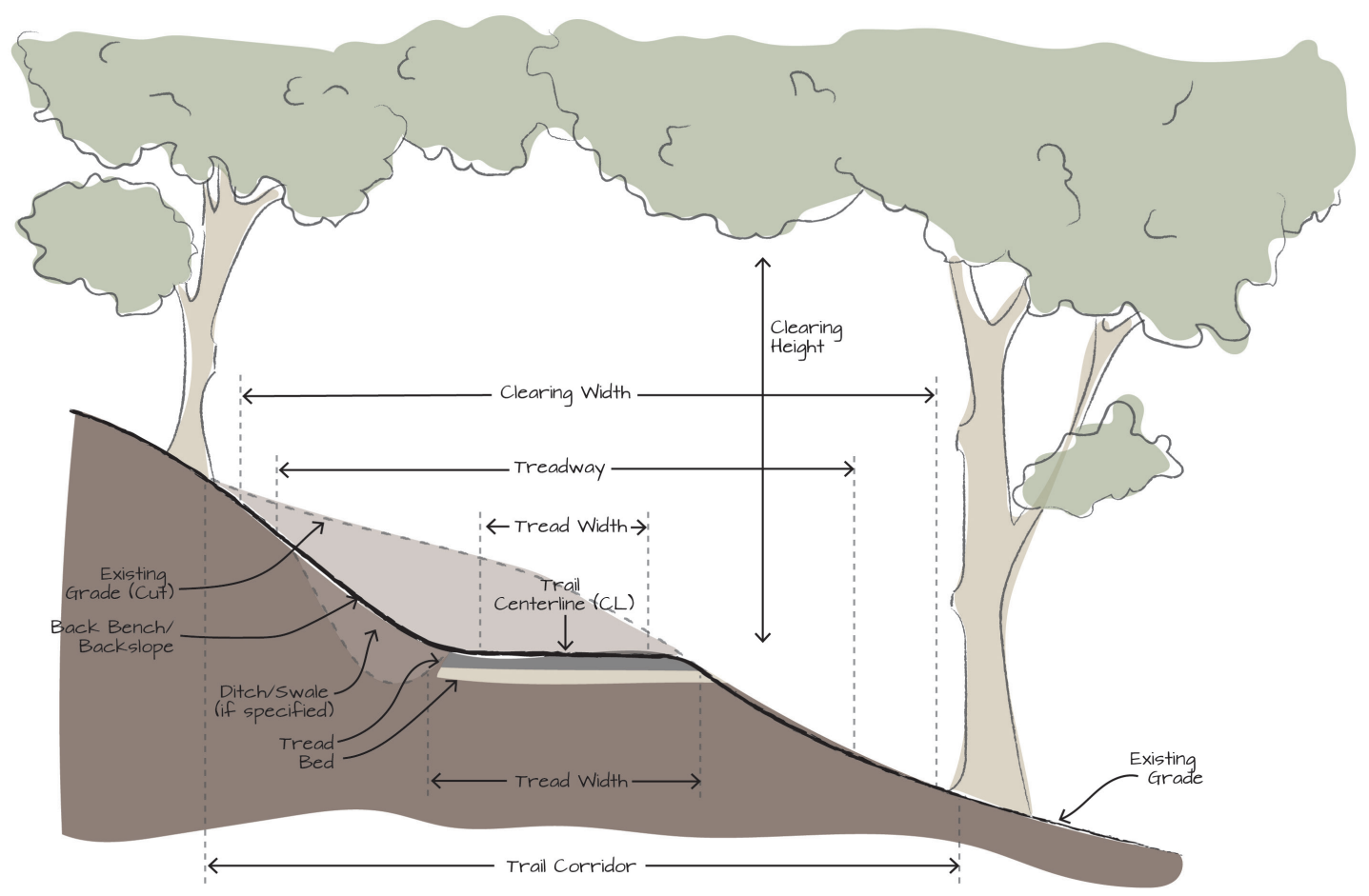
1. Contractor shall install and maintain erosion and sediment control measures (silt sock, straw matting, hydroseeding) as prescribed in the approved plan.
2. Same-day stabilization is required for all disturbed areas.

**FORK RUN TRAIL SYSTEM MASTER PLAN
SAMPLE PROCUREMENT DOCUMENTATION LANGUAGE**

2.3.11 Project Management and Inspections

1. The Project will be managed and inspected by Garrett County.
2. When work is ready for inspection, the Contractor shall notify the Project Manager to arrange an inspection.

STANDARD TRAIL TERMS



Adopted from the US Forest Service

GLOSSARY

This glossary contains commonly used terms and definitions applicable to trail planning and design. Not all terms included in the glossary may appear in this report, and some report-specific terms may not be defined herein.

Boardwalk: An elevated footpath, walkway, or causeway built with wooden planks that enables pedestrians to cross wet, fragile, or marshy land.

Box Steps: A step with a wooden riser frame, filled with compacted aggregate or native soil.

Catwalk: An elevated structure that may be attached to the side of another structure or natural feature such as a cliff face.

Clearing Height: The minimum clearing height determined to be appropriate for a trail.

Clearing Limit: The area over and beside the trail tread that is cleared of trees, limbs, and other obstructions.

Clearing Width: The minimum clearing width determined to be appropriate for a trail

Cross Slope: The percentage grade of a the trail tread measured from edge to edge perpendicular to the direction of travel.

Design Surface: See tread material.

French Mattress: A trail structure that consists of mounded tread material. Similar to French mattress but without retention or curbing. Allows surface water to seep through the trail structure.

Grade (Percent Grade): Grade can be expressed as a percent or an angle. Percent grade equals the rise (elevation change) divided by the run (horizontal distance) multiplied by 100 to obtain a percent figure.

Inslope: A trail tread profile in which the trail tread tilts toward the backslope, preventing water from shedding off the trail on the downslope side.

Junction: An intersection of multiple trails. While it may contain seating or wayfinding signage, a junction is not as developed as a trailhead.

Landing: A transition area from trail to structure.

Maximum Cross Slope: The steepest cross slope that is determined to be appropriate. Typically exceeds the target cross slope of the trail.

Maximum Pitch Density: The maximum percentage of a trail with grades that exceed the Target Grade and that are less than or equal to the short pitch maximum.

Obstacles: Trail tread imperfections, such as rocks, roots, holes, stumps, steps, downed logs, and structures, that are beyond the acceptable range of tread roughness and challenge level for the trail and that obstruct one or more Managed Uses of the trail

Outslope: An outsloped trail is a trail with a cross slope. An insloped trail tips toward the uphill side while an outsloped trail tips downhill. Both types of cross slope allow water to flow off the trail.

Oversteep: A segment of trail that exceeds sustainable or desired running grades.

Passing Space: Where the clear tread width of a trail is less than 60 inches, passing spaces allow for users traveling in opposite directions or at different speeds to bypass on another.

Protrusions: Trail tread imperfections, such as rock, roots, holes, stumps, steps, and structures, that are within the acceptable range of tread roughness and challenge level for the trail and that do not obstruct the Managed Uses of the trail.

Short Pitch Maximum: The steepest grade that is determined to be appropriate for a trail over a specified distance.

Shoulder Clearance: The minimum horizontal and vertical clearance of obstructions immediately adjacent to the trail tread.

Social Trail: An informal or rogue trail created by users.

Surface Type: A characteristic of the design surface expressed in terms of material type, grading, compaction, and roughness of the trail tread.

Tread Material: The trail tread surface, defined in terms of surface type, surface protrusions, and surface obstacles, that is determined to be appropriate to accommodate the Managed Uses of a trail

Tread Width: The tread width determined to be appropriate to accommodate the Managed Uses of a trail.

Turn Radius: The minimum horizontal radius required for a Managed Use to negotiate a curve (for example, a switchback, climbing turn, or horizontal turn) in a single maneuver.

Turnpike: Turnpikes are used to elevate the trail above wet ground. The technique uses fill material from parallel side ditches and other areas to build the trail base higher than the surrounding water table. Turnpike construction is used to provide a stable trail base in areas with a high water table and fair- to well-drained soils.