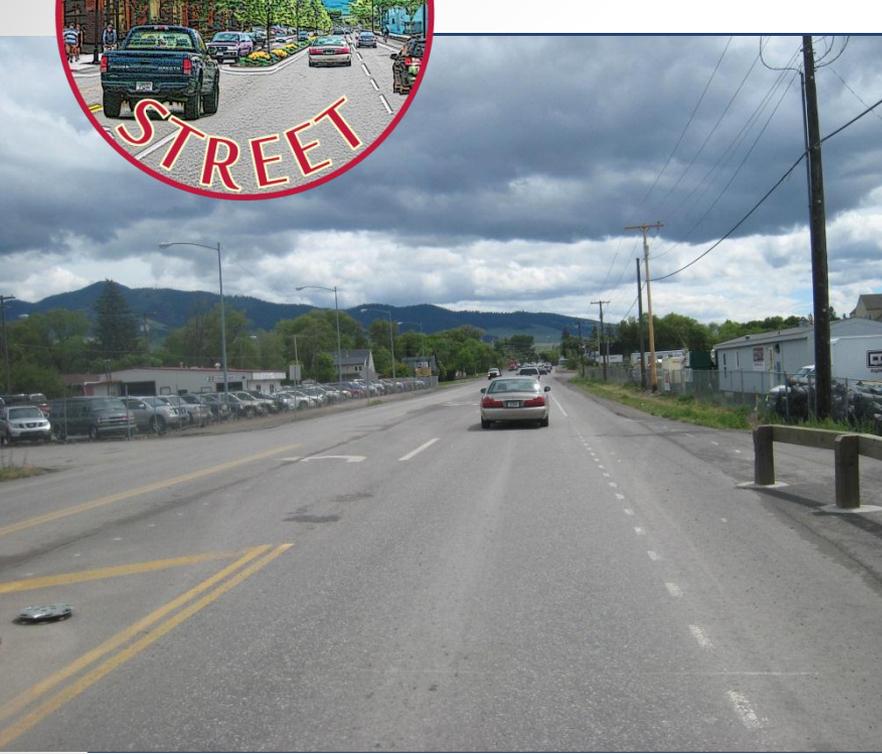


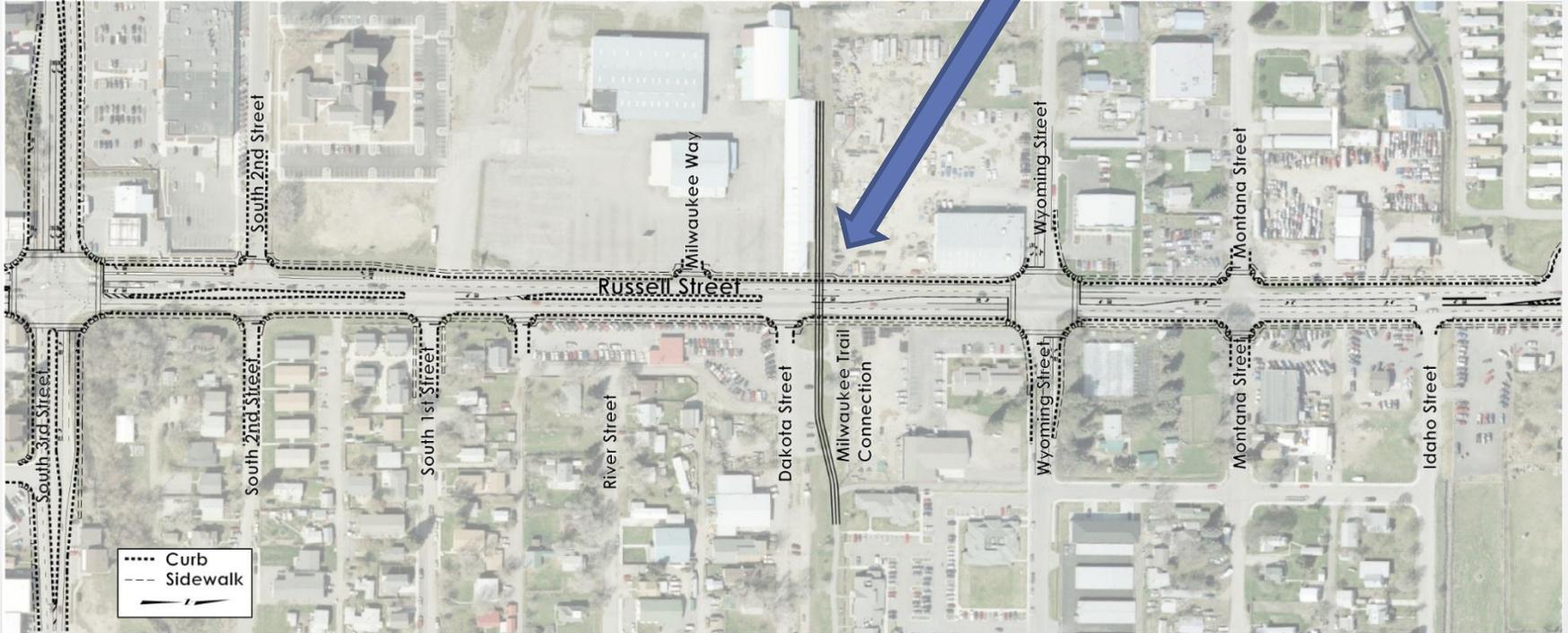
Russell Street



1111 E. Broadway,
Missoula, Montana 59802
406.728.4611



Milwaukee Trail Crossing



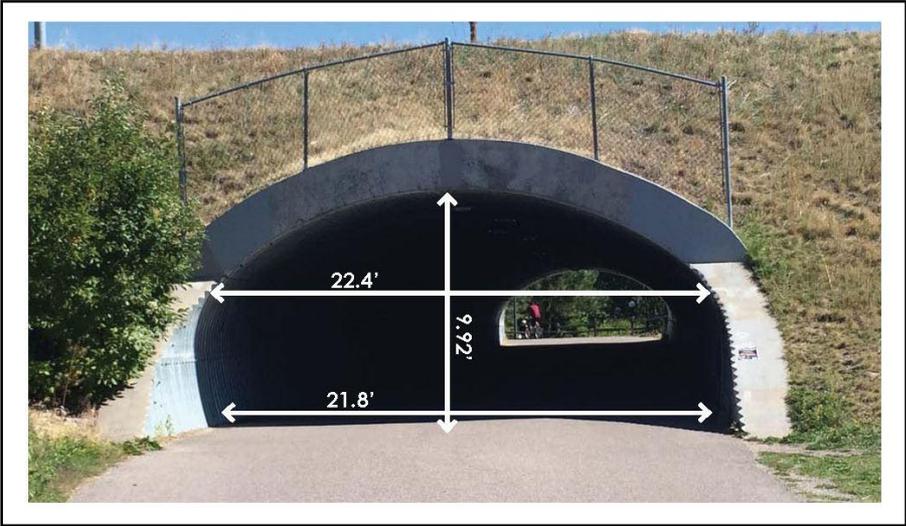


Milwaukee Trail Underpass

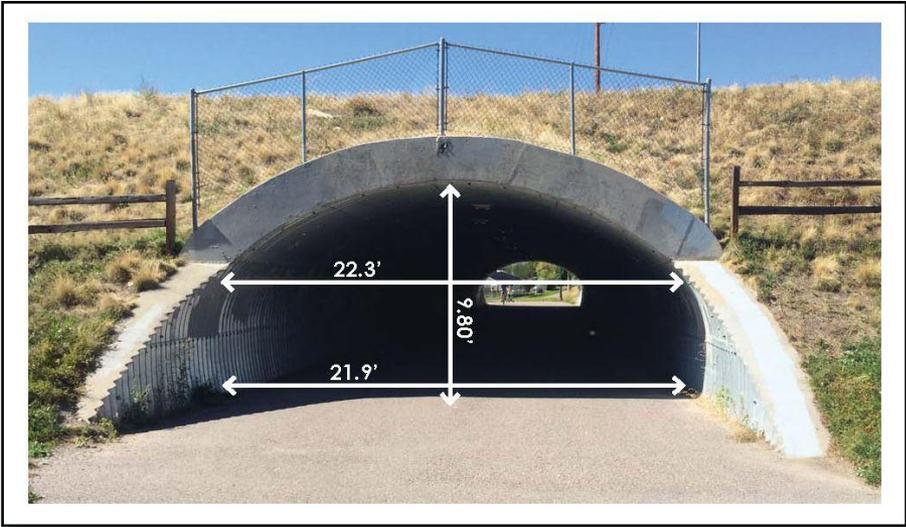
Things to Consider

- Patterns, colors and retaining wall types are interchangeable between options
- There is some flexibility in retaining wall height and placement
 - North side walls can be shortened/shifted using 2:1 slopes
 - South side walls are restricted by connections
- Underpass length is uniform for all options at about 96 feet
- The transmission line is expensive to alter and there isn't a place to relocate it

Comparison: Orange Street Underpass



West Side



East Side

Precast Concrete Arch



FS 13578 Formliner Color



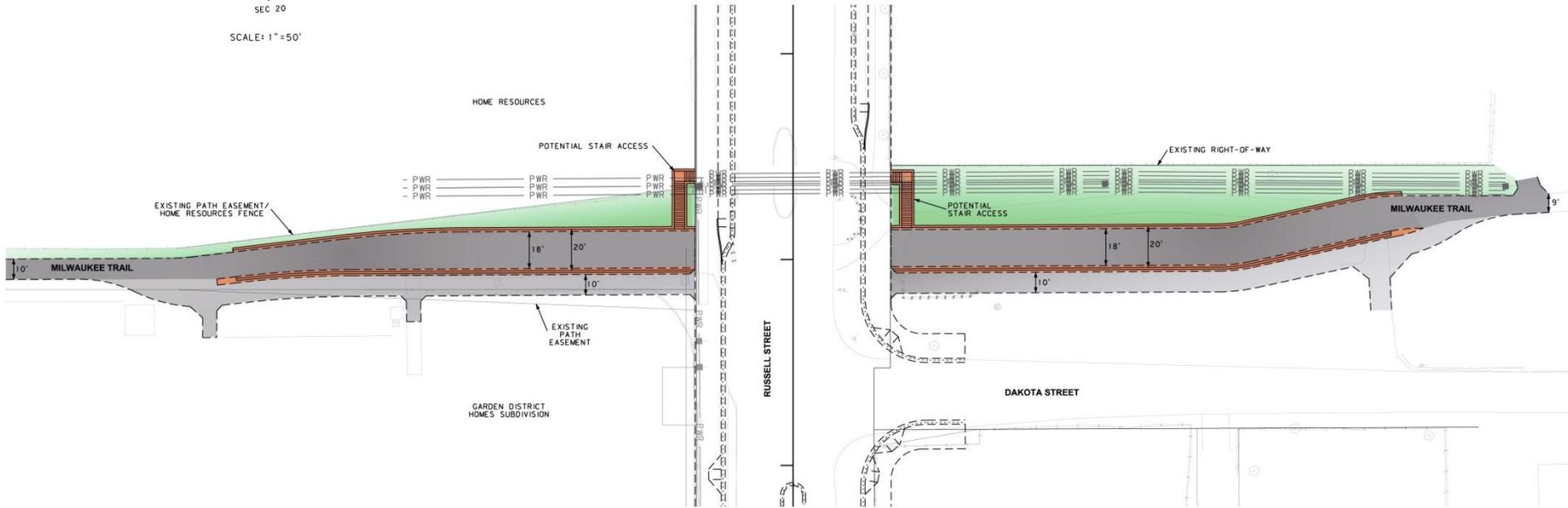
FS 27040 Railing Color



Scott System- Teton Drystack

Precast Concrete Arch

T. 13 N. R. 19 W.
SEC 20
SCALE: 1"=50'





Precast Concrete Arch

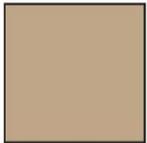
Pros

- Possibly no impact to overhead power
- Open bottom could better accommodate drainage features
- Structural type can accommodate longer spans with increased concrete thickness and/or earth cover
- Arch may provide a more desirable appearance
- Arch provides greater clearance along the path centerline
- Provides a wider crossing
- Second most expedited construction

Cons

- Foundations are more complex than the box culvert
- Slightly more expensive than the box culvert
- The wider crossing may require right-of-way acquisition from Home Resources to incorporate a stair access

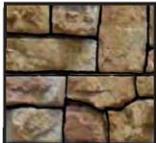
Box Culvert



FS 20460 Concrete Color



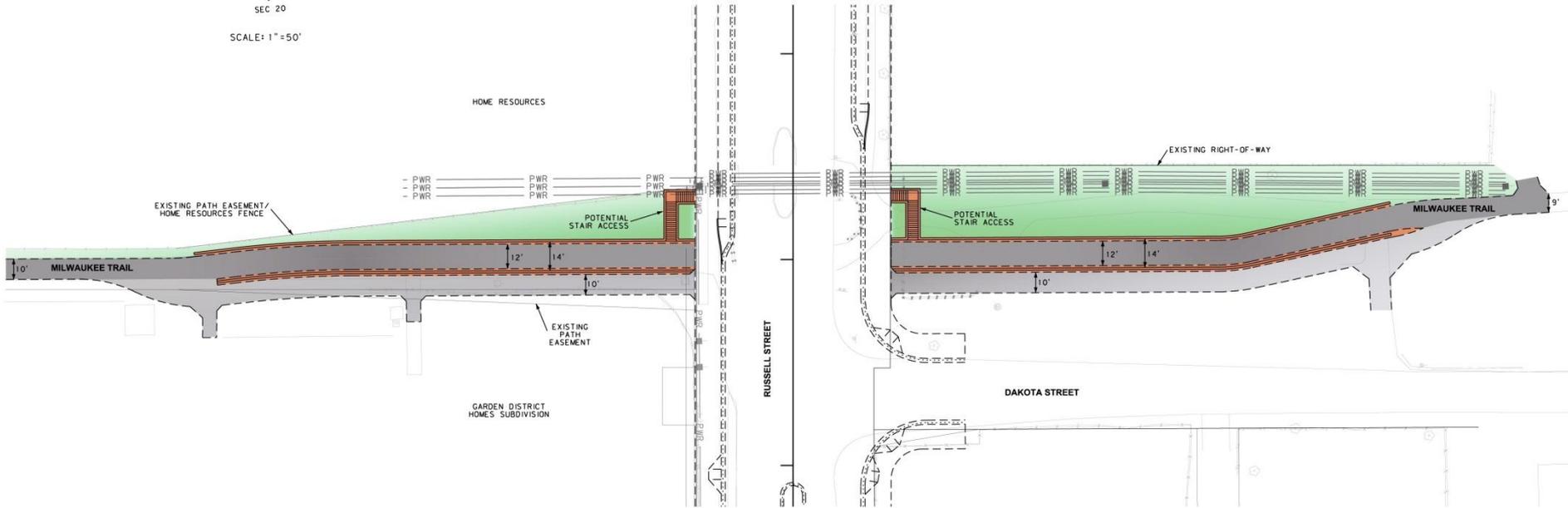
FS 27040 Railing Color



Redi-Rock- 41" Block Series

Box Culvert

T. 13 N. R. 19 W.
SEC 20
SCALE: 1"=50'





Box Culvert

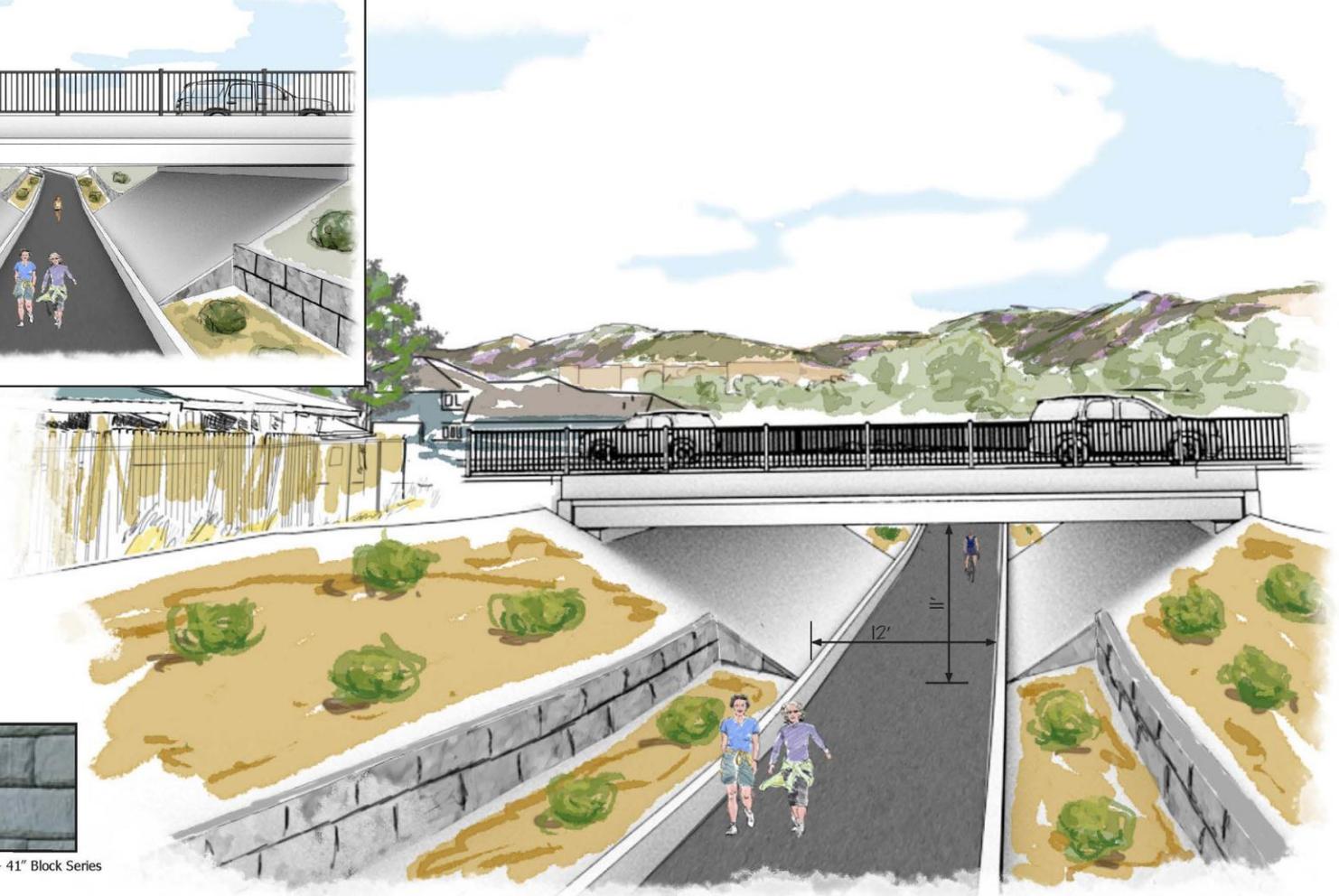
Pros

- Possibly no impact to overhead power
- Lowest cost option
- A separate foundation is not required
- Narrow footprint
 - More space for connections
 - Limited right-of-way needed from Home Resources for a possible stair access
- Most expedited construction

Cons

- Span is limited to 14 feet for standard sections
- Narrowest option
- Drainage a bit more difficult

Bridge with Concrete Sloped Embankment



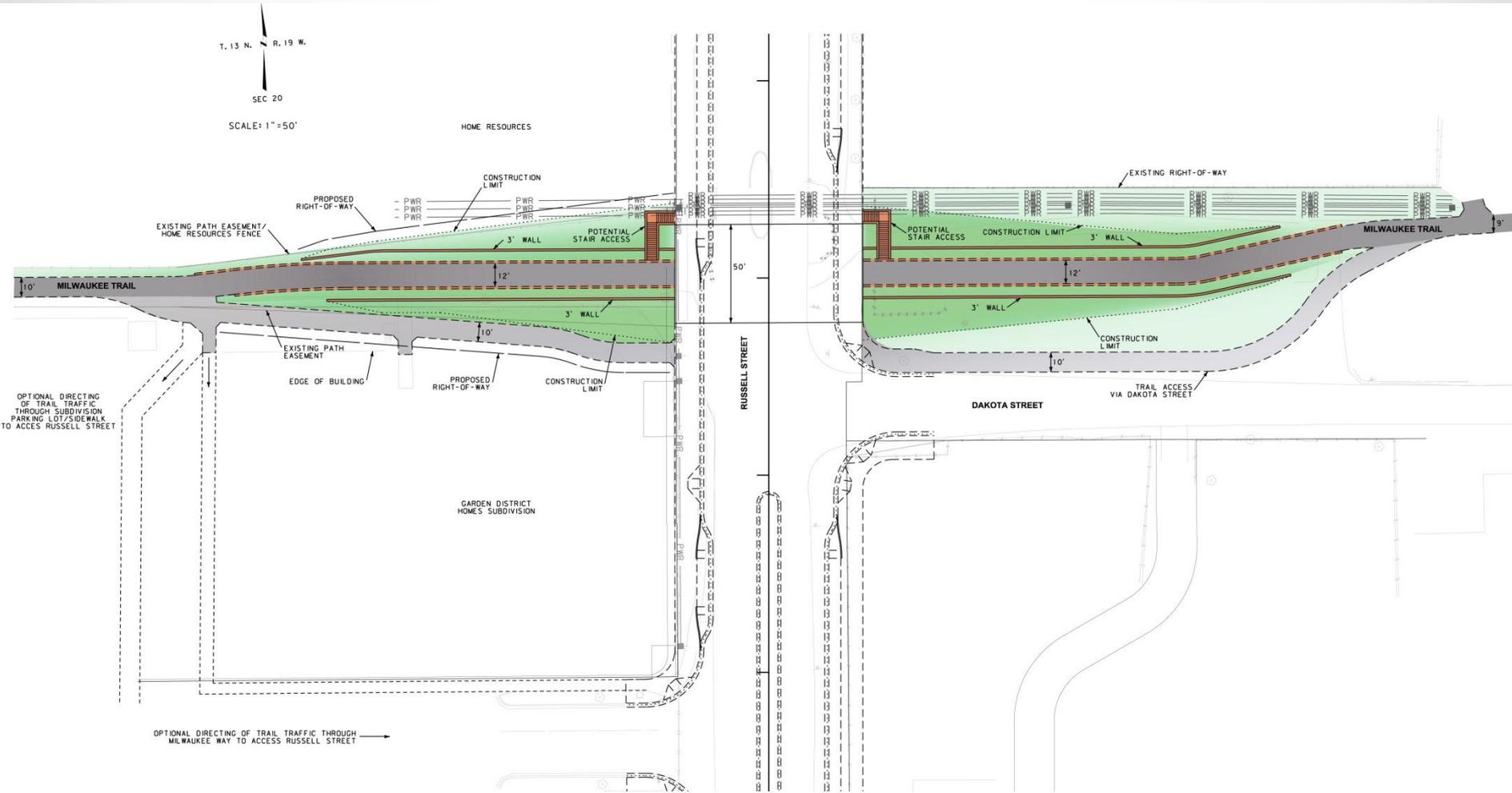
27040 Railing Color



Redi-Rock-41 Block Series

PRELIMINARY

Bridge with Concrete Sloped Embankment





Bridge with Concrete Sloped Embankment

Pros

- Open bottom could better accommodate drainage features
- Wide crossing can create the most open space

Cons

- Most expensive option
- Requires special design around transmission poles
- Requires longer ramps due to superstructure depth
- Slowest construction
- Wide footprint
 - Will require right-of-way acquisition from Home Resources
 - Will require right-of-way acquisition from Garden District Homes Subdivision for path connection
 - Potential loitering areas

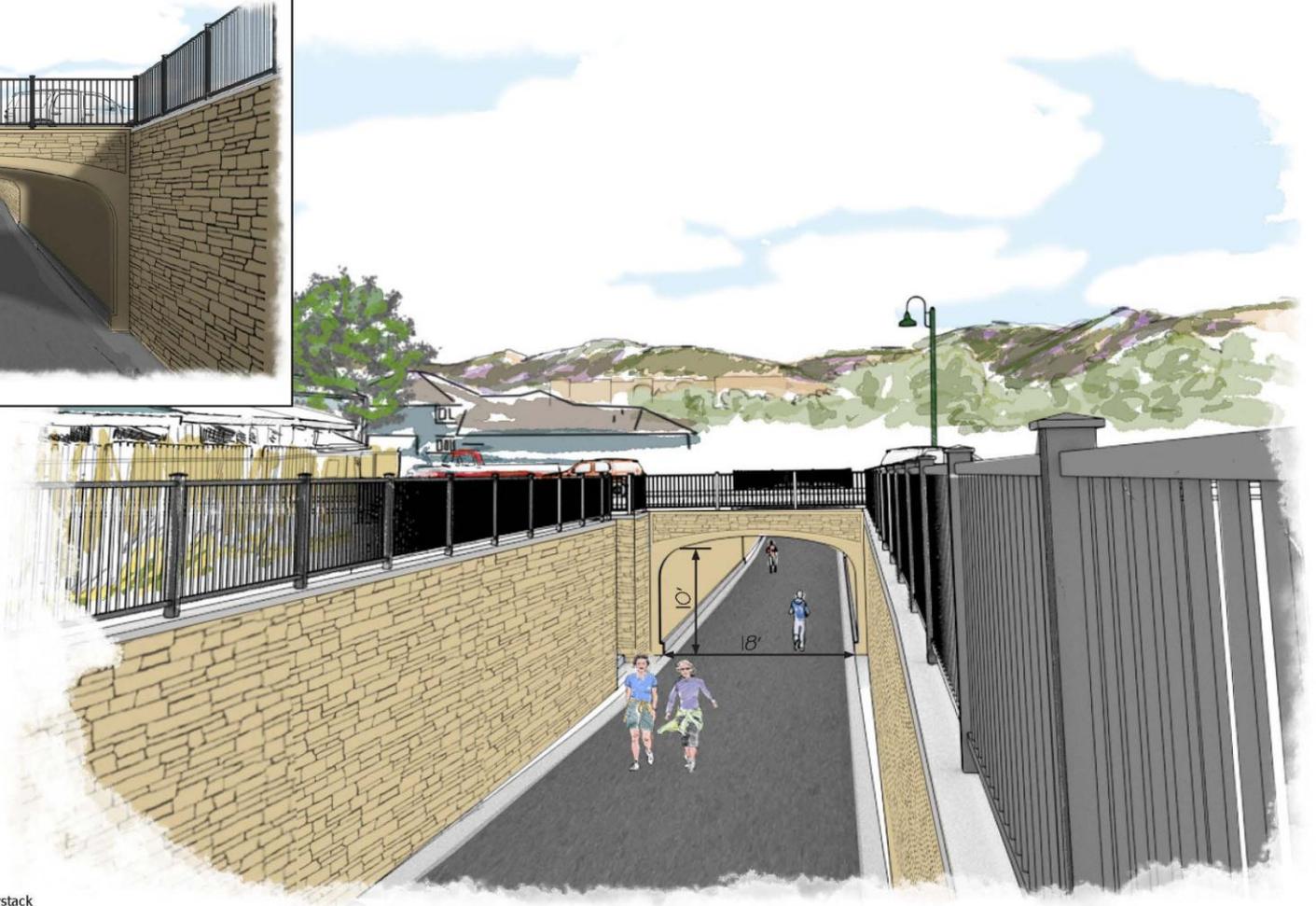


Milwaukee Trail Underpass

- Option?
- Connection?
- Pattern, color and retaining wall type?



Precast Concrete Arch



FS 13578 Formliner Color

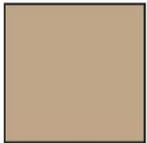


FS 27040 Railing Color



Scott System- Teton Drystack

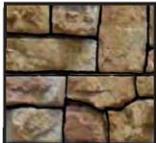
Box Culvert



FS 20460 Concrete Color

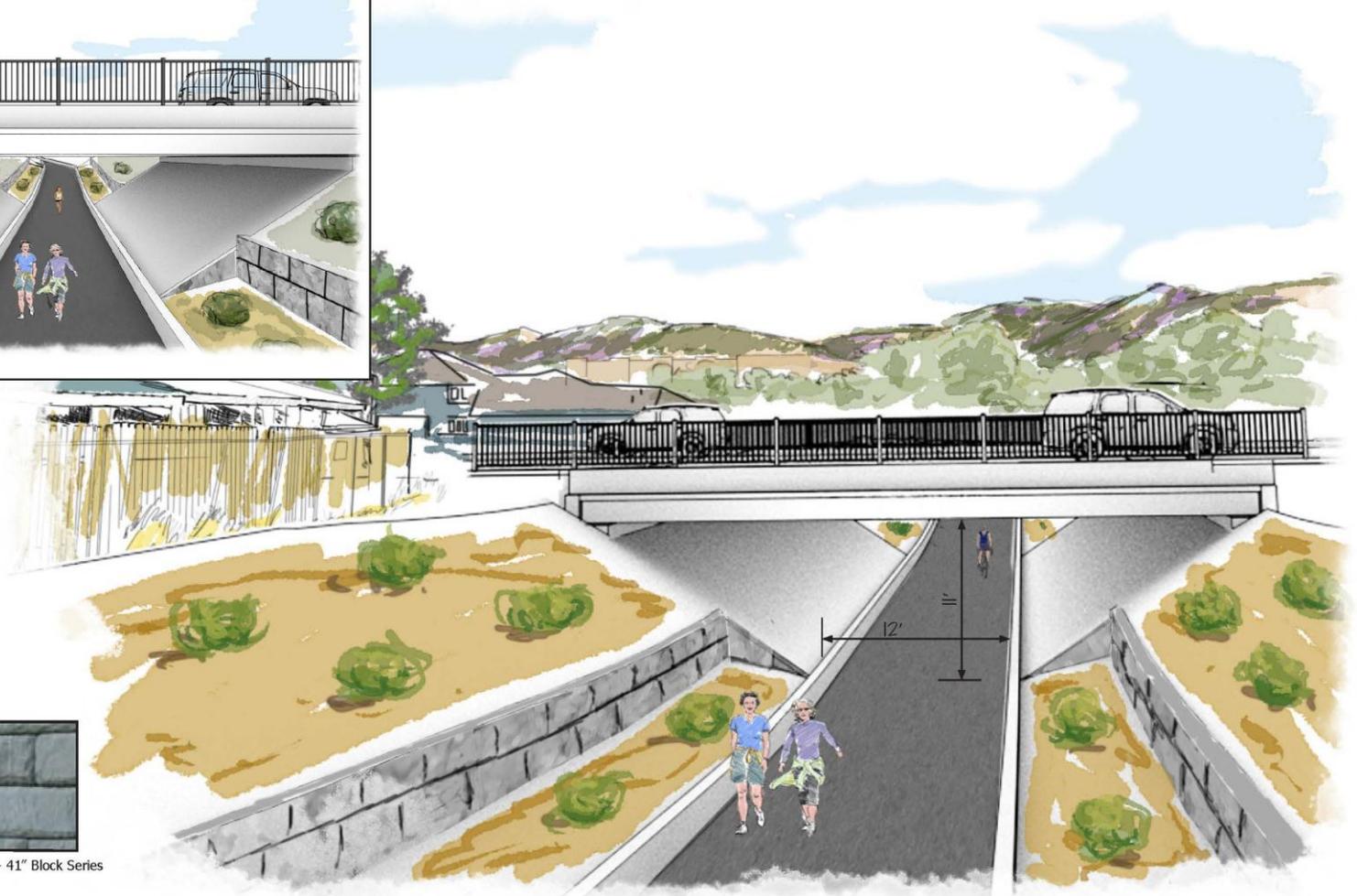


FS 27040 Railing Color



Redi-Rock- 41" Block Series

Bridge with Concrete Sloped Embankment



27040 Railing Color



Redi-Rock-41 Block Series



Contact Information

- Website

<http://www.mdt.mt.gov/pubinvolve/russell>

- Contact Info

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