

ELK RIDGE CITY

TRAIL CONSTRUCTION & DEVELOPMENT STANDARDS

Condensed Working Draft

Companion to the Elk Ridge Trails, Parks, and Open Space Master Plan and Elk Ridge City Trail Code.

STANDARD PAVED TRAIL SECTION

3.5" HOT-MIX ASPHALT OVER 6" COMPACTED ROAD BASE

Concrete is not an approved primary longitudinal surface for a City-designated trail.

1. PURPOSE & APPLICATION

These standards establish minimum design, construction, inspection, and acceptance requirements for City trails and developer-required trails. They implement the City's trail code and Master Plan and apply to public trails, required development improvements, public-access trails on private property, substantial trail reconstruction, Road Shared Trail treatments, and trail-roadway crossings.

1.1 City Engineer Authority

The City Engineer may approve site-specific modifications for topography, drainage, geology, utilities, existing development, accessibility, safety, maintenance, or snow storage, provided the intended trail classification and system connection are preserved.

1.2 Sidewalks Are Not Trails

A concrete sidewalk is a pedestrian facility and does not satisfy a City-designated trail requirement except where expressly approved by the City as an alternative connection through an existing developed area where the planned trail is impracticable. Main and Residential / Local Connector Trails shall use asphalt as the primary longitudinal surface. Provide a 6-inch-wide concrete border immediately adjacent to each side of the asphalt trail tread. Concrete may also be used for limited features such as curb ramps, crossings, drainage structures, trailheads, plazas, bridge approaches, retaining structures, or accessibility improvements.

2. TRAIL CLASSIFICATIONS

Trail Type	Tread / Surface	Minimum Corridor	Primary Use
Main Trail	10' asphalt + 6" concrete border each side	20' Trail Corridor	Transportation + recreation
Residential / Local Connector	8' asphalt typical; 6' constrained with approval + 6" concrete border each side	15' Trail Corridor	Neighborhood connectivity
Road Shared Trail	One marked on-road bike lane; typically 5'; no barrier	Existing roads: width may be determined by available space	Transportation
Backcountry / Natural Surface	2'-4' natural or approved crushed aggregate	Site-specific Trail Corridor	Recreation / mountain access

Regional Main Trails: The City may require a width greater than 10 feet for major regional connections or another agency's adopted standard.

3. CORE DESIGN STANDARDS

- **Alignment:** Provide direct, understandable connections while responding to terrain, drainage, safety, property configuration, and environmental constraints.
- **Separation:** A separated trail is preferred where practicable. Road Shared Trails may be used where existing right-of-way, terrain, development, or roadway conditions make separation impracticable.
- **Corridor Edge Areas:** Main Trails shall provide 4.5 feet on each side of the trail assembly for clearing / landscape / snow storage within the 20-foot minimum Trail Corridor. Residential / Local Connector Trails shall provide 3.0 feet on each side within the 15-foot minimum Trail Corridor. Maintain at least 10 feet of vertical clearance where practicable; increase where maintenance, emergency access, vegetation, or snow conditions require.
- **Sight Distance:** Preserve adequate stopping and intersection sight distance. Avoid blind curves and hidden roadway crossings.
- **Cross Slope:** Paved trails should generally be approximately 1.5%-2%, subject to applicable accessibility requirements.
- **Grade:** Paved trails should generally be 5% or less where practicable. Grades above 5% require site-specific review; sustained grades above 10% are discouraged and require City Engineer approval.
- **Drainage:** Prevent ponding, erosion, pavement undermining, and adverse discharge to adjoining property. Concentrated runoff shall cross trails only through an approved drainage treatment.
- **Snow / Utilities:** Use the designated clearing / landscape / snow-storage areas for snow storage where winter maintenance is anticipated. Utilities require City approval and should be outside the asphalt trail tread.

4. PAVED TRAIL CONSTRUCTION

Component	Standard
Surface	3.5" compacted hot-mix asphalt
Base	6" minimum approved compacted road base
Subgrade	Prepared, shaped, and compacted; remove or stabilize unsuitable material

Corridor Edge Areas

Main: 4.5' each side; Residential / Local Connector: 3.0' each side for clearing / landscape / snow storage

Concrete

6" wide concrete border immediately adjacent to each side of Main and Residential / Local Connector asphalt tread; concrete is not permitted as the primary longitudinal trail tread

Engineering adjustment: The City Engineer may require a thicker base or pavement section based on geotechnical conditions, frost susceptibility, drainage, maintenance vehicles, or other loading.

5. BACKCOUNTRY / NATURAL-SURFACE TRAILS

- Tread: 2'-4' typical bench; width based on intended users, terrain, visibility, drainage, and resource protection.
- Surface: Native mineral soil or approved crushed aggregate / stone fines.
- Grade: Approximately 5%-8% typical. Grades near or above 10% require sustainable-trail design and City approval.
- Drainage: Use outslope, grade reversals, rolling dips, armored crossings, switchbacks, or similar techniques; avoid fall-line alignment and long runoff-concentrating grades.
- Disturbance: Minimize clearing, root damage, erosion, and disturbance to drainage corridors, steep slopes, sensitive vegetation, and adjoining property.
- Structures: Bridges, retaining walls, culverts, stairs, or boardwalks require City approval.

6. ROADWAY INTERFACES & ROAD SHARED TRAILS

- Road crossings shall provide adequate visibility and should be as close to perpendicular to vehicle travel as practicable.
- Provide accessible curb ramps and detectable warnings where required.
- Use City-approved warning, regulatory, wayfinding, crossing, and pavement markings where warranted.
- Bollards or access-control devices may be used only where necessary and shall preserve accessible, emergency, and maintenance access.
- At driveways, maintain trail continuity, sight distance, and a consistent surface/grade where practicable.
- Road Shared Trail - existing roads: one marked on-road bike lane, typically 5 feet wide, may be used with no physical barrier; width may be determined by available space.
- Road Shared Trail - new development: provide one marked bike lane, typically 5 feet wide, with a solid white stripe, "Share the Road" signage where appropriate, and speed-management treatment consistent with City policy and context.

7. ACCESSIBILITY, CORRIDORS & ADJACENT DEVELOPMENT

- Accessible routes shall comply with applicable federal and state accessibility requirements.
- Trail Corridors shall accommodate the tread, 6-inch concrete borders where required, clearing / landscape / snow-storage areas, drainage, grading, maintenance access, fencing, revegetation/landscaping, and approved utilities.
- Fences and landscaping shall preserve operating width, sight distance, drainage, and maintenance access and shall not create hazardous projections or root/irrigation conflicts.
- Privately owned required trails with public access shall have recorded documents assigning construction, maintenance, repair, replacement, snow removal where applicable, insurance, and access responsibilities.
- Future connections to adjoining undeveloped property shall be preserved.

8. TRAILHEADS, CONSTRUCTION & ACCEPTANCE

- Trailheads shall be sized for expected use and may include parking, bicycle parking, signs, benches, waste receptacles, restrooms, water, lighting, and emergency location identification.
- Major trailheads should accommodate emergency response/staging where practicable. Lighting, if provided, shall comply with City dark-sky requirements.
- Preliminary and Final Plats: All required or planned Trail Corridors affecting a development shall be shown on the preliminary plat or preliminary development plan and carried forward to the final plat. The preliminary submittal shall identify trail classification, Trail Corridor width, proposed alignment, and connections to existing or planned trails and adjoining property. The final plat shall show the approved Trail Corridor and the applicable dedication, public right-of-way, or perpetual public trail easement. A Trail Corridor approved at preliminary plat shall not be removed, materially relocated, or materially reduced at final plat except through an approved modification consistent with the Trail Code.
 - Preconstruction plans shall show trail classification, alignment, Trail Corridor, profile/grades, drainage, pavement section, concrete borders where required, crossings, utilities, structures, signage, access control, and restoration.

- The City may require staking, inspections, compaction/material testing, and correction/retesting of failed work.
- Acceptance requires completion of punch-list items, testing, restoration, required as-builts, applicable recorded dedication/right-of-way/public-access documents, and closeout documents. Dedication or recording does not itself constitute City acceptance.
- Developer-constructed trails remain subject to applicable improvement warranty requirements. Maintenance responsibility shall be established before final approval or acceptance.

9. DEFERRED CONSTRUCTION / PAYMENT IN LIEU

Where authorized by City Code and Utah law, the City may approve deferred trail construction or a proportionate payment when immediate construction would create an isolated segment, conflict with a planned public project, or otherwise be impracticable. The City Engineer shall approve the cost basis and the City Attorney shall review the legal form and authority.

10. ELK RIDGE STANDARD CROSS SECTIONS

The following cross-section sheet is incorporated as the graphic standard for these requirements. Dimensions shown are minimums unless noted. Trail Corridor dimensions shall be applied as shown; final alignment and site-specific engineering remain subject to City Engineer approval consistent with the Trail Code.

ELK RIDGE CITY TRAIL CONSTRUCTION & DEVELOPMENT STANDARDS STANDARD CROSS SECTIONS – ELK RIDGE CITY

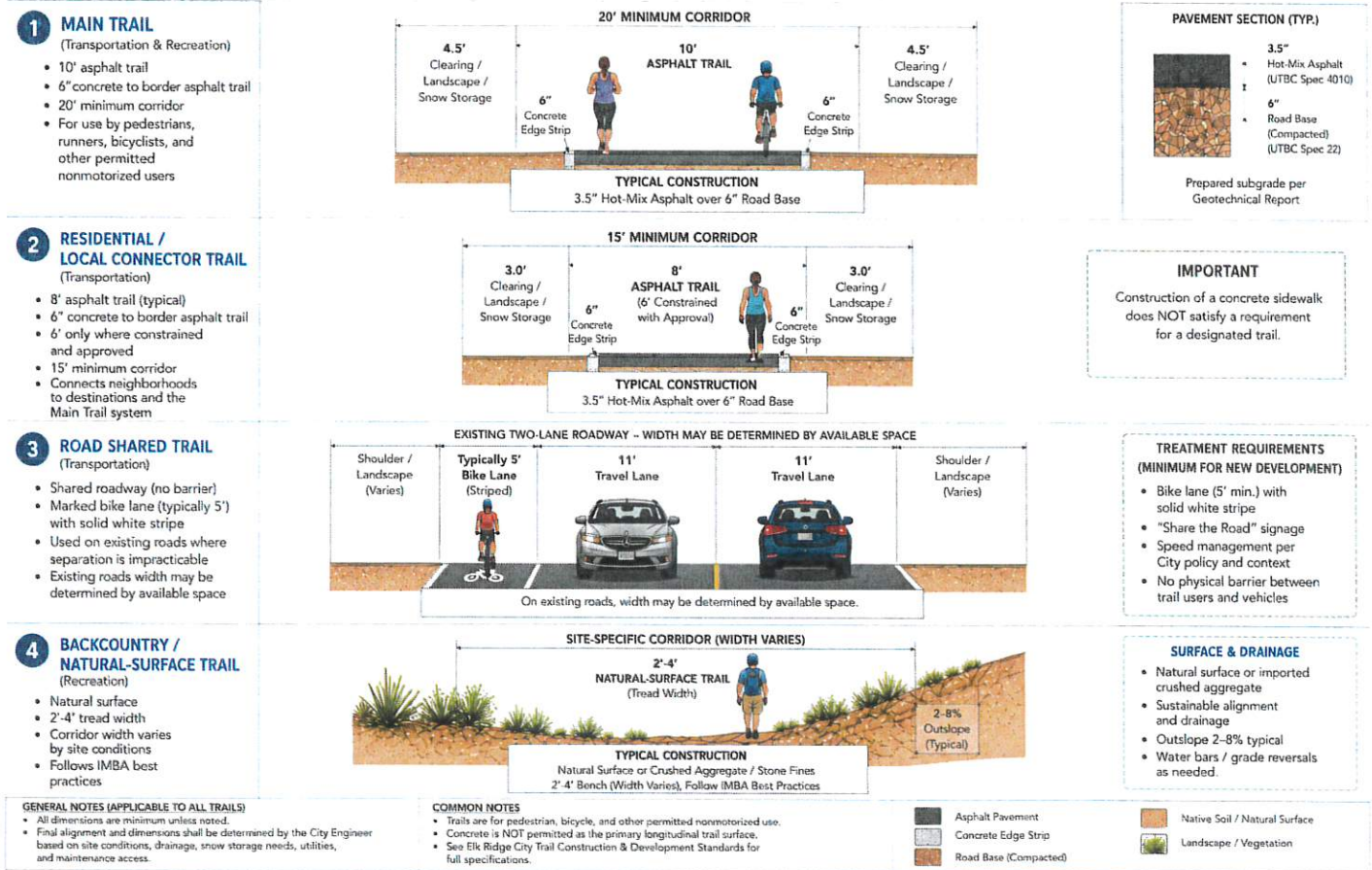


Figure TR-1 through TR-4 — Elk Ridge City Standard Trail Cross Sections (Main, Residential / Local Connector, Road Shared, and Backcountry / Natural Surface)

11. STANDARD DETAIL SCHEDULE

Detail	Description
TR-1	Main Trail - 10' asphalt + 6" concrete border each side / 20' minimum Trail Corridor / 4.5' edge area each side
TR-2	Residential / Local Connector - 8' typical asphalt + 6" concrete border each side / 15' minimum Trail Corridor / 3.0' edge area each side; 6' constrained tread option
TR-3	Road Shared Trail - existing two-lane road; one marked bike lane, typically 5'; no physical barrier
TR-4	Backcountry / Natural-Surface Trail - 2'-4' bench
TR-5	Trail-to-street crossing / curb-ramp transition
TR-6	Driveway crossing
TR-7	Bollard / emergency access
TR-8	Trail drainage / culvert / rolling dip
TR-9	Trail fencing / clearance
TR-10	Trailhead signing / emergency location marker

12. DRAFTING BASIS & ADOPTION REVIEW

- These standards implement the Elk Ridge City Trail Code and the Trails, Parks, and Open Space Master Plan. They provide the technical construction requirements for the trail classifications and Trail Corridors established by City Code.
- City Engineer: confirm 3.5-inch asphalt / 6-inch road-base section, compaction, mix, geotechnical requirements, grades, drainage, sight distance, and standard details.
 - City Attorney: review consistency with the Trail Code provisions governing dedication, public right-of-way, perpetual public trail easements, City acceptance, deferred construction/payment-in-lieu, and development exactions.
 - Planning / City Council: confirm consistency with adopted trail classifications, Trail Corridor widths, asphalt primary-surface policy, concrete-border requirements, and Road Shared Trail policy.

13. ADOPTION / REVISION RECORD

Action	Date	Reference
Planning Commission Review	_____	_____
City Engineer Review	_____	_____
City Attorney Review	_____	_____
City Council Adoption	_____	Resolution / Ordinance _____