Hanover Parkway All-ages Bike Facilities

Presentation to the Greenbelt Advisory Committee On Environmental Sustainability

August 27, 2019

THE CITY OF GREENBELT

SABRA & ASSOCIATES
A Mead & Hunt Company

OUTLINE

- Project Limits
- Initial Design Assumptions
- Two Options
  - Option A – On-road protected bike lanes (with road diet)
  - Option B – 10’ side path
- Other Impacts
- Costs & Continuing Maintenance
- Next Steps

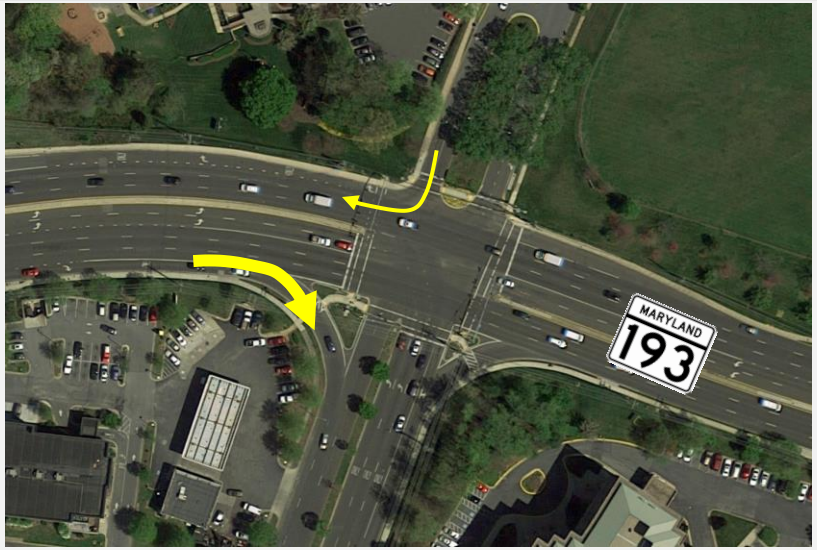
SABRA
& ASSOCIATES
A Mead & Hunt Company

Project Limits

- 1.9 mile Segment
  - Mandan Road to the North
  - Good Luck Road to the South

Design Assumptions

- Design an All-ages Facility “8 to 80 years”
  - Traditional bike lanes will not get used
- Bike/pedestrian crossings across large and/or fast turning movements must be avoided.
- Retain Trees
- Minimize Expensive Utility Relocation
- Design for Ease of Continuing Maintenance
- Minimize Impacts to on-street Parking

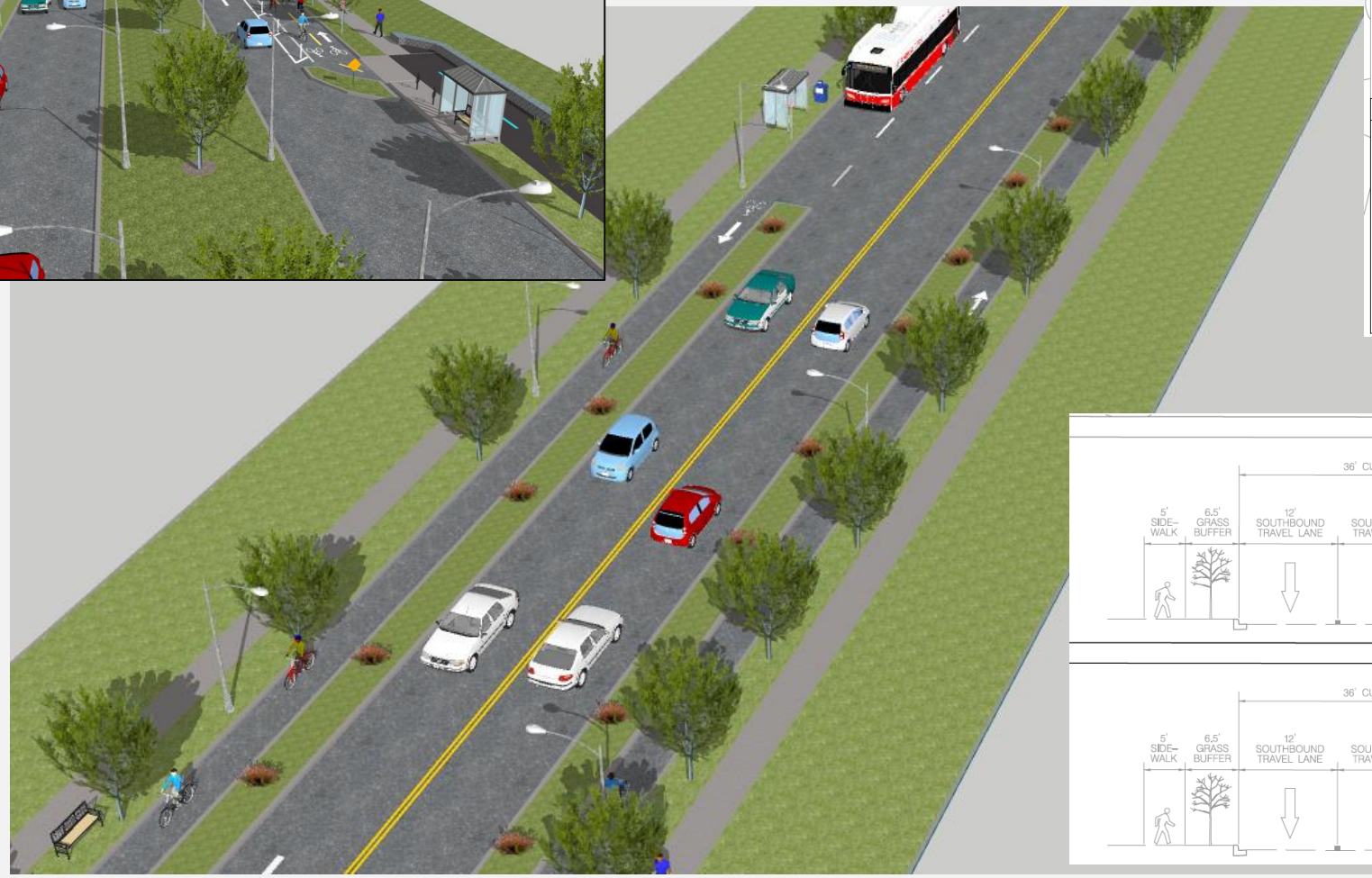


Avoid West Side when Crossing MD 193

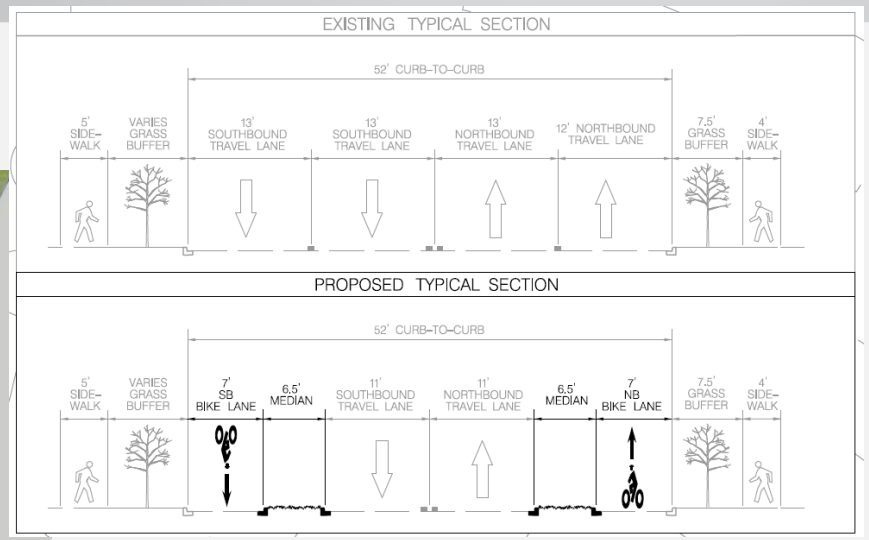
SABRA
& ASSOCIATES
A Mead & Hunt Company

Option A – On-road Bike Lanes

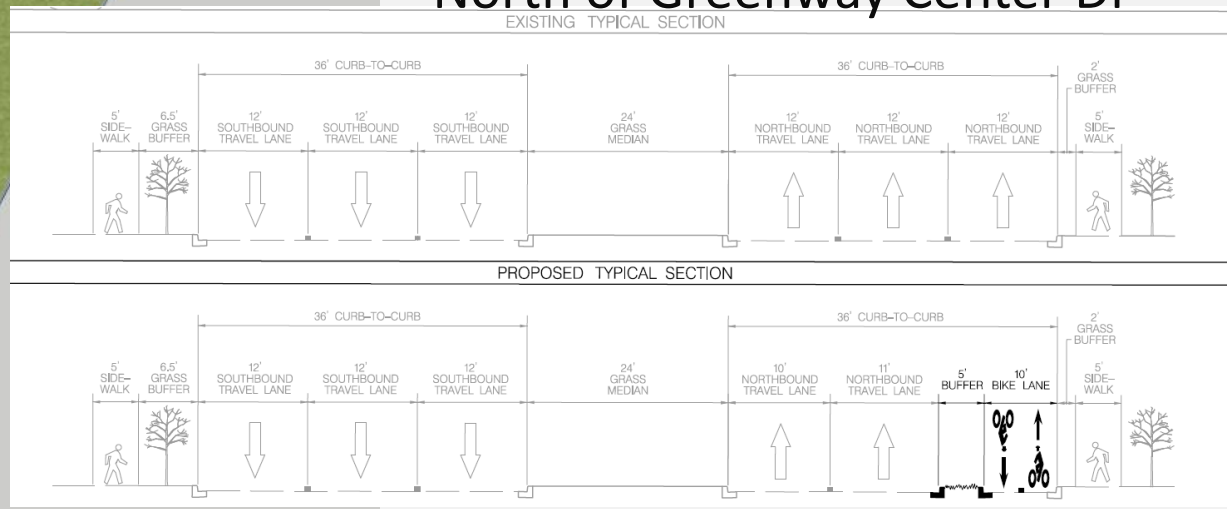
ROAD DIET South of Ora Glen



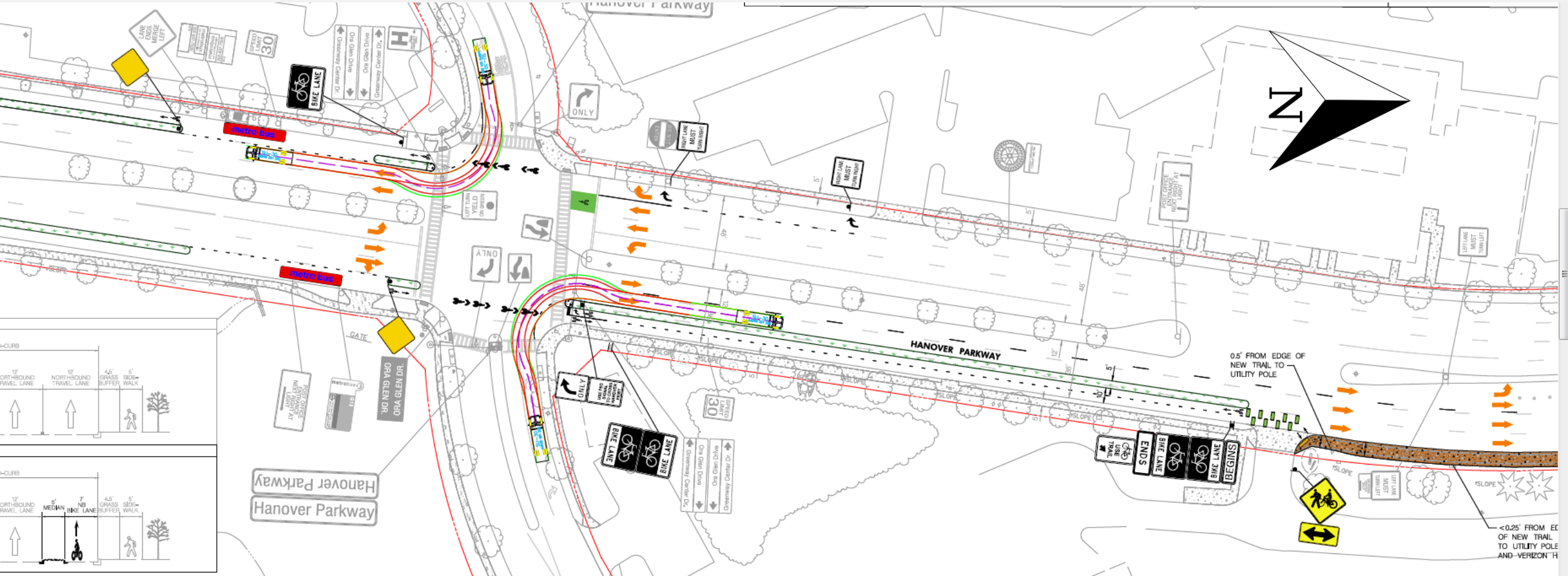
South of Greenway Center Dr



North of Greenway Center Dr



Option A – On-Road Protected Bike Lanes



Option A – On-road Bike Lanes

Protected Bike Lane Options

Recycled Plastic Wheel Stop

Pre-cast or formed concrete curbs

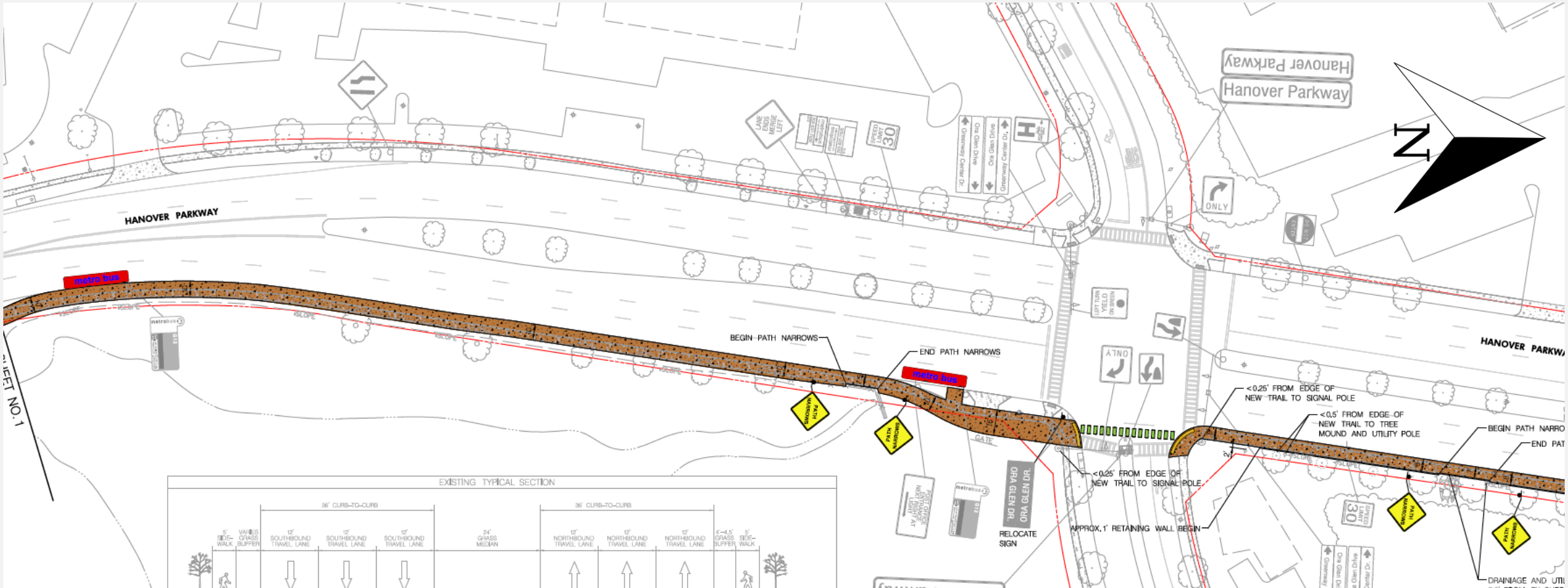
Armadillo

SABRA & ASSOCIATES
A Mead & Hunt Company

Option B – 10-foot Side Path

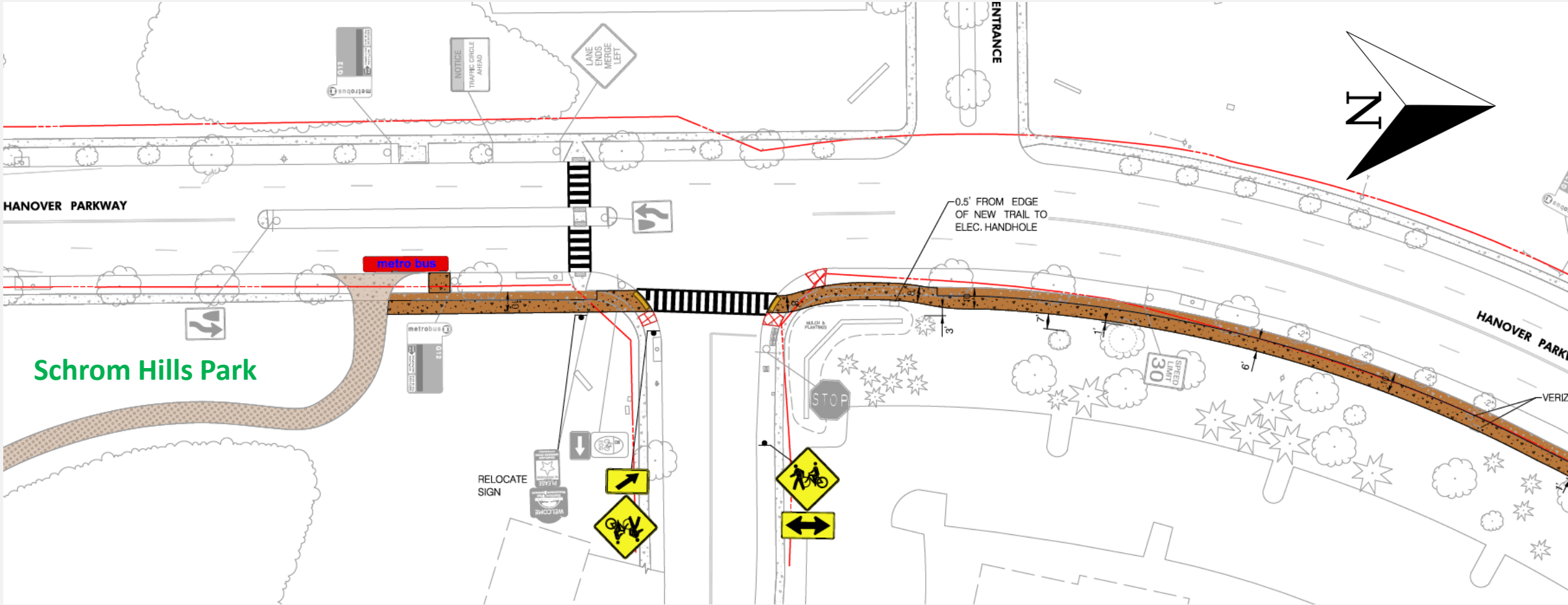
*Short 500’ long section is reduced to 8-feet wide to avoid tree roots

10’ Asphalt Trail parallel to Hanover Pkwy



Option B – 10-foot Side Path

- Trail is either against the Curb or behind the Tree Line
  - Depends on the placement of the Roadside Trees



Other Impacts

- Minimal Impacts on Private Right of Way
- No Utility Impacts
- No Tree Impacts
- Option A Traffic Impacts at Hanover / Greenway Ctr Drive are low
  - ~1 second for each movement.
  - Side streets south of Hanover / Greenway Ctr Drive will have increased delay accessing Hanover Pkwy
- Option A will result in slower vehicle speeds south of Ora Glen

SABRA & ASSOCIATES
A Mead & Hunt Company

Other Impacts

- Alternative A and B *will* require SWM mitigation
- Net Impervious Surface Change varies greatly by on Design
  - Option A:
    - -5,000 square feet for the bike lanes protected by grass medians
    - Or +6,000 square feet for all other types of protected bike lanes
  - Option B: +30,000 square feet

SABRA & ASSOCIATES
A Mead & Hunt Company

Construction Costs & Continual Maintenance

Option A, On-road bike lanes: $200,000 to $700,000

- Signing and Marking
- Trail Construction
- Stormwater Management (SWM)
- Maintenance of Traffic (MOT)
- Trail/sidewalk Ramp Reconstruction
- Bike Lane Protection

$200,000 with Flexpost only protection up to $700,000 with curbed-median separated bike lanes.

Option B, 10-foot Side Path: $650,000

- Signing and Marking
- Trail Construction and Excavation
- SWM
- MOT is minimal
- Trail/Sidewalk Ramp Reconstruction
- Low Retaining Wall – partial trail section

SABRA & ASSOCIATES
A Mead & Hunt Company

Continual Maintenance

- Budget for $3,000 per year
  - Annual Evaluation of Facility
  - Leaf removal / Vegetation Growth Removal
  - Debris removal / Street sweeping
  - Snow Plowing
  - Trail Crack Sealant & Patch Repairs

Instead of Purchasing Specialized sweeping/plowing Equipment, contract-out these maintenance needs.

SABRA & ASSOCIATES
A Mead & Hunt Company

Next Steps

- Select Alternative
  - Refine Concept with input from all stakeholders
- Complete Feasibility Report
  - Document all data collection efforts and Field Photos
  - Design Assumptions
  - Finalize Construction Cost Estimate
- Obtain Funding for Final Design and Permitting ~$150k to $200k
- Obtain Funding for Construction

SABRA & ASSOCIATES
A Mead & Hunt Company

Bryon White, PE, PTOE
Project Manager, Transportation Planning
bwhite@sabra-associates.com

Questions?

THE CITY OF GREENBELT

SABRA & ASSOCIATES
A Mead & Hunt Company