



LEBANON HILLS REGIONAL PARK

SUSTAINABLE TRAIL IMPLEMENTATION PROJECT

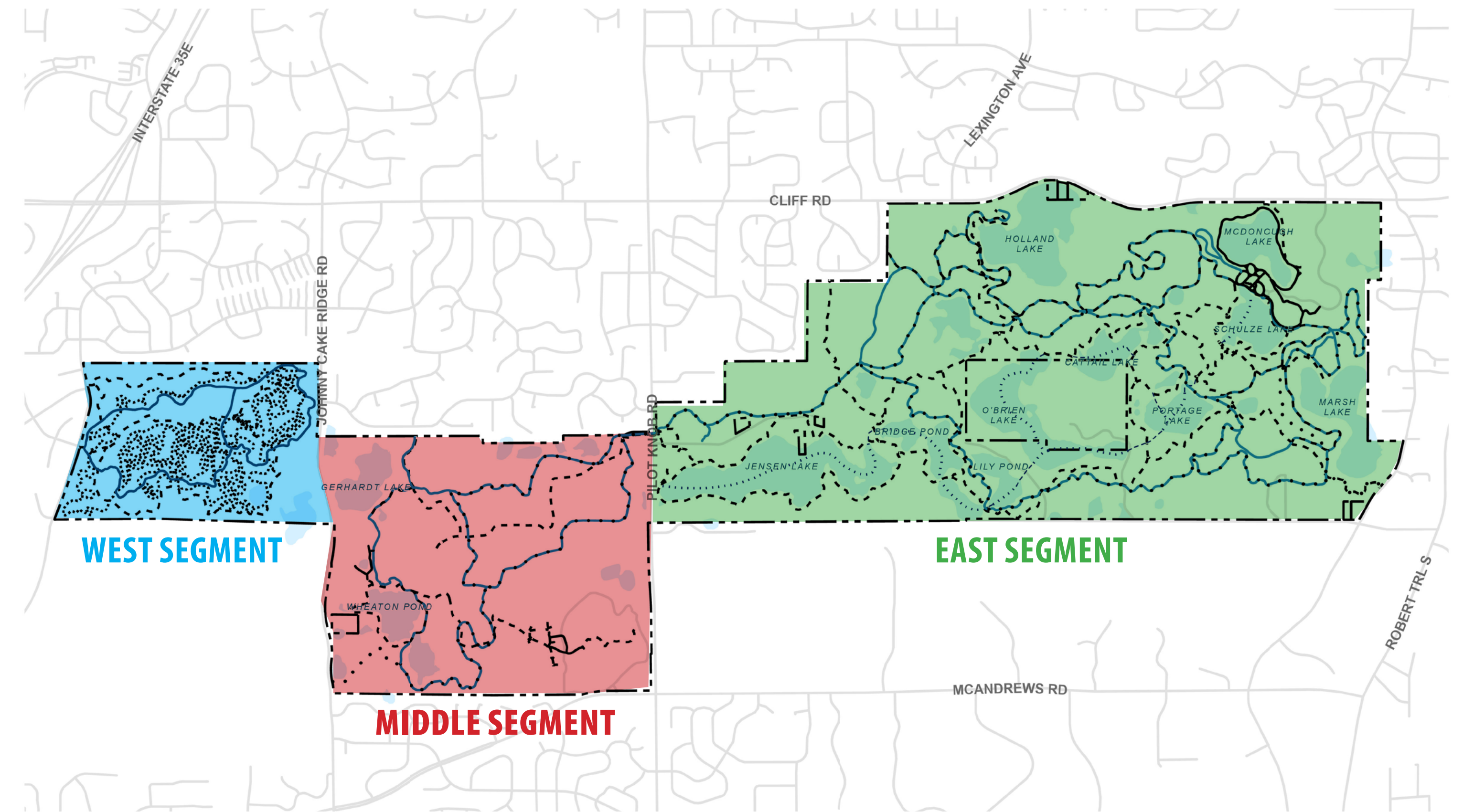
Dakota County MN
February, 2025

Project Background

The Lebanon Hills Regional Park Sustainable Trail Implementation project is based on outcomes of the 2023 Sustainable Trail Study that assessed all 50 miles of existing trail at Lebanon Hills Regional Park. The 2023 Sustainable Trail Study refined the 2015 Master Plan conceptual trail network to achieve safe, sustainable trails throughout the park, improve ADA accessibility, and provide quality nature-based visitor experiences. Trail refinements minimize natural resource impacts and improve long term sustainability of trails by integrating sustainable trail building practices.

The current Sustainable Trail Implementation project has further refined the trail system improvements recommended in previous studies through additional field work and detailed design. Dakota County is currently soliciting public and stakeholder feedback on the refined trail improvements proposed in the west, middle, and east segment of the park. The implementation of trails will be broken out into two phases of implementation based on current budget allocated for the trail improvements. The first phase of work will primarily focus on trail improvements in the west and middle segments of the park where most severely eroded fall line trails exist.

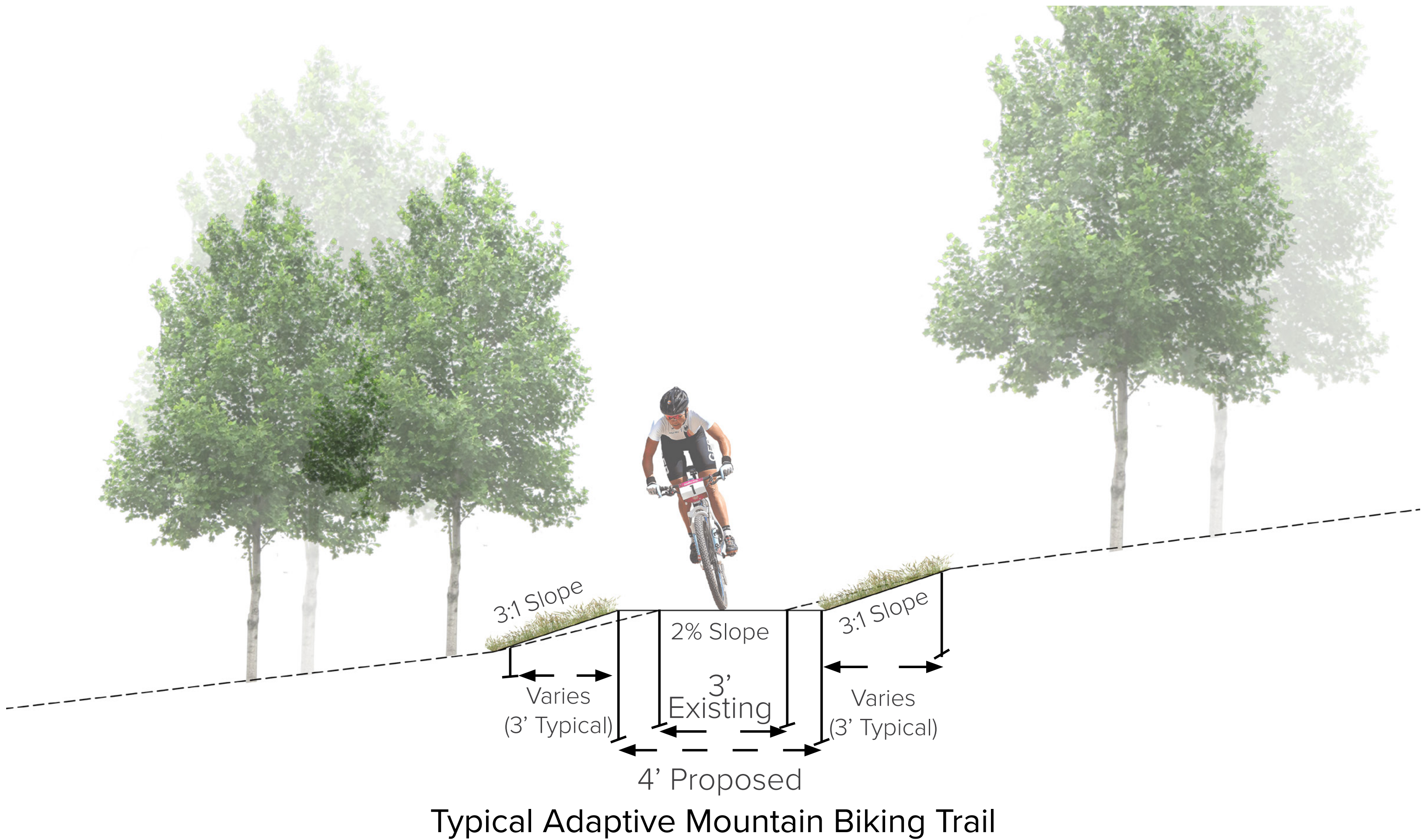
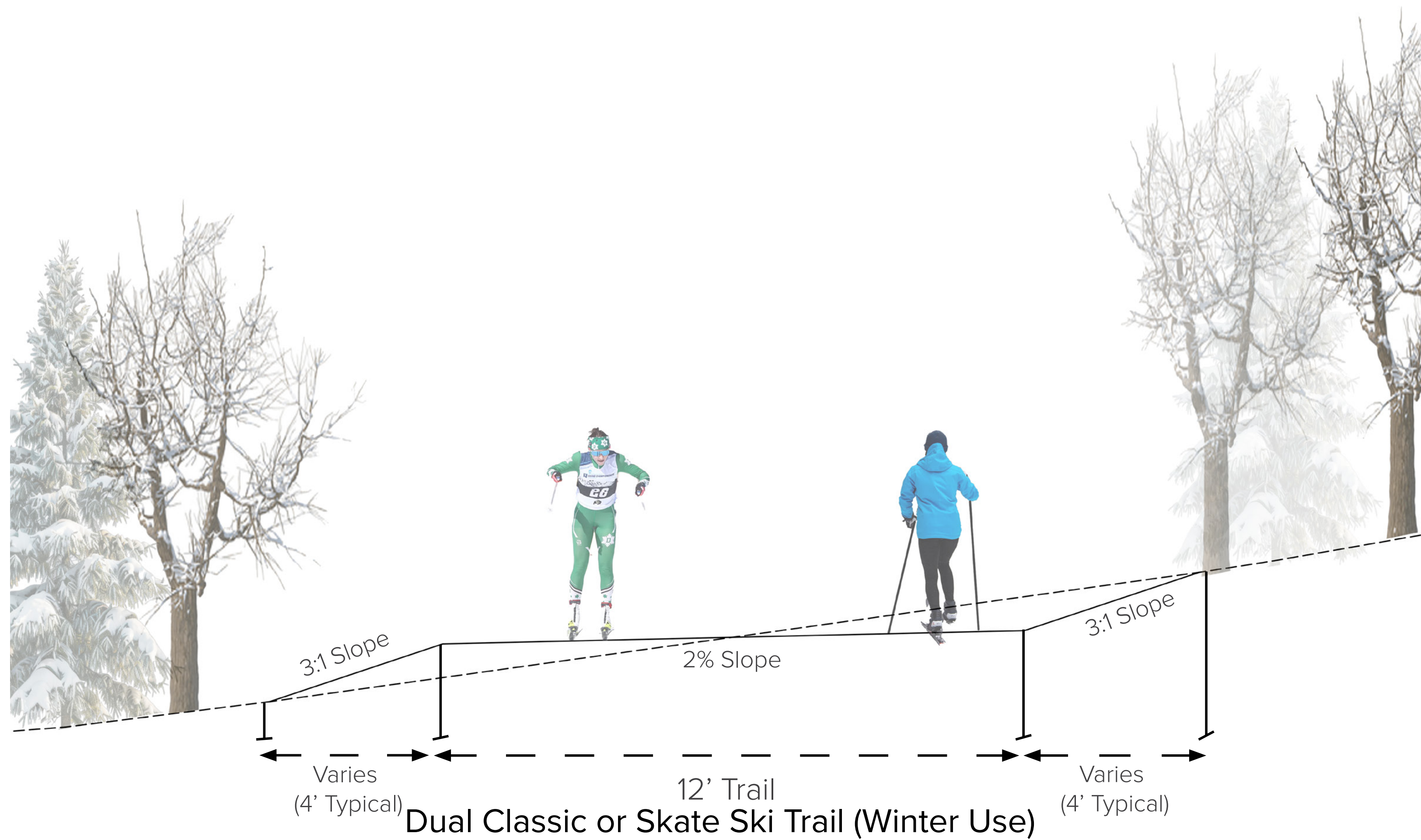
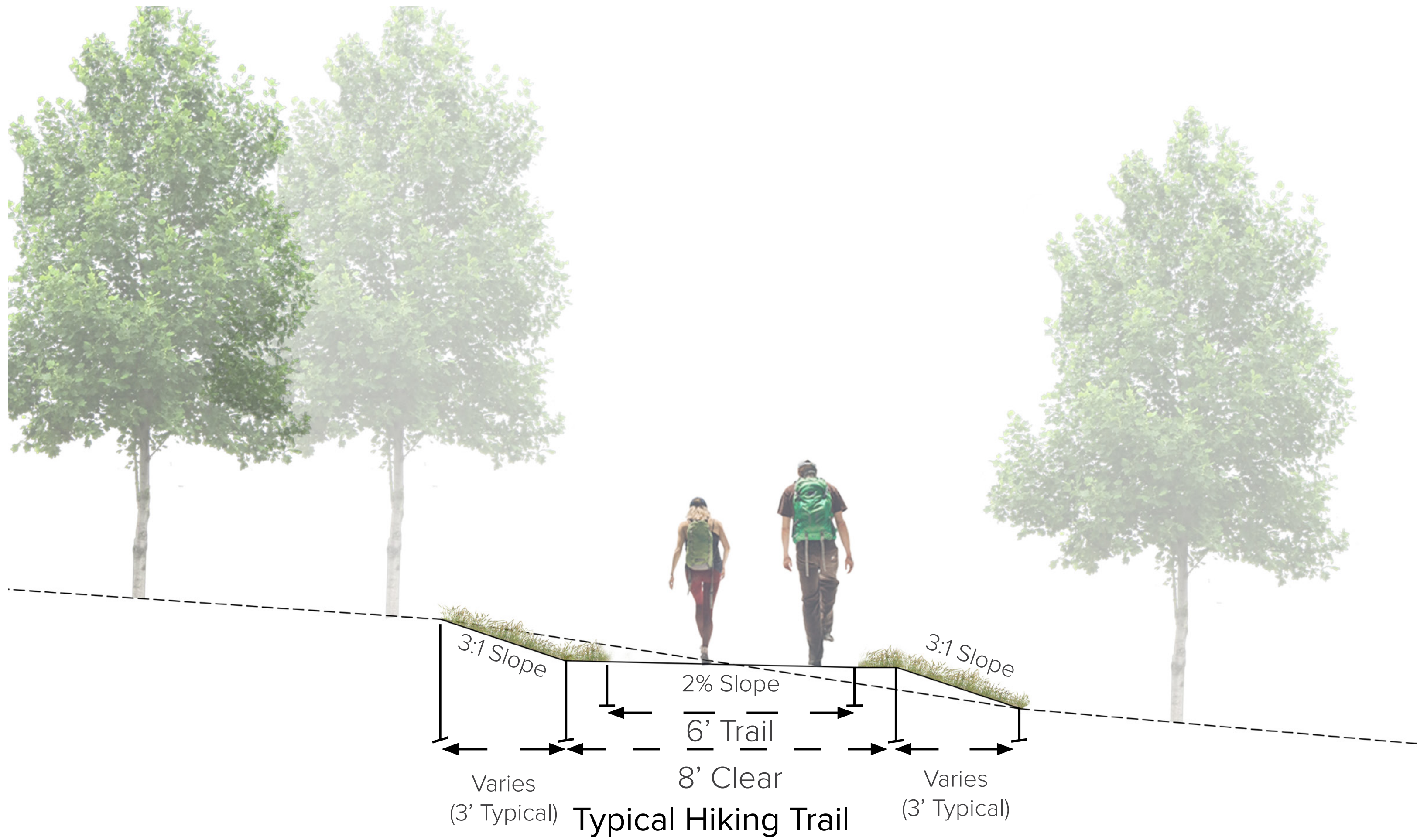
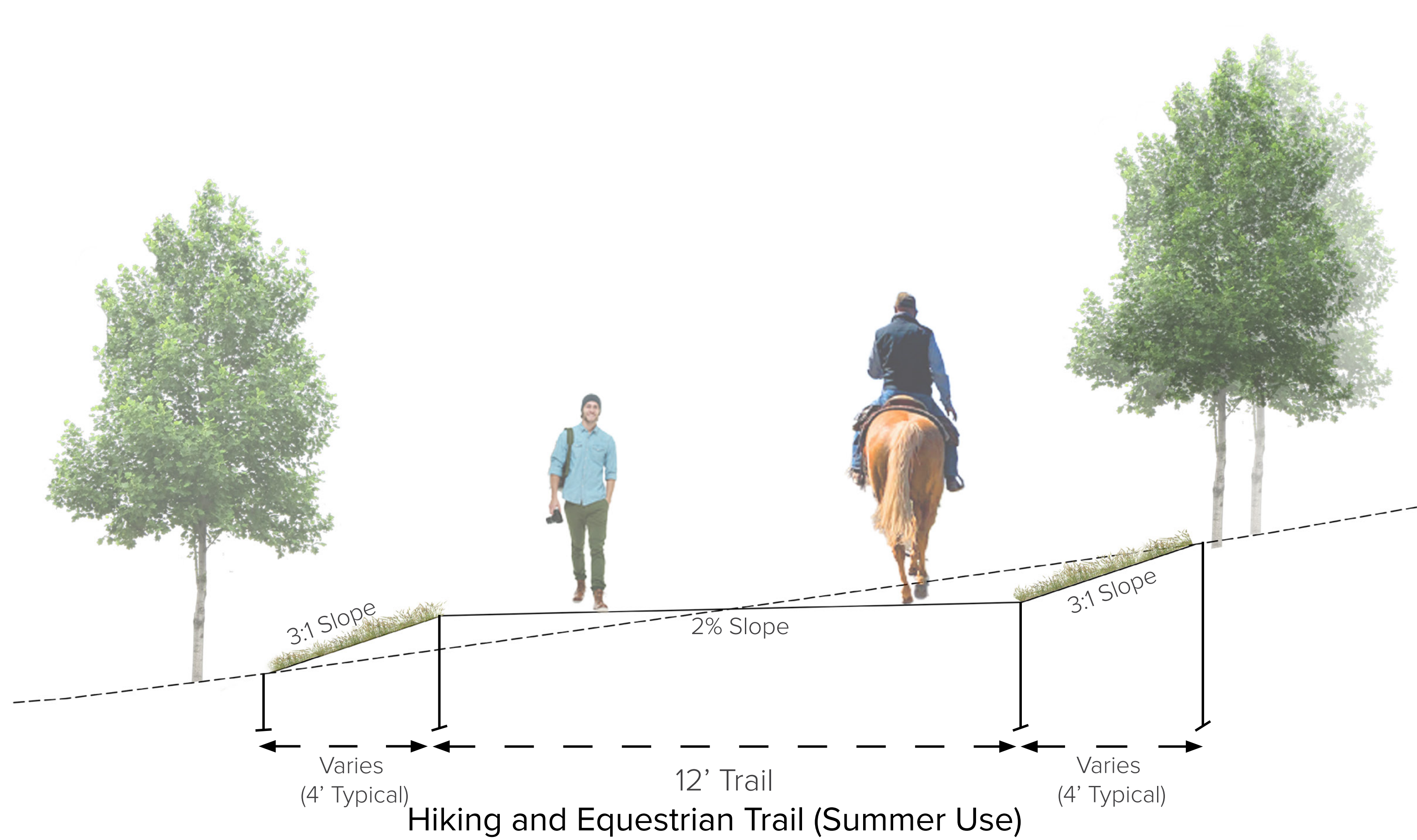
Park Context Map



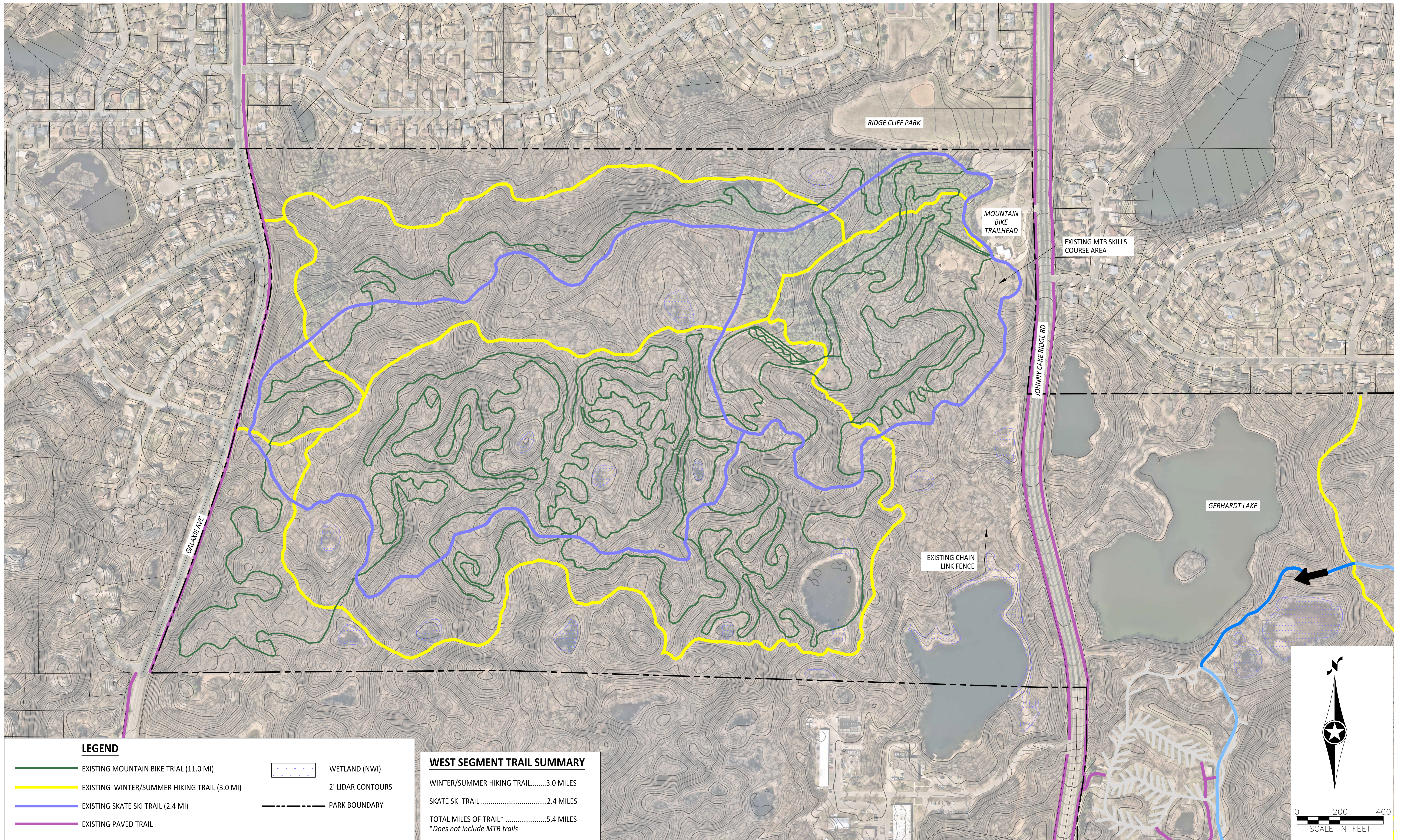
Project Schedule



PROJECT BACKGROUND AND SCHEDULE



PROPOSED TYPICAL TRAIL SECTIONS

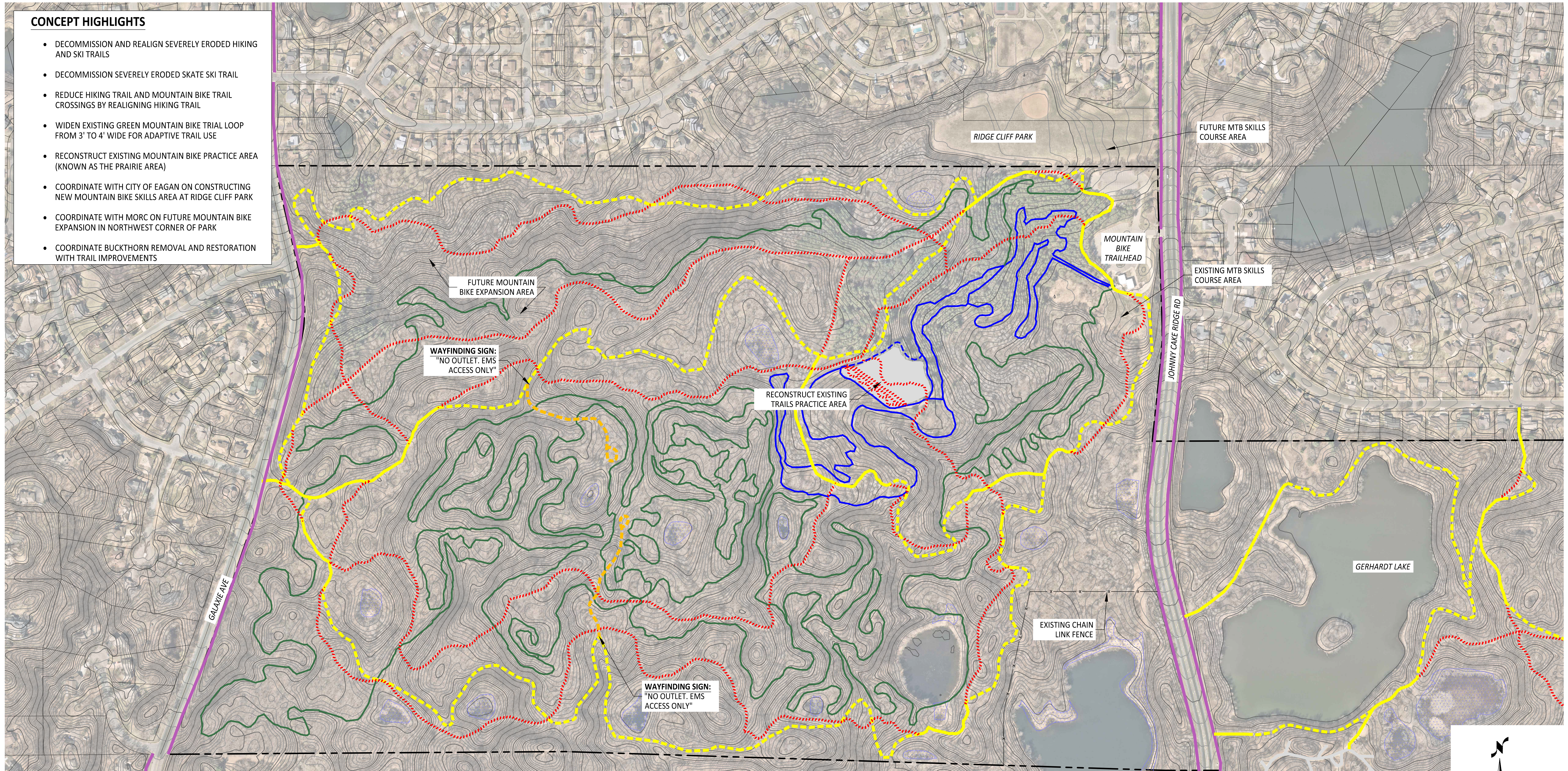


WEST SEGMENT EXISTING TRAILS

Lebanon Hills Regional Park Sustainable Trail Implementation

CONCEPT HIGHLIGHTS

- DECOMMISSION AND REALIGN SEVERELY ERODED HIKING AND SKI TRAILS
- DECOMMISSION SEVERELY ERODED SKATE SKI TRAIL
- REDUCE HIKING TRAIL AND MOUNTAIN BIKE TRAIL CROSSINGS BY REALIGNING HIKING TRAIL
- WIDEN EXISTING GREEN MOUNTAIN BIKE TRAIL LOOP FROM 3' TO 4' WIDE FOR ADAPTIVE TRAIL USE
- RECONSTRUCT EXISTING MOUNTAIN BIKE PRACTICE AREA (KNOWN AS THE PRAIRIE AREA)
- COORDINATE WITH CITY OF EAGAN ON CONSTRUCTING NEW MOUNTAIN BIKE SKILLS AREA AT RIDGE CLIFF PARK
- COORDINATE WITH MORC ON FUTURE MOUNTAIN BIKE EXPANSION IN NORTHWEST CORNER OF PARK
- COORDINATE BUCKTHORN REMOVAL AND RESTORATION WITH TRAIL IMPROVEMENTS

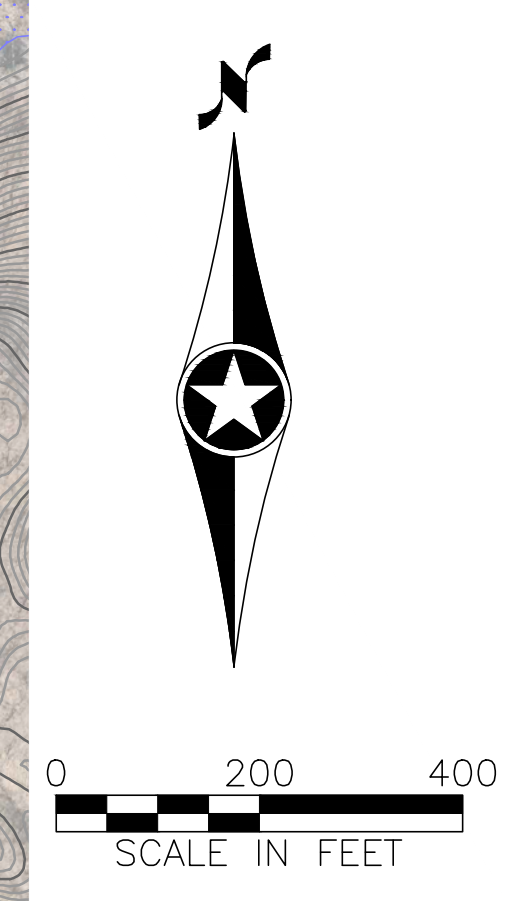


LEGEND

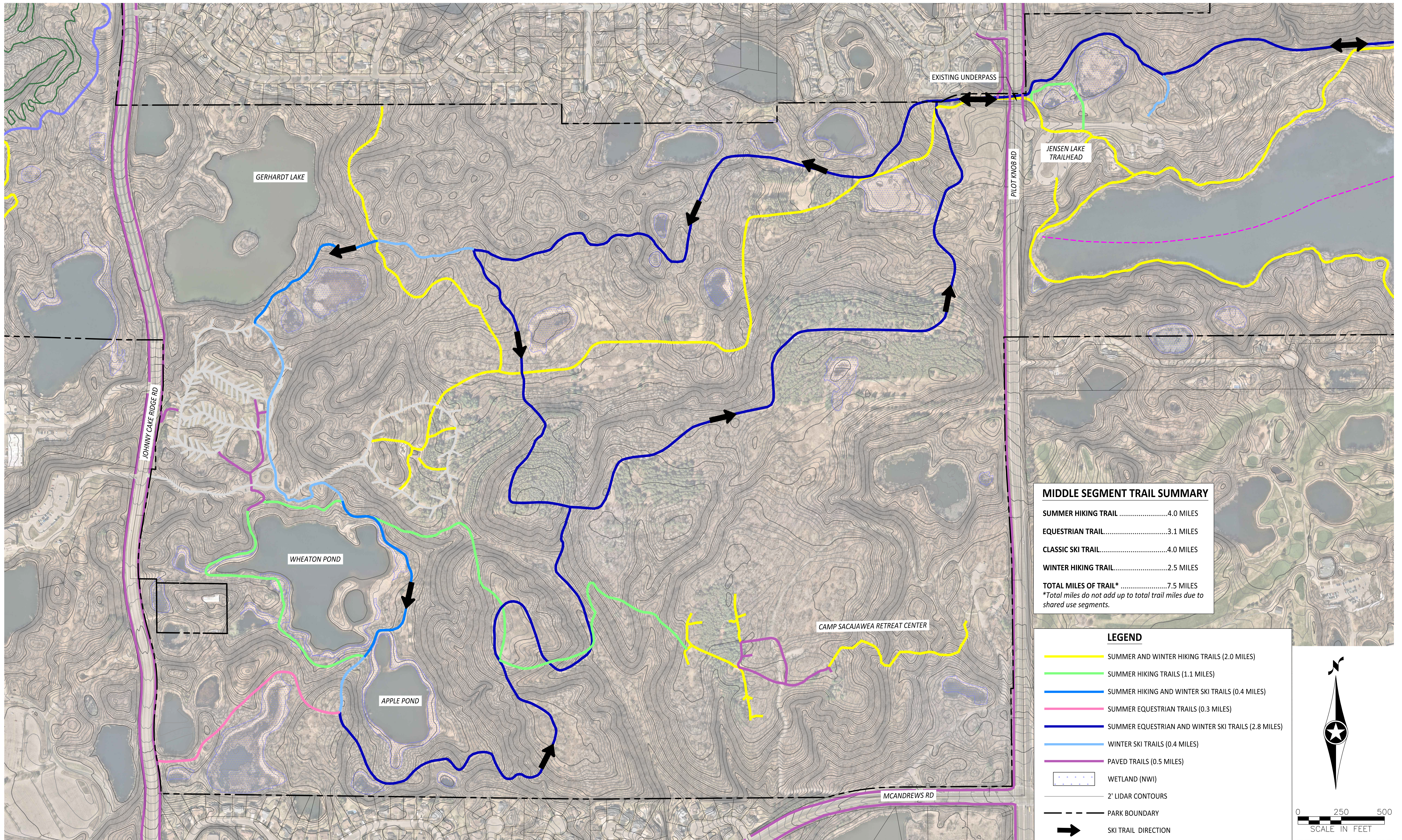
- WIDEN EXISTING GREEN MOUNTAIN BIKE TRAIL TO ACCOMMODATE ADAPTIVE TRAIL USE (1.9 MILES)
- EXISTING MOUNTAIN BIKE TRAIL (9.1 MILES)
- - - PROPOSED 6' WIDE 8' CLEAR WINTER/SUMMER HIKING TRAIL (3.1 MILES)
- EXISTING 6' WIDE 8' CLEAR WINTER/SUMMER HIKING TRAIL TO REMAIN (1.2 MILES)
- - - PROPOSED 6' WIDE 8' CLEAR EMS ACCESS TRAIL (0.3 MILES)
- EXISTING PAVED TRAIL
- - - DECOMMISSION TRAIL (4.7 MILES)
- WETLAND (NWI)
- 2' LIDAR CONTOURS
- - - PARK BOUNDARY

WEST SEGMENT TRAIL SUMMARY

| | |
|-----------------------------------|-----------|
| WINTER/SUMMER HIKING TRAIL | |
| EXISTING | 3.0 MILES |
| PROPOSED | 4.3 MILES |
| SKATE SKI TRAIL | |
| EXISTING | 2.4 MILES |
| PROPOSED | 0.0 MILES |
| TOTAL MILES OF TRAIL* | |
| EXISTING | 5.4 MILES |
| PROPOSED** | 4.6 MILES |
| *Does not include MTB trails | |
| **Includes 0.3 miles of EMS trail | |

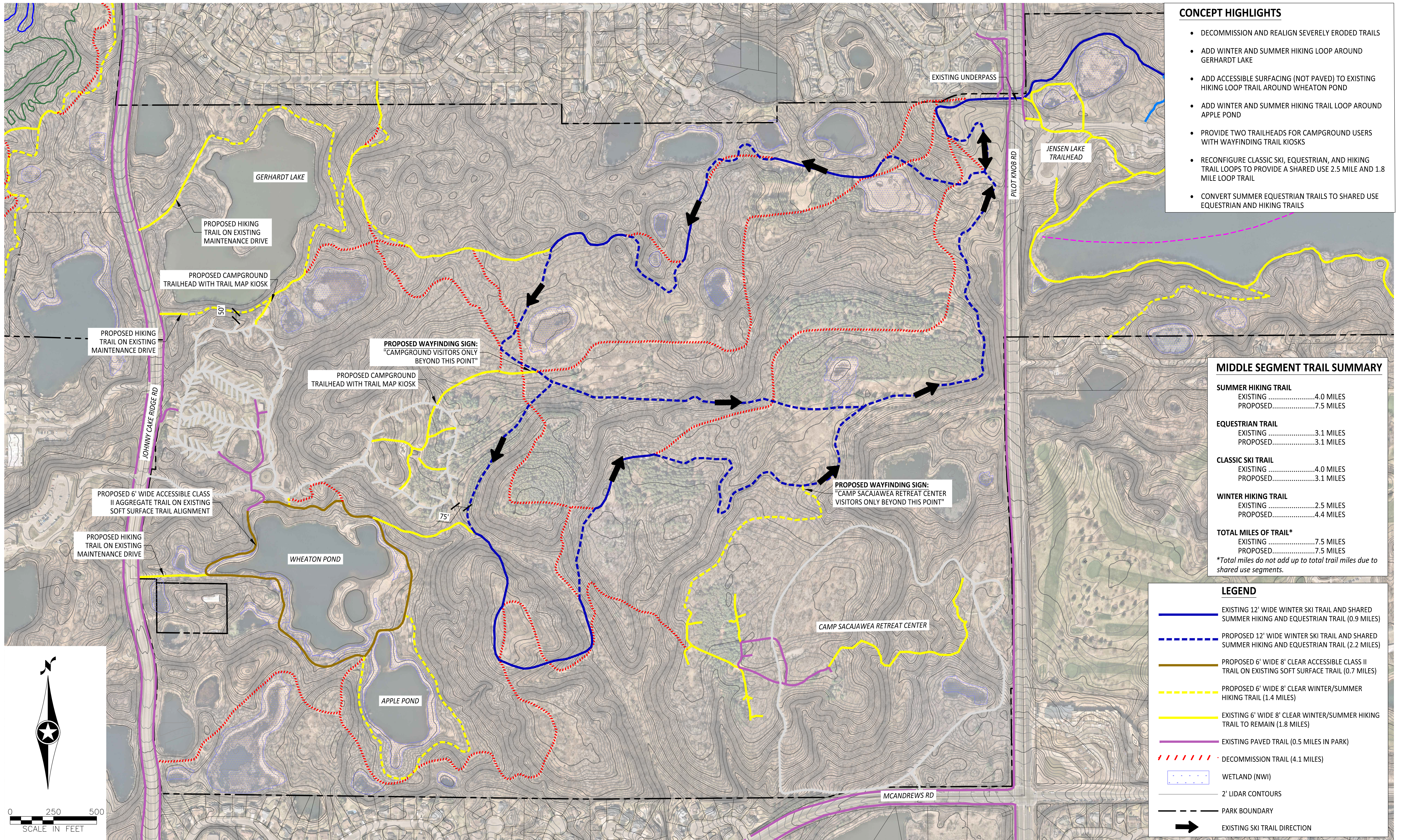


WEST SEGMENT PROPOSED TRAILS



MIDDLE SEGMENT EXISTING TRAILS

Lebanon Hills Regional Park Sustainable Trail Implementation



- ### CONCEPT HIGHLIGHTS
- DECOMMISSION AND REALIGN SEVERELY ERODED TRAILS
 - ADD WINTER AND SUMMER HIKING LOOP AROUND GERHARDT LAKE
 - ADD ACCESSIBLE SURFACING (NOT PAVED) TO EXISTING HIKING LOOP TRAIL AROUND WHEATON POND
 - ADD WINTER AND SUMMER HIKING TRAIL LOOP AROUND APPLE POND
 - PROVIDE TWO TRAILHEADS FOR CAMPGROUND USERS WITH WAYFINDING TRAIL KIOSKS
 - RECONFIGURE CLASSIC SKI, EQUESTRIAN, AND HIKING TRAIL LOOPS TO PROVIDE A SHARED USE 2.5 MILE AND 1.8 MILE LOOP TRAIL
 - CONVERT SUMMER EQUESTRIAN TRAILS TO SHARED USE EQUESTRIAN AND HIKING TRAILS

MIDDLE SEGMENT TRAIL SUMMARY

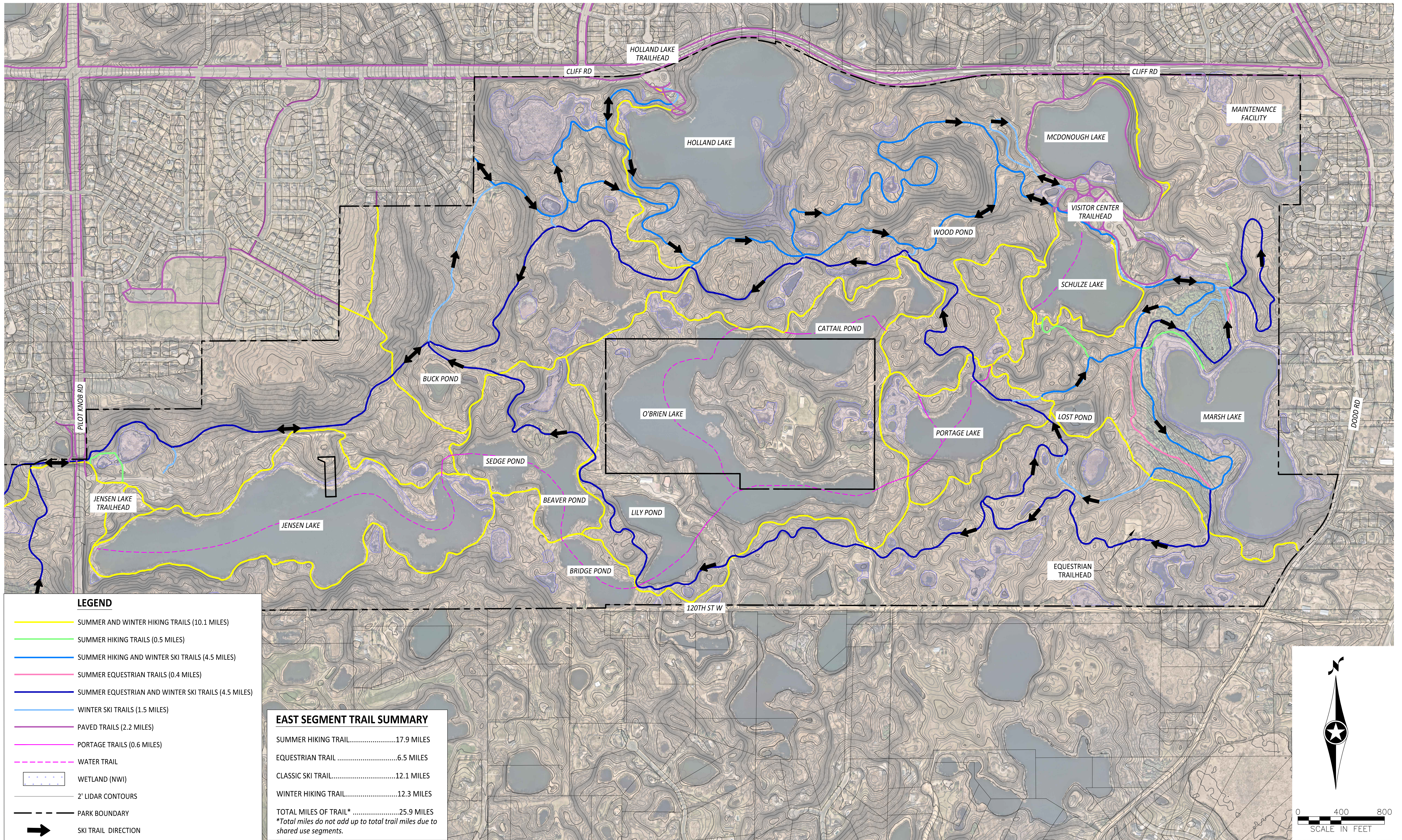
| SUMMER HIKING TRAIL | |
|-----------------------|-----------|
| EXISTING | 4.0 MILES |
| PROPOSED | 7.5 MILES |
| EQUESTRIAN TRAIL | |
| EXISTING | 3.1 MILES |
| PROPOSED | 3.1 MILES |
| CLASSIC SKI TRAIL | |
| EXISTING | 4.0 MILES |
| PROPOSED | 3.1 MILES |
| WINTER HIKING TRAIL | |
| EXISTING | 2.5 MILES |
| PROPOSED | 4.4 MILES |
| TOTAL MILES OF TRAIL* | |
| EXISTING | 7.5 MILES |
| PROPOSED | 7.5 MILES |

*Total miles do not add up to total trail miles due to shared use segments.

- ### LEGEND
- EXISTING 12' WIDE WINTER SKI TRAIL AND SHARED SUMMER HIKING AND EQUESTRIAN TRAIL (0.9 MILES)
 - - - PROPOSED 12' WIDE WINTER SKI TRAIL AND SHARED SUMMER HIKING AND EQUESTRIAN TRAIL (2.2 MILES)
 - PROPOSED 6' WIDE 8' CLEAR ACCESSIBLE CLASS II TRAIL ON EXISTING SOFT SURFACE TRAIL (0.7 MILES)
 - - - PROPOSED 6' WIDE 8' CLEAR WINTER/SUMMER HIKING TRAIL (1.4 MILES)
 - EXISTING 6' WIDE 8' CLEAR WINTER/SUMMER HIKING TRAIL TO REMAIN (1.8 MILES)
 - EXISTING PAVED TRAIL (0.5 MILES IN PARK)
 - /// DECOMMISSION TRAIL (4.1 MILES)
 - [] WETLAND (NWI)
 - - - 2' LIDAR CONTOURS
 - - - PARK BOUNDARY
 - ➔ EXISTING SKI TRAIL DIRECTION

MIDDLE SEGMENT PROPOSED TRAILS

Lebanon Hills Regional Park Sustainable Trail Implementation



EAST SEGMENT EXISTING TRAILS

Lebanon Hills Regional Park Sustainable Trail Implementation

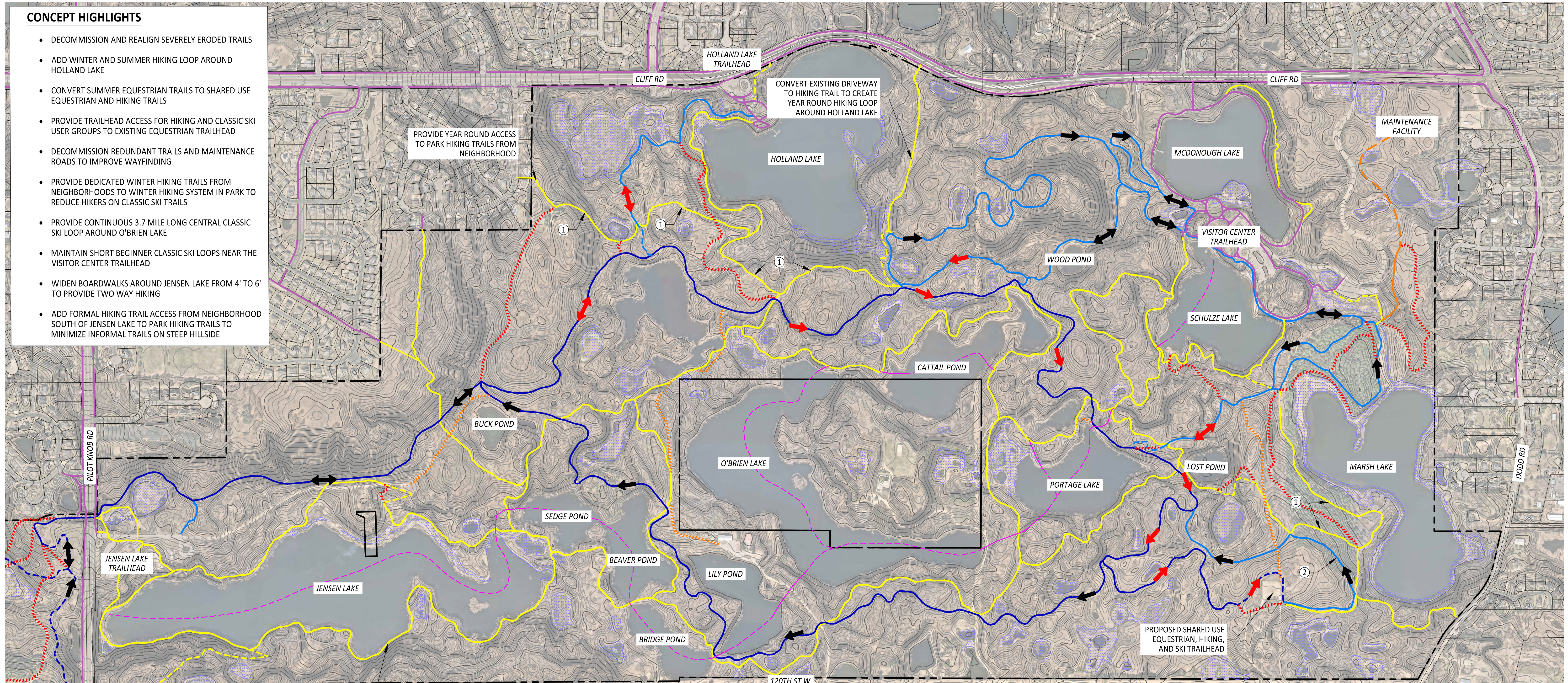
EAST SEGMENT TRAIL SUMMARY

| | |
|------------------------------------|-------------------|
| SUMMER HIKING TRAIL..... | 17.9 MILES |
| EQUESTRIAN TRAIL | 6.5 MILES |
| CLASSIC SKI TRAIL..... | 12.1 MILES |
| WINTER HIKING TRAIL..... | 12.3 MILES |
| TOTAL MILES OF TRAIL* | 25.9 MILES |

*Total miles do not add up to total trail miles due to shared use segments.

CONCEPT HIGHLIGHTS

- DECOMMISSION AND REALIGN SEVERELY ERODED TRAILS
- ADD WINTER AND SUMMER HIKING LOOP AROUND HOLLAND LAKE
- CONVERT SUMMER EQUESTRIAN TRAILS TO SHARED USE EQUESTRIAN AND HIKING TRAILS
- PROVIDE TRAILHEAD ACCESS FOR HIKING AND CLASSIC SKI USER GROUPS TO EXISTING EQUESTRIAN TRAILHEAD
- DECOMMISSION REDUNDANT TRAILS AND MAINTENANCE ROADS TO IMPROVE WAYFINDING
- PROVIDE DEDICATED WINTER HIKING TRAILS FROM NEIGHBORHOODS TO WINTER HIKING SYSTEM IN PARK TO REDUCE HIKERS ON CLASSIC SKI TRAILS
- PROVIDE CONTINUOUS 3.7 MILE LONG CENTRAL CLASSIC SKI LOOP AROUND O'BRIEN LAKE
- MAINTAIN SHORT BEGINNER CLASSIC SKI LOOPS NEAR THE VISITOR CENTER TRAILHEAD
- WIDEN BOARDWALKS AROUND JENSEN LAKE FROM 4' TO 6' TO PROVIDE TWO WAY HIKING
- ADD FORMAL HIKING TRAIL ACCESS FROM NEIGHBORHOOD SOUTH OF JENSEN LAKE TO PARK HIKING TRAILS TO MINIMIZE INFORMAL TRAILS ON STEEP HILLSIDE



WIDEN EXISTING BOARDWALKS FROM 4' WIDE TO 6' WIDE

ADD NEIGHBORHOOD CONNECTION

- KEY NOTE LEGEND**
- ① CONVERT SKI TRAIL TO WINTER HIKING TRAIL
 - ② CONVERT WINTER HIKING TRAIL TO SKI TRAIL

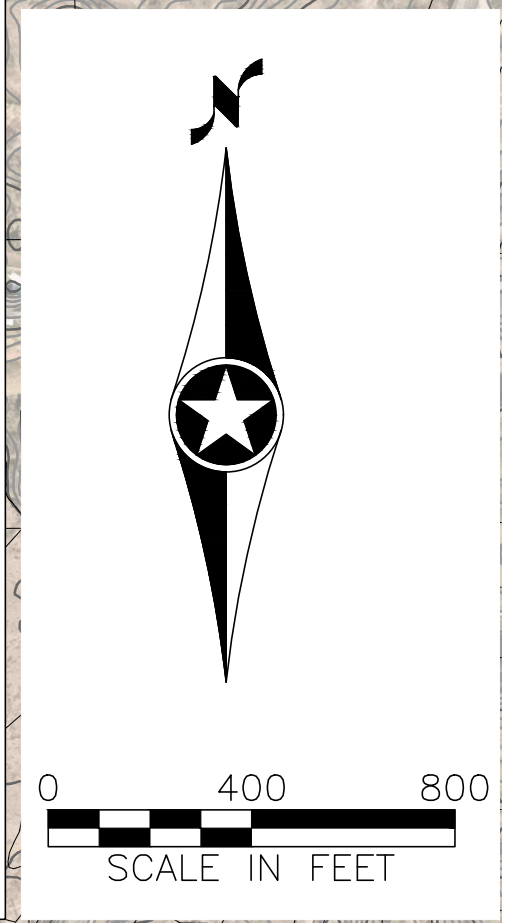
LEGEND

| | | | |
|--|--|--|--|
| | EXISTING PORTAGE TRAIL (0.6 MILES) | | EXISTING PAVED TRAIL (2.2 MILES IN PARK) |
| | EXISTING WATER TRAIL | | DECOMMISSION MAINTENANCE ROAD (1.1 MILES) |
| | EXISTING 12' WIDE WINTER SKI TRAIL AND SHARED SUMMER HIKING AND EQUESTRIAN TRAIL (4.9 MILES) | | MAINTENANCE ROAD ON EXISTING TRAIL (0.1 MILES) |
| | PROPOSED 12' WIDE WINTER SKI TRAIL AND SHARED SUMMER HIKING AND EQUESTRIAN TRAIL (0.1 MILES) | | PROPOSED MAINTENANCE ROAD (0.3 MILES) |
| | EXISTING WINTER SKI TRAIL AND SUMMER HIKING TRAIL (4.3 MILES) | | DECOMMISSION TRAIL (2.9 MILES) |
| | PROPOSED WINTER SKI TRAIL AND SUMMER HIKING TRAIL (0.1 MILES) | | WETLAND (NWI) |
| | EXISTING 6' WIDE 8' CLEAR WINTER/SUMMER HIKING TRAIL TO REMAIN (11.8 MILES) | | 2' LIDAR CONTOURS |
| | PROPOSED 6' WIDE 8' CLEAR WINTER/SUMMER HIKING TRAIL (0.8 MILES) | | PARK BOUNDARY |
| | | | EXISTING SKI TRAIL DIRECTION |
| | | | PROPOSED SKI TRAIL DIRECTION |

EAST SEGMENT TRAIL SUMMARY

| | |
|------------------------------|------------|
| SUMMER HIKING TRAIL | |
| EXISTING | 17.9 MILES |
| PROPOSED | 24.8 MILES |
| EQUESTRIAN TRAIL | |
| EXISTING | 6.5 MILES |
| PROPOSED | 5.0 MILES |
| CLASSIC SKI TRAIL | |
| EXISTING | 12.1 MILES |
| PROPOSED | 9.4 MILES |
| WINTER HIKING TRAIL | |
| EXISTING | 12.3 MILES |
| PROPOSED | 14.8 MILES |
| TOTAL MILES OF TRAIL* | |
| EXISTING | 25.9 MILES |
| PROPOSED | 24.8 MILES |

*Total miles do not add up to total trail miles due to shared use segments.



EAST SEGMENT PROPOSED TRAILS

| EXISTING AND PROPOSED TRAIL COMPARISON (IN MILES) | | | | |
|---|------|--------|------|-------|
| Trail System | West | Middle | East | Total |
| Summer Hiking Trail Existing | 3.0 | 4.0 | 17.9 | 24.9 |
| Summer Hiking Trail Proposed | 4.3 | 7.5 | 24.8 | 36.6 |
| | | | | |
| Equestrian Trail Existing | 0.0 | 3.1 | 6.5 | 9.6 |
| Equestrian Trail Proposed | 0.0 | 3.1 | 5.0 | 8.1 |
| | | | | |
| Skate Ski Trail Existing | 2.4 | 0.0 | 0.0 | 2.4 |
| Skate Ski Trail Proposed | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | | |
| Classic Ski Trail Existing | 0.0 | 4.0 | 12.1 | 16.1 |
| Classic Ski Trail Proposed | 0.0 | 3.1 | 9.4 | 12.5 |
| | | | | |
| Snowshoe/Winter Hiking Trail Existing | 3.0 | 2.5 | 12.3 | 17.8 |
| Snowshoe/Winter Hiking Trail Proposed | 4.3 | 4.4 | 14.8 | 23.5 |

**Total miles do not add up to total trail miles due to shared use segments.*

| EXISTING AND PROPOSED TOTAL MILES OF TRAIL COMPARISON | | | |
|---|-------------------------|-------------------------|-------------|
| Segment | Existing Miles of Trail | Proposed Miles of Trail | Net Gain |
| West* | 5.4 | 4.6 | -0.8 |
| Middle | 7.5 | 7.5 | 0.0 |
| East | 25.9 | 24.8 | -1.1 |
| TOTAL | 38.8 | 36.9 | -1.9 |

**Does not include mountain bike trails. Proposed miles of trail include EMS trail*

EXISTING AND PROPOSED TRAIL COMPARISON