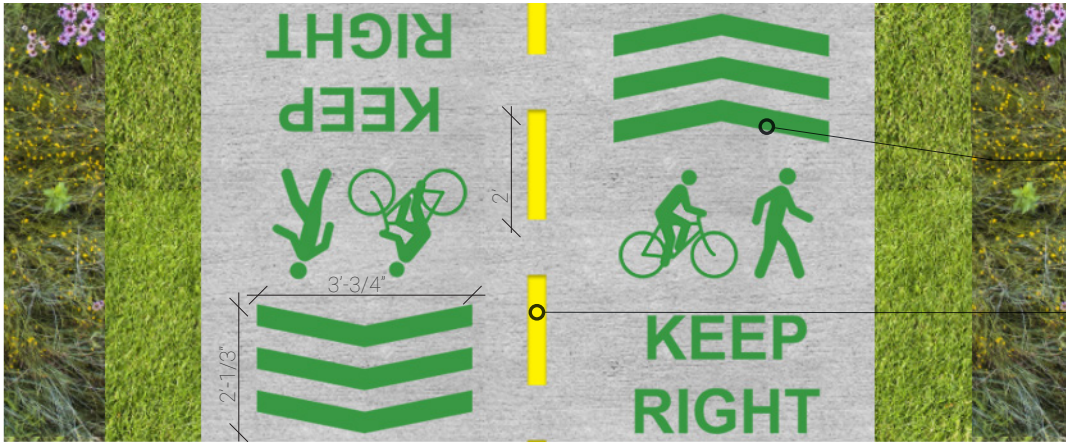


# 6.8 HARDSCAPE TOOLKIT

## PAVING AND STRIPING

In order to give city staff the most flexibility, this Trail Design Strategy proposes several a la carte features that can be added on to the baseline standards. These features can be used with any Trail Capacity width.

- 1. Lane Striping:** The striping indicated in this document has been used as a pilot project in areas with high levels of user conflict. The green and yellow-colored thermoplastic paint consists of lane dividers, chevron directional indicators, and “keep right” text. This tool can be used at the discretion of staff where there is a perception of overcrowding.
- 2. Training Trail:** A training trail can help San Antonio competitive runners achieve their long distance training goals. City staff can determine the best location and distance for a training trail and promote its use to the public. One of the following standard race distances can be used to plan a training trail: 10k, Half Marathon, Marathon.

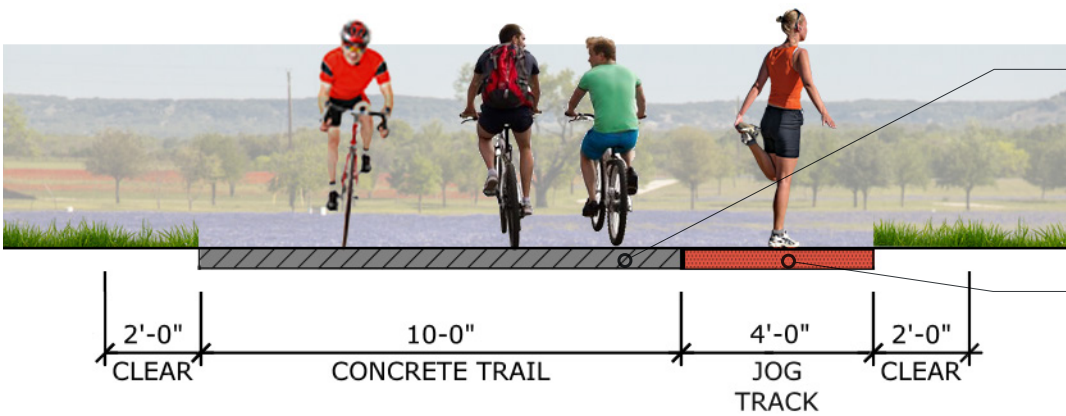


GREEN  
THERMOPLASTIC  
DIRECTIONAL  
STRIPING

YELLOW  
THERMOPLASTIC  
LANE STRIPING

### LANE STRIPING

- CAN BE USED ON ALL TRAIL CAPACITY WIDTHS
- FOR USER CONFLICT AREAS (CITY STAFF TO DETERMINE)



CONCRETE, MEDIUM  
BRUSH

- CONTROL JOINTS AND  
EXPANSION JOINTS TO BE  
DETERMINED BY SOIL TYPES

POLYMERIC ALL-  
WEATHER RUNNING  
TRACK



### TRAINING TRAIL

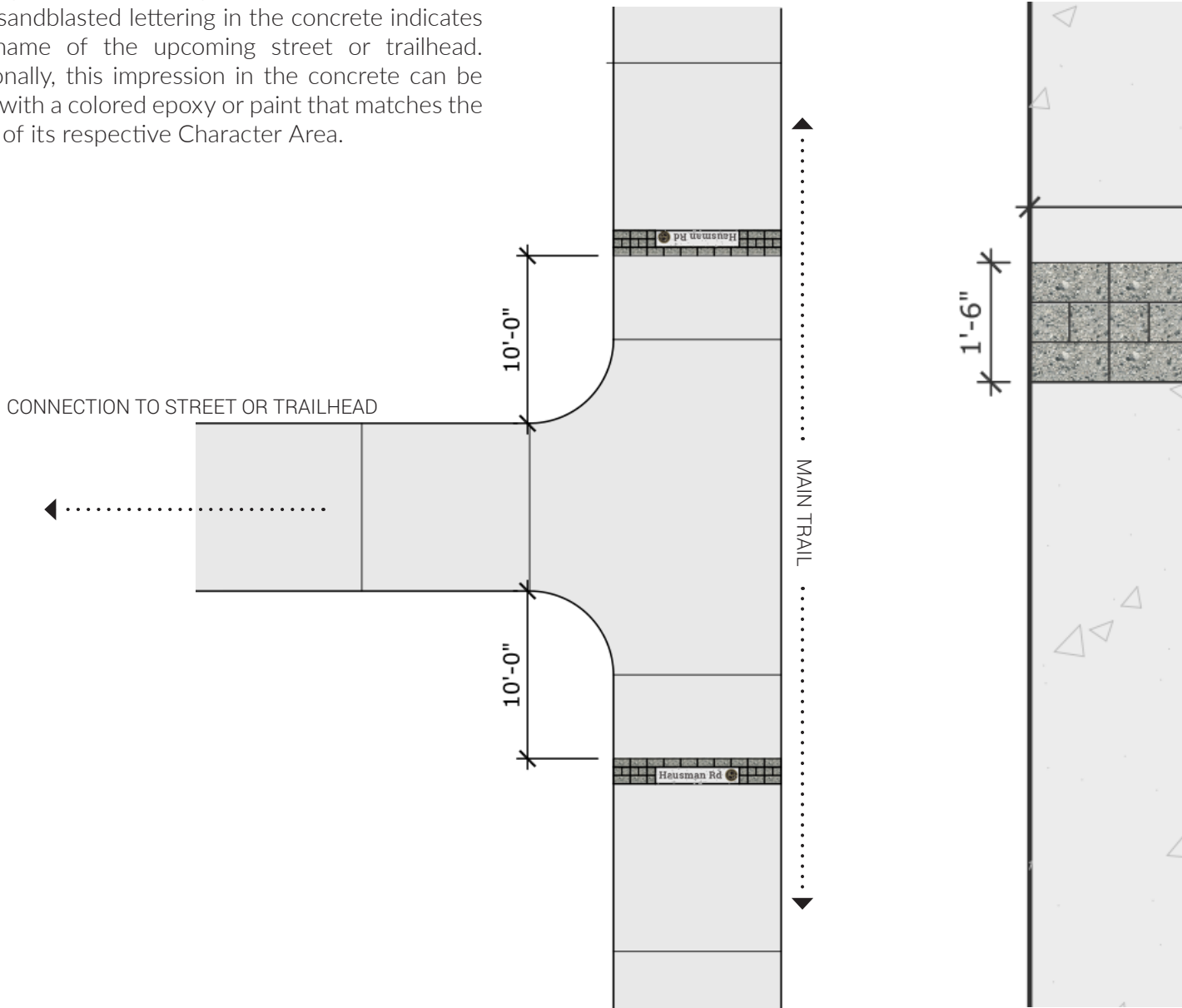
A training trail can help achieve San Antonio runner's achieve their long distance running goals. One of the following standard race distances can be used to plan a training trail:

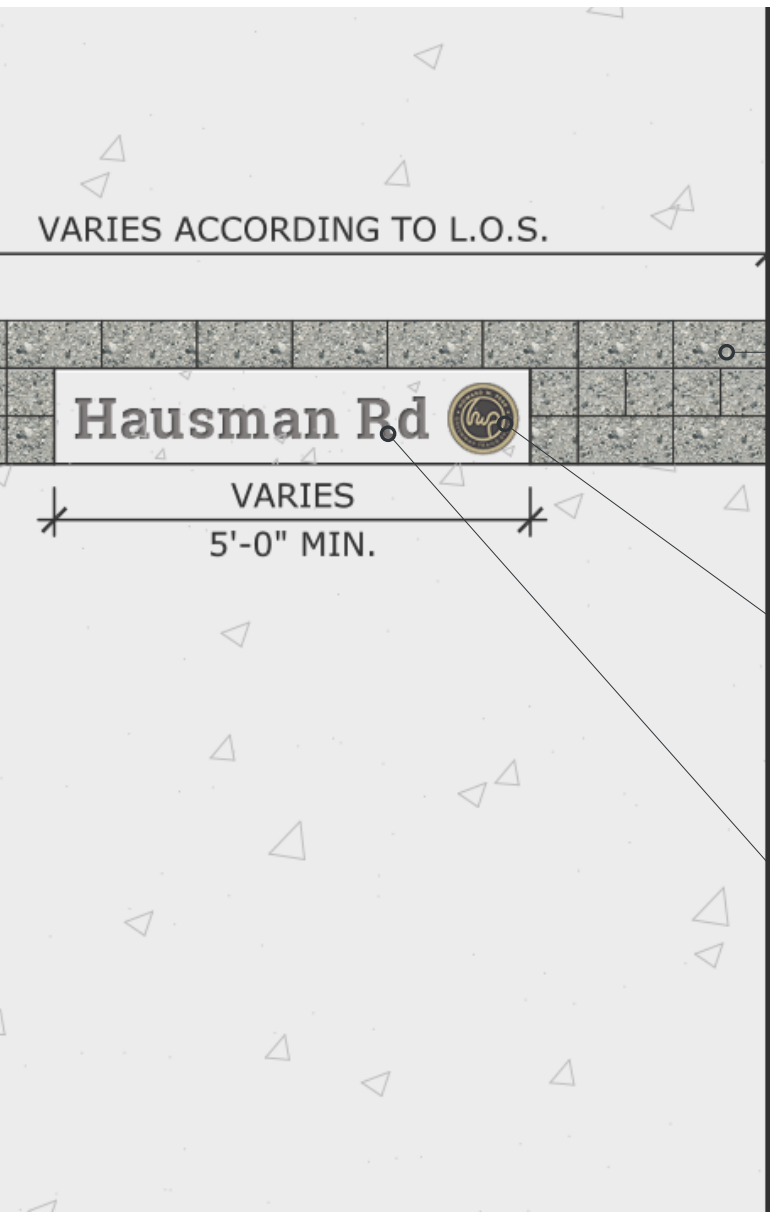
- 5K
- 10K
- Half Marathon
- Marathon

City staff can determine the best location and distance for a training trail based on future specific assessment of demand

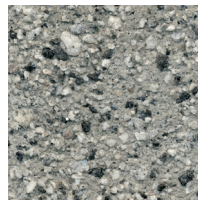
## IN-GRADE SIGNS

In order to increase a sense of place and user's orientation, this Trail Design Strategy recommends the use of in-grade signs. These features will provide better communicate major street crossings and spur trails that lead to important facilities, such as Tier 1 trailheads. These features entail an in-grade paver band that spans the width of the trail with sandblasted lettering in the concrete indicates the name of the upcoming street or trailhead. Optionally, this impression in the concrete can be filled with a colored epoxy or paint that matches the color of its respective Character Area.





6"X6" AND 6"X12" GRAY GRANITE PAVERS



METAL TRAIL SYSTEM EMBLEM IN CONCRETE



SANDBLASTED LETTERING SIGNIFIES TRAILHEADS AND MAJOR ROADS



- FILLED WITH CUSTOM COLOR EPOXY SIGNIFYING CHARACTER AREA

- EXAMPLE PHOTO LOCATED IN CONFLUENCE PARK

## EXISTING RETAINING WALLS

There are a number of existing retaining wall types being used throughout the trail system, including stamped concrete with animal and plant representations, gunnite walls, stacked limestone, and plain concrete.

Walls recommended to be discontinued:

- Gunnite Walls- typically used for pools.
- Walls with non-unified imprints
- Walls that represent natural scenes



Concrete scene wall



Gunnite wall

## PROPOSED RETAINING WALLS

### GRAVITY WALLS- BOARD FORM AND STAMPED COLOR CONCRETE

Most common wall type along the existing trail system. Due to height restrictions, this wall depends on its own weight for required stability. Gravity walls require footings below finished grade, so height of the retaining wall will affect the size of the footings. Most flatwork contractors installing trails can construct this type of retaining wall successfully, which makes it a cost-effective option. Staining and/or stamping concrete can be used to create contrast for wayfinding, notification, or aesthetics. Follow CoSA standard details for thickness, reinforcing, drainage, and concrete standards.

### GABION WALLS

Natural appearance and cost-effective retaining walls that can be adapted to various grades, existing materials, vegetation, and drainage outfalls. Gabion walls are effective in most heights and can be stair-stepped to heights over 20'. They can be used in areas with significant grade changes and unstable soil. Gabion walls can be used to hinder erosion, dissipate energy from flowing water, and support drainage structures. The voids between the aggregate in the gabion wall allow water to drain freely, assisting with erosion and sedimentation. Gabion walls conform to ground movement making them a great option where movement may be an issue.



Board form concrete



Stamped color concrete



Gabion wall

## CRIB WALLS

Walls are constructed from precast concrete components that interlock to form an open grid. The open spaces are filled with free draining gravel. Vegetation can easily integrate into the wall, which provides an aesthetically pleasing appearance. Crib walls are effective in various heights and can easily transition to match existing grades. Crib walls can serve multiple purposes, the materials are readily available, and are designed to be free draining. Crib walls require increased maintenance as compared to standard cast-in-place retaining walls. Significant toe down depth is required for crib wall applications and may require a reinforced concrete footing.



Crib wall

 **Initial Cost**  
\$\$

## LIMESTONE QUARRY BLOCK

Limestone quarry block retaining walls, also called “butter block”, are commonly used on the Greenway and are recommended for continued use. Blocks are typically sawed at the ends and have a rough face on the sides that are adjacent to soil or public facing. They are an economical and attractive solution for retaining walls, and can integrate stairs, ledges, and tiers easily. With the appropriate height and batter, they easily function as seat walls and would be appropriate adjacent to Tier I and II trailheads.



Limestone Quarry Block

 **Initial Cost**  
\$-\$\$

## RETAINING WALL BRANDING

A unified theme of hardscape branding would help convey to users that they are on the Howard W. Peak Greenway Trail System. Furthermore, trail users would benefit from additional vertical branding opportunities that horizontal branding, such as the in-grade trail marker. This greenway’s emblem, combined with the name of the corresponding Character Area, can be applied consistently to every type of retaining wall.

CREEK CHARACTER AREA AND  
METAL EMBLEM SET INTO  
CONCRETE RETAINING WALL

