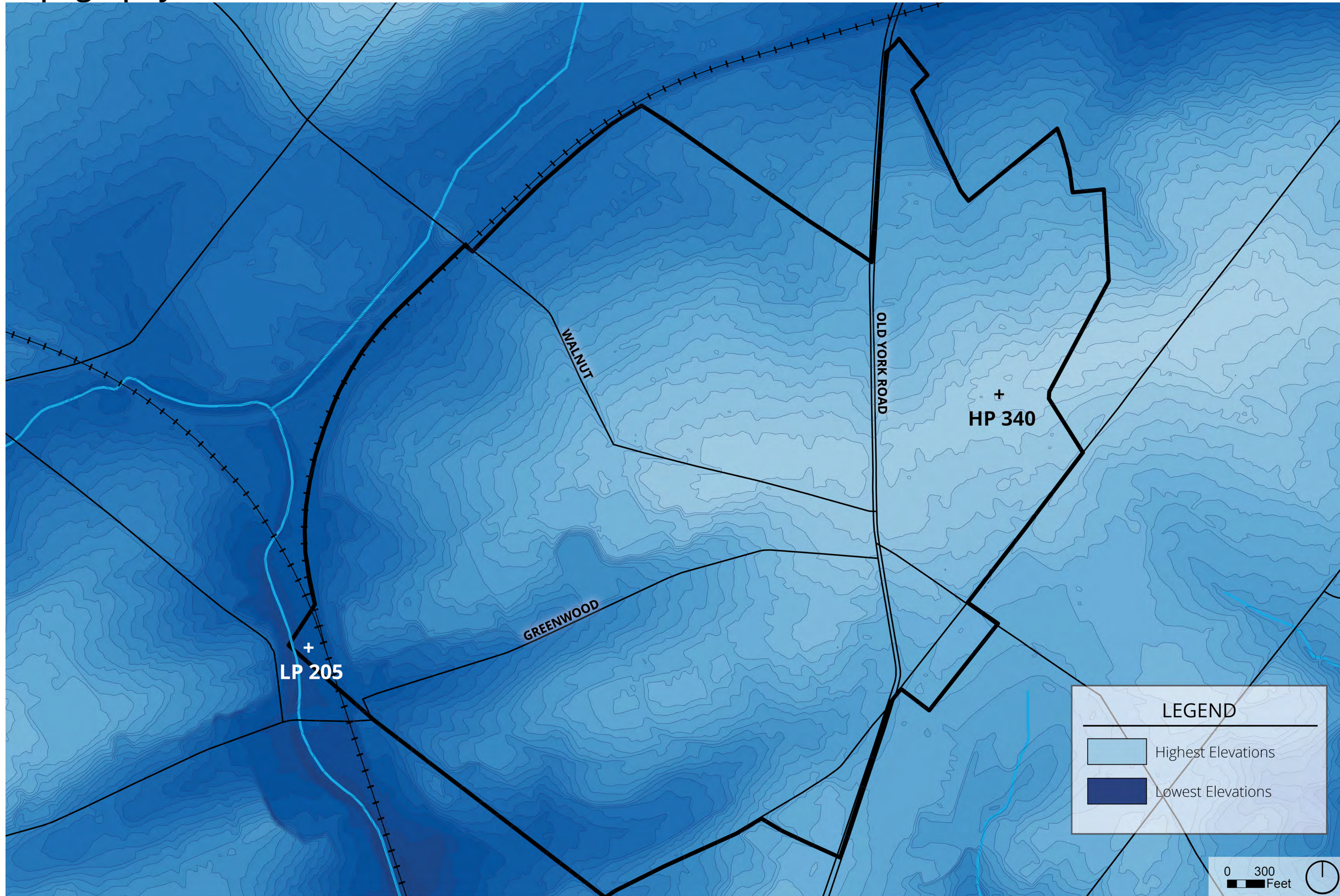


## Topography



## Hillshade



Hillshade is a three-dimensional representation of the Earth's surface, with the sun's position taken into account for shading purposes. In this hillshade, we can better visualize the topography of Jenkintown. Especially of note is the valley that Greenwood Ave. sits in.

## Elevation

- Jenkintown is located on a hilltop. Its point of highest elevation (340 feet above sea level) is located in the Northeast corner near the intersection of Homestead and Newbold, and the point of lowest elevation (205 feet above sea level) is located near the Jenkintown train station.
- The areas of highest elevation are located around the commercial corridor and are divided in half by Old York Road.
- Jenkintown's hilltop location offers several views of the surrounding valley.

## Topographic Views



Greenwood Looking North



Greenwood Looking South



Old York Road Looking North



Old York Road Looking South

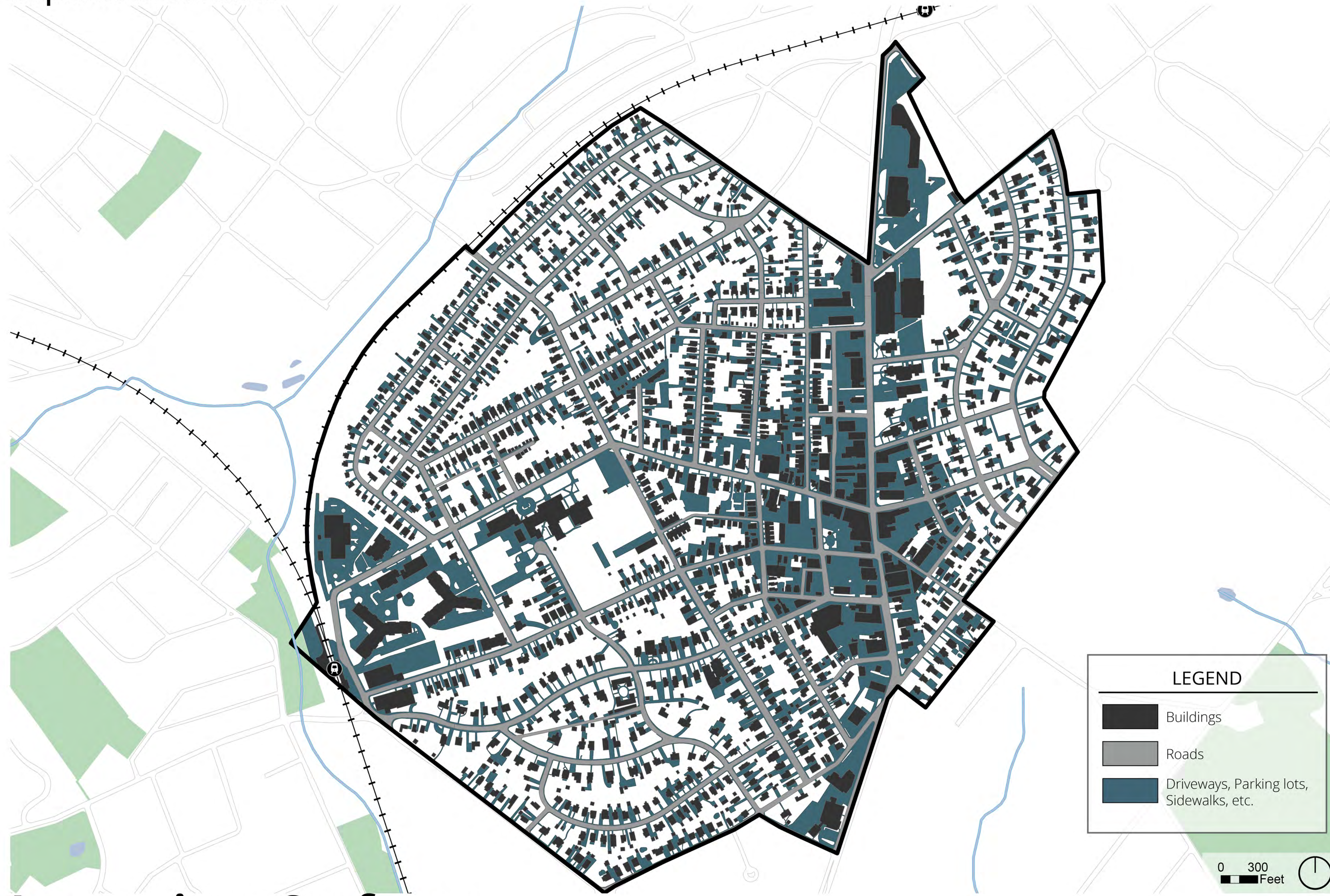


Looking Southwest on Walnut from West



Looking Northwest on West from Cedar

# Impervious Surfaces



# Impervious Surfaces

- Jenkintown is built out, and heavily covered in impervious surfaces. They cover approximately 55% of the municipality.
- Rainwater that falls on impervious surfaces becomes stormwater runoff. Stormwater runoff can lead to erosion from fast water speeds. It can also lead to waterway contamination if it picks up pollution or litter along the way.
- A decrease in impervious surfaces, and replacement with pervious surfaces such as greenspace or permeable pavers, could lead to less stormwater runoff and more on-site water infiltration.
- There are numerous opportunities for de-paving and introduction of green, permeable spaces throughout the borough.

# Examples



Water collecting on impervious sidewalk and road



Wide expanse of impervious parking lot at Jenkintown train station

# De-Paving Opportunities



Road diet opportunity at the intersection of Cheltena, Linda Vista, and Cedar



Road realignment could lead to new pocket park at intersection of Rydal + Old York.



Expansion of library parking green buffer and additional tree plantings.



# Slope



# Slopes

- Jenkintown is built out on even the steepest of slopes
- Slopes over 25% are at increased risk for erosion
- The flattest land in Jenkintown is located along the commercial corridor, while the more variable slopes are located on residential property
- One of Jenkintown's strategies for erosion control is to educate property owners with steep slopes about how they can revegetate their slopes with deep rooted vegetation

# Slope Development

## Gradual Slopes:

- 0-2% = Best area for building placement and ADA parking
- 2-5% = Slope acceptable for parking areas and plazas
- 5-8.33% = Maximum range for ADA accessible ramps

## Moderate Slope:

- 8.33-15% = Maximum range for roads to parking areas

## Steep Slopes:

- 15-25% = Limited recreational uses
- 25-33% = Maximum range for mowable areas
- 33+ % = Areas unsuitable for development without significant modification



Steep Slopes at Jenkintown Station



Steep Slopes at Jenkintown Station

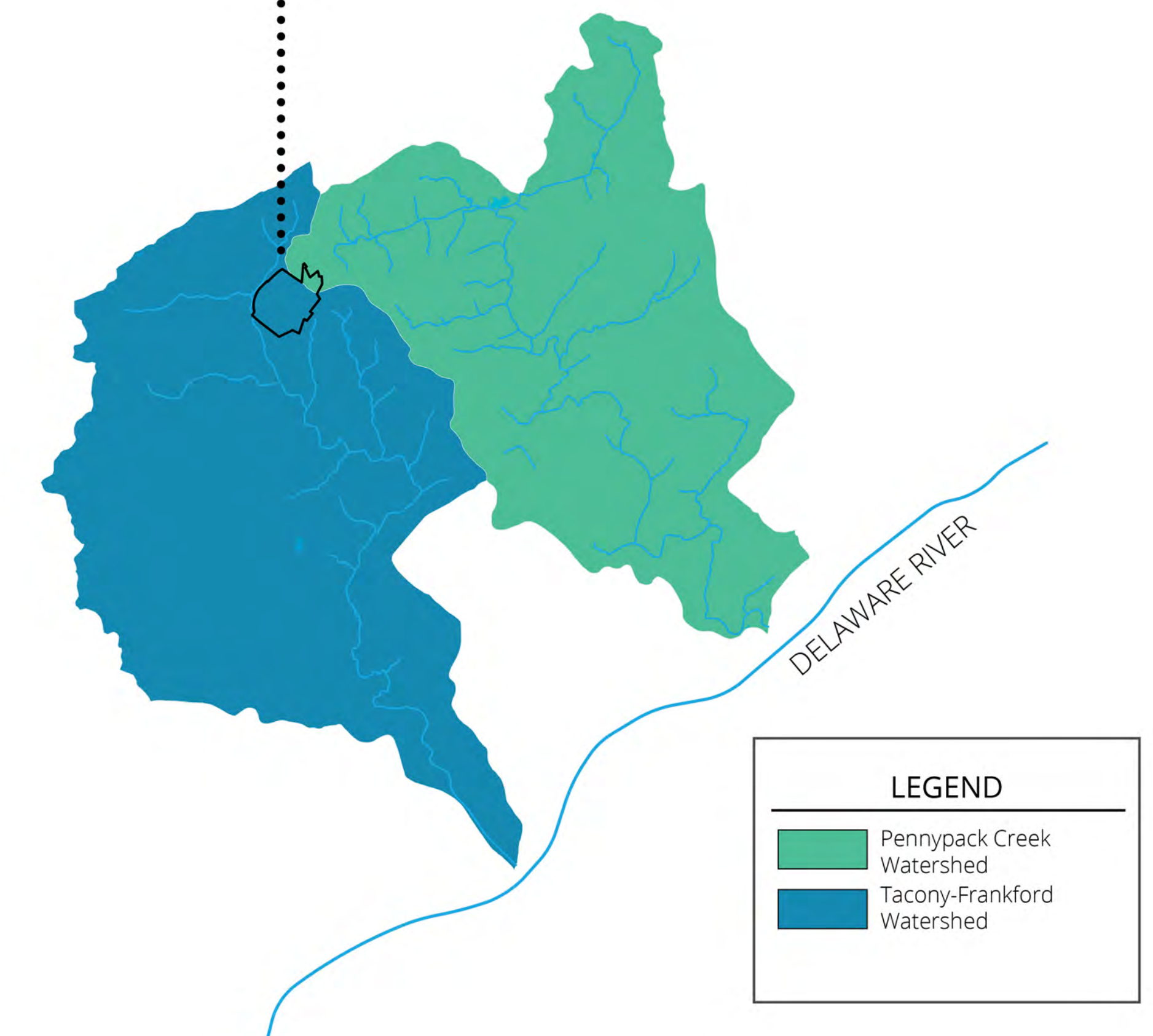
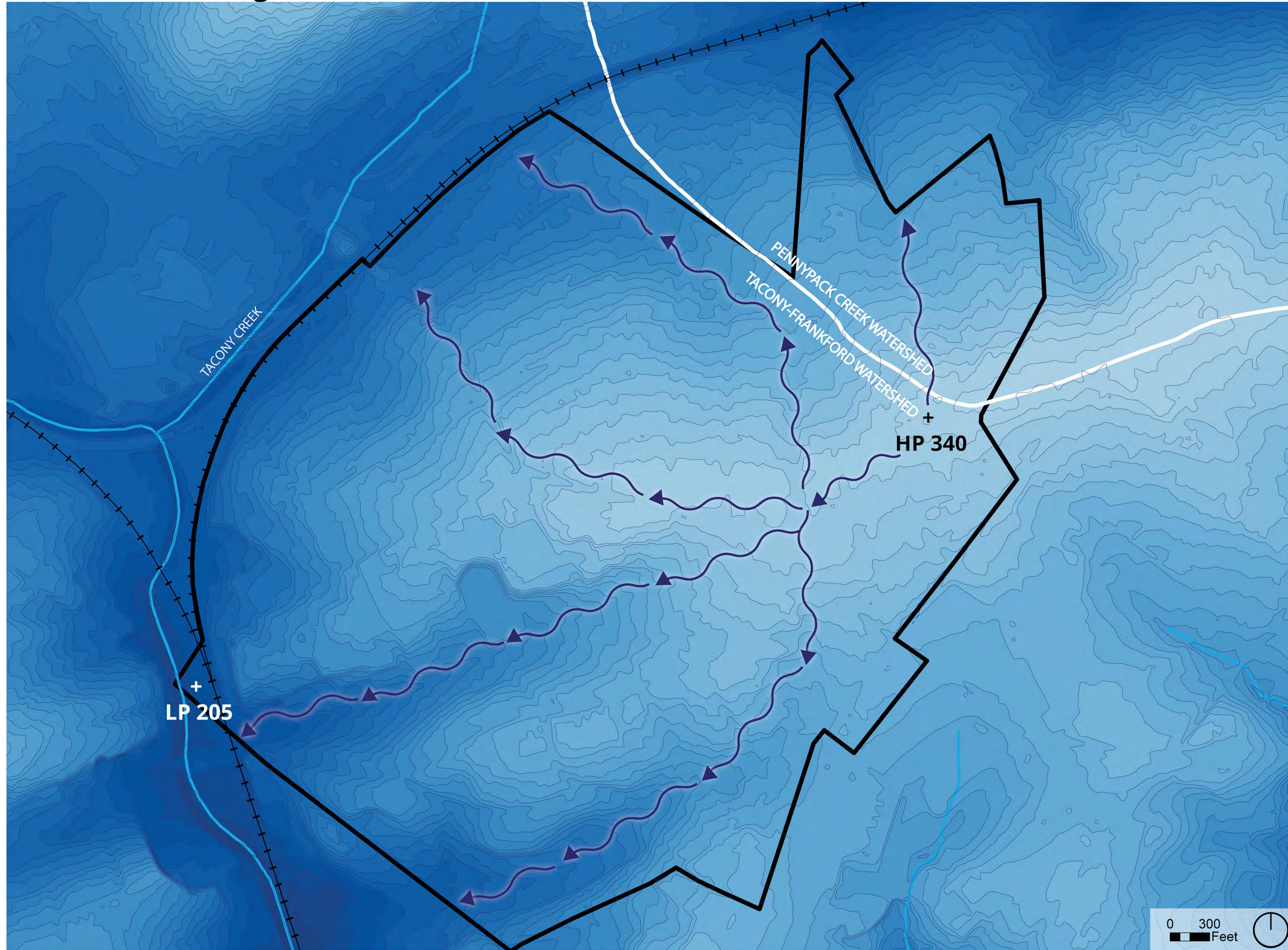


Steep Slopes at Jenkintown High School



Steep Slopes at Noble Station

## Watershed Drainage



## Watersheds and Drainage

- The majority of Jenkintown's runoff drain to the South and West into the Tacony Creek. However, a small portion drains to the north into the Pennypack Creek Watershed. Both of these watersheds eventually drain into the Delaware River.
- Maintaining watersheds preserves ecological health and protects water supplies. Stormwater management actions can prevent sedimentation, erosion, and contamination of our watersheds. The Tacony-Frankford Watershed Partnership is an active non-profit in Jenkintown that takes action to preserve watershed health.
- The Pennypack Creek Watershed Act 167 Plan requested that Jenkintown reduce their stormwater runoff volume by 0.4 acre-feet to assist in the health checkpoints for the Pennypack Creek Watershed.

## FEMA 100 - Year Floodplain



## Flooding

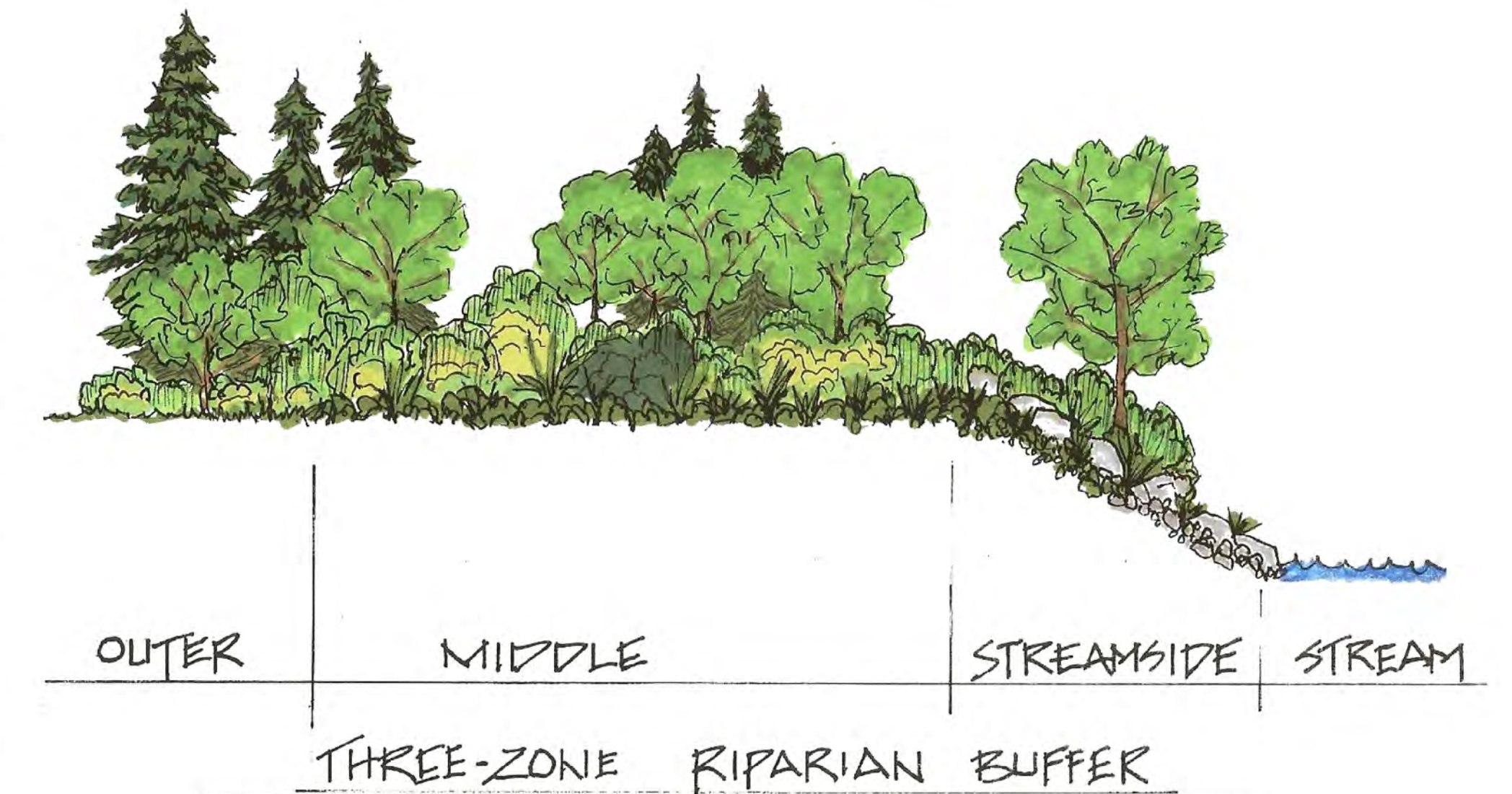
- The 2035 plan states that Jenkintown is at low-risk for flooding based on the FEMA 100-Year floodplain, which shows us what a 1% chance flood event would look like.
- Very little of the flood zone is within Jenkintown's official municipal boundary.

## SEPTA Station

- Though much of it is technically in Cheltenham, the floodzone does cover parts of the Jenkintown Station parking lot and the SEPTA tracks, which are in close proximity to Tacony Creek.
- In 2011, floodwaters washed out the road beds of the SEPTA tracks near the Jenkintown Station.

## Flooding Remedies

- Most of the stormwater runoff in Jenkintown drains towards the Tacony Creek, which would ultimately contribute to flooding. Therefore, flood management is still of concern to Jenkintown despite the floodzone not protruding very far into their boundary.
- Stormwater management efforts such as permeable paving and street greening would reduce the risk of flooding during a storm event.
- In response to Jenkintown Station flooding, SEPTA is dedicating \$20 million to flood mitigation near the station, including a new culvert and bio-detention basin with riparian plantings.

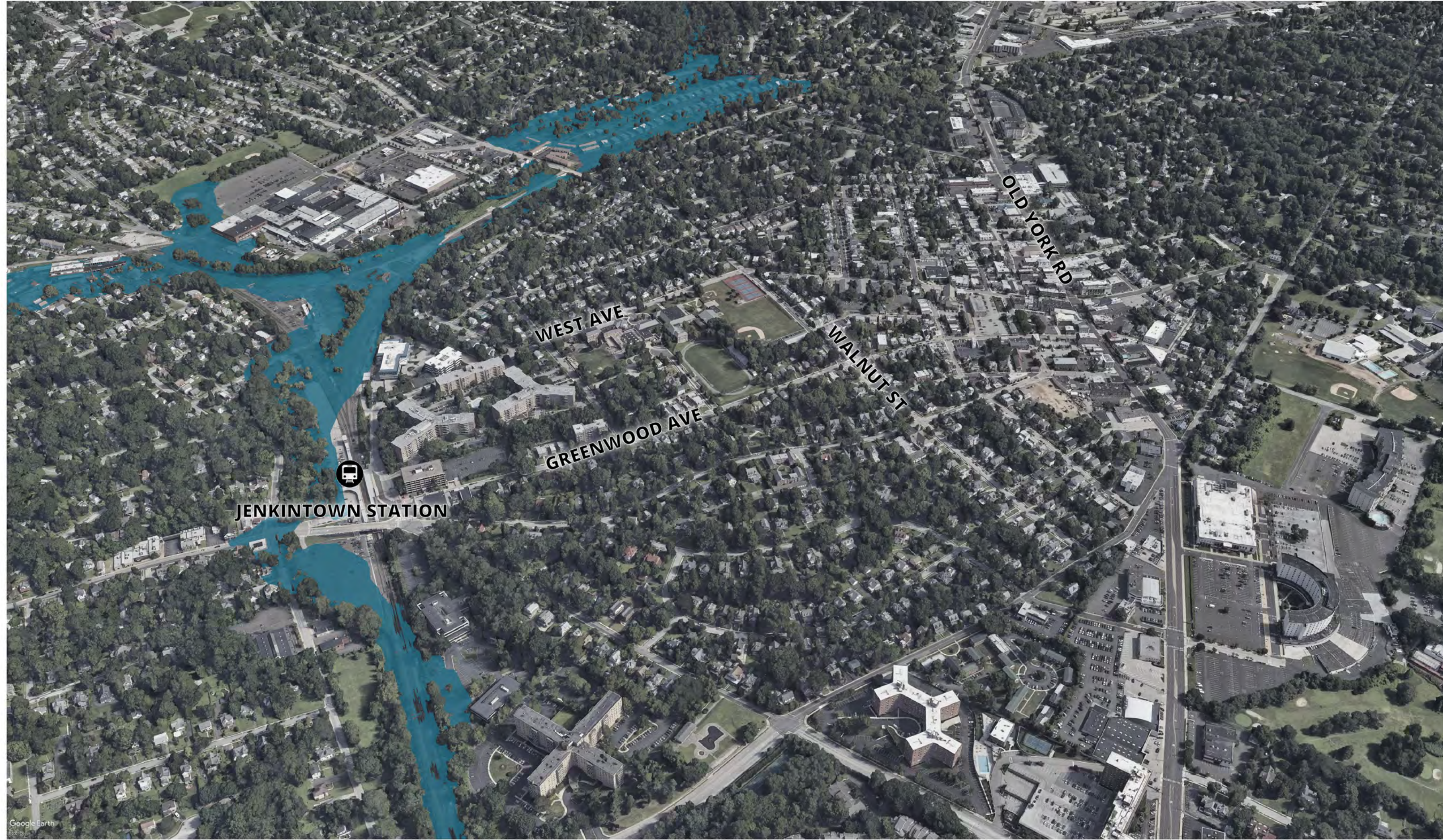


Parts of a robust riparian buffer



Close proximity of Tacony Creek to SEPTA train tracks

## Flood Event Simulation



This graphic shows a three-dimensional view of the extent of the 100-year floodplain.

## Flood Event Simulation - Jenkintown-Wyncote Station Close-up



This close-up view notes areas of importance that would be affected by a potential flood event.

# Areas Affected by Potential Flooding

The area surrounding the Jenkintown-Wyncote Station has been impacted by numerous flood events in recent years. The station serves multiple regional rail lines and is the busiest hub outside of Philadelphia. Many commuters rely on this station and flood damage holds the potential to disrupt this integral public resource.



The Jenkintown-Wyncote Station Platform



Ralph Morgan Park



Tacony Creek



Jenkintown-Wyncote Station Parking Lot