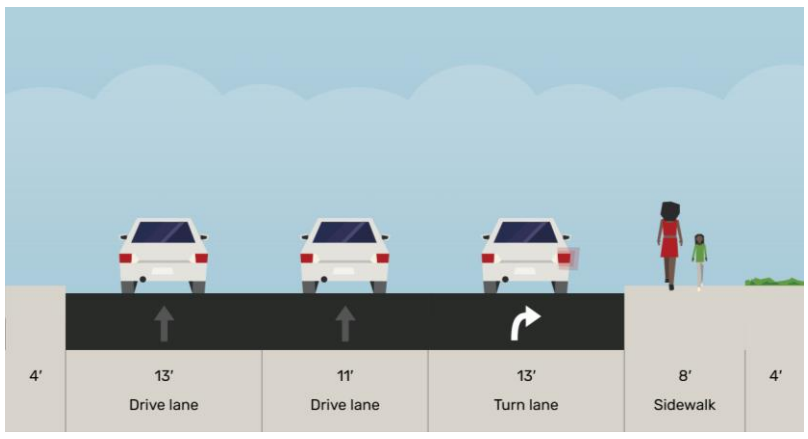
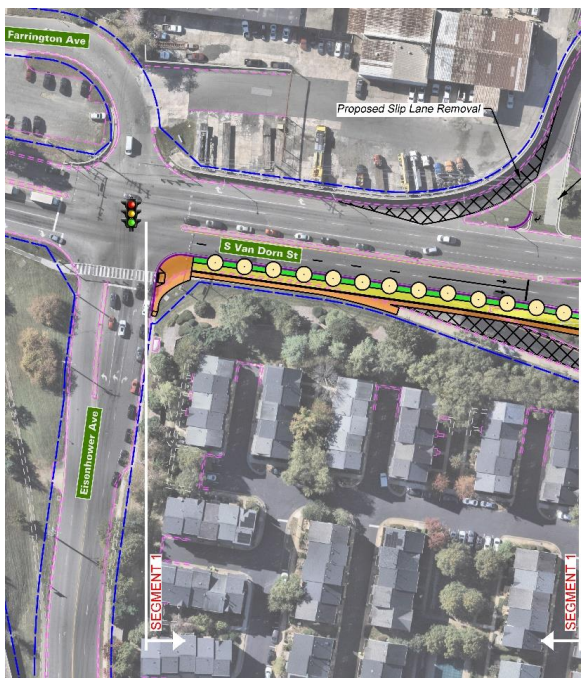
Van Dorn Street and Bridges Design

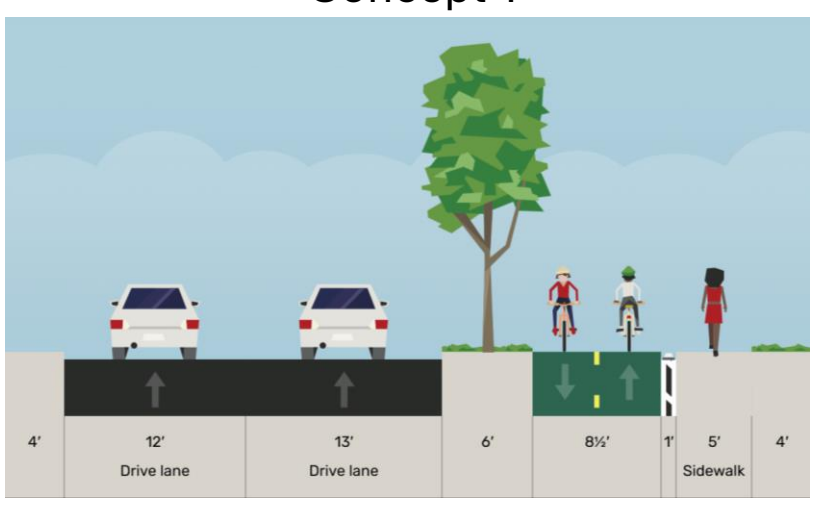
Segment 1

Existing Conditions



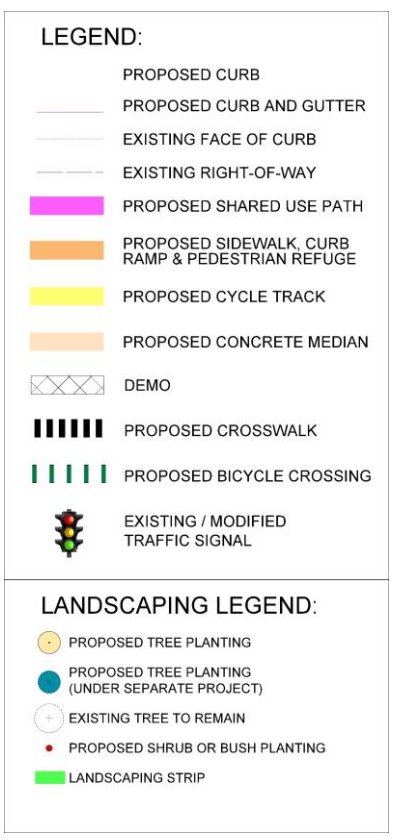


Concept 1

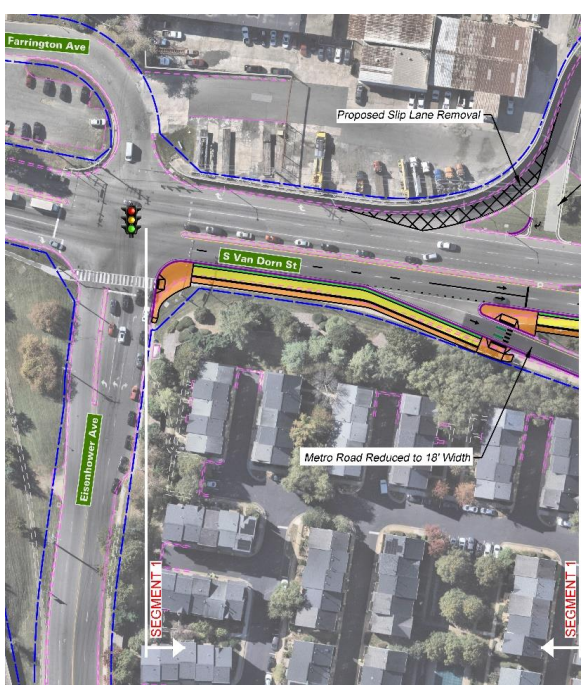


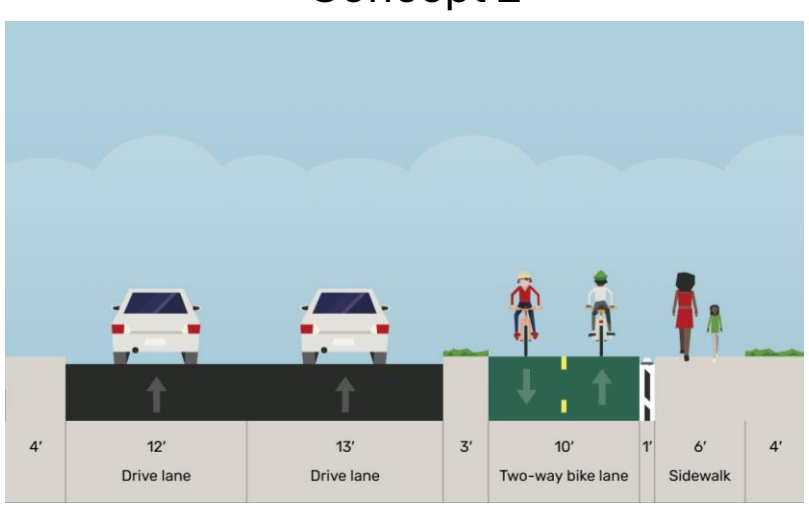
Benefits
- Landscape buffer with planted trees
- Separated bicycle and pedestrian facilities
- Removal of right-turn lane conflict at Metro Road

Challenges
- Removal of access to Metro Road



Concept 2

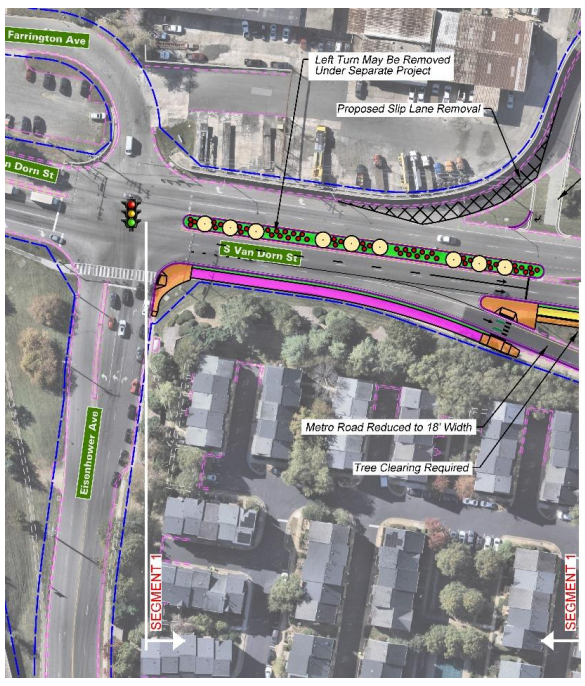


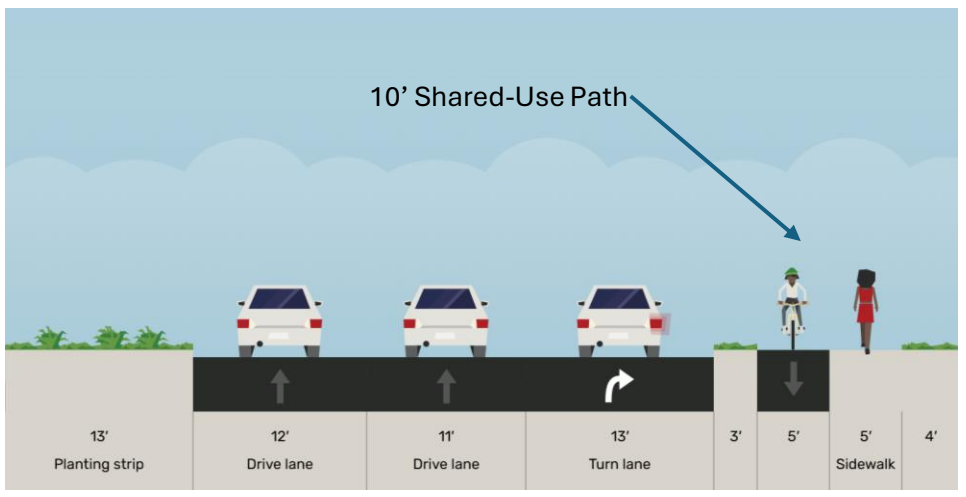


Benefits
- Separated bicycle and pedestrian facilities
- Access to Metro Road maintained

Challenges
- Less separation from adjacent traffic
- Right-turn conflict remains at Metro Road

Concept 3





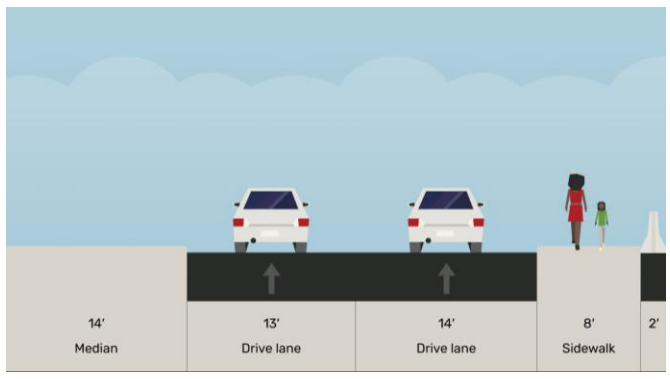
Benefits
- Existing access to Metro Road maintained
- Option for removal of southbound left-turn lane onto Eisenhower Avenue (NOTE: this could be feasible with all concepts)

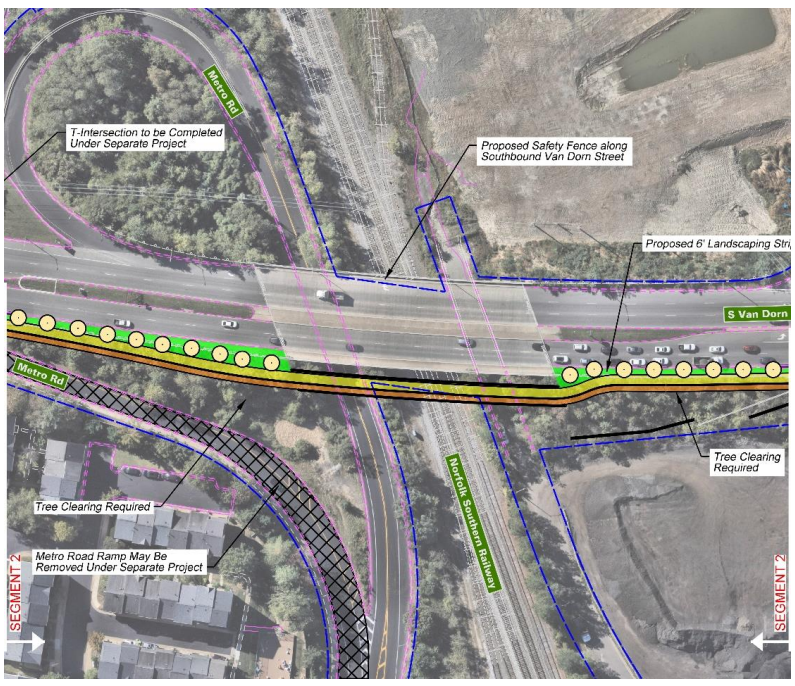
Challenges
- Less separation from adjacent traffic
- Combined bicycle and pedestrian facilities
- Right-turn conflict remains at Metro Road

Van Dorn Street and Bridges Design

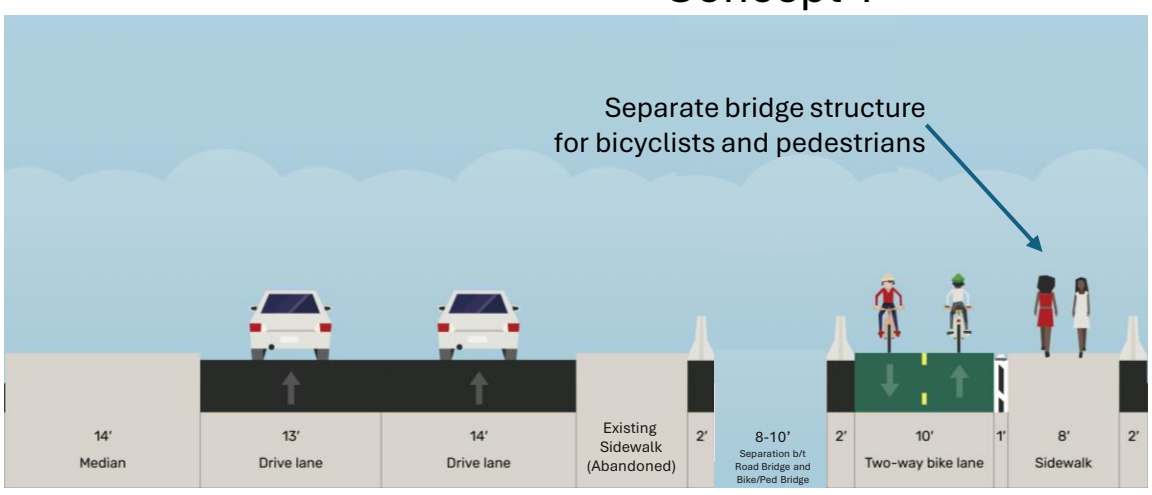
Segment 2

Existing Conditions





Concept 1

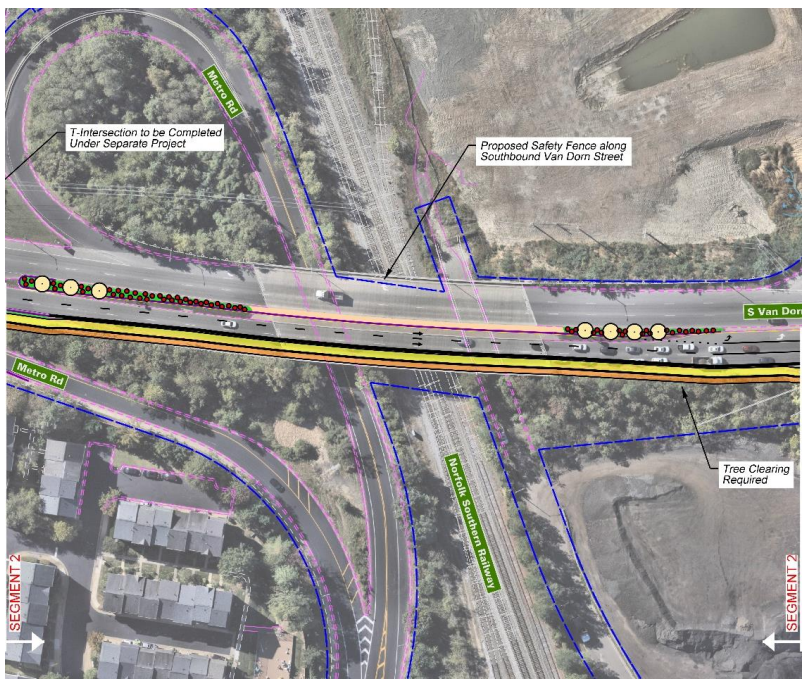


Benefits
- Separate bridge structure for bicyclists and pedestrians only
- No modifications required to S Van Dorn bridge

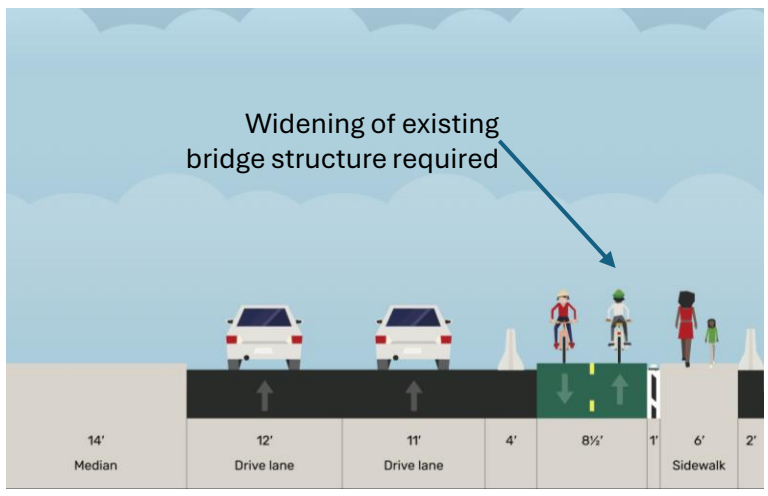
Challenges
- Coordination with Norfolk Southern Railroad for bike/ped bridge

LEGEND:
- PROPOSED CURB
- PROPOSED CURB AND GUTTER
- EXISTING FACE OF CURB
- EXISTING RIGHT-OF-WAY
- PROPOSED SHARED USE PATH
- PROPOSED SIDEWALK, CURB RAMP & PEDESTRIAN REFUGE
- PROPOSED CYCLE TRACK
- PROPOSED CONCRETE MEDIAN
- DEMO
- PROPOSED CROSSWALK
- PROPOSED BICYCLE CROSSING
- EXISTING / MODIFIED TRAFFIC SIGNAL

LANDSCAPING LEGEND:
- PROPOSED TREE PLANTING
- PROPOSED TREE PLANTING (UNDER SEPARATE PROJECT)
- EXISTING TREE TO REMAIN
- PROPOSED SHRUB OR BUSH PLANTING
- LANDSCAPING STRIP



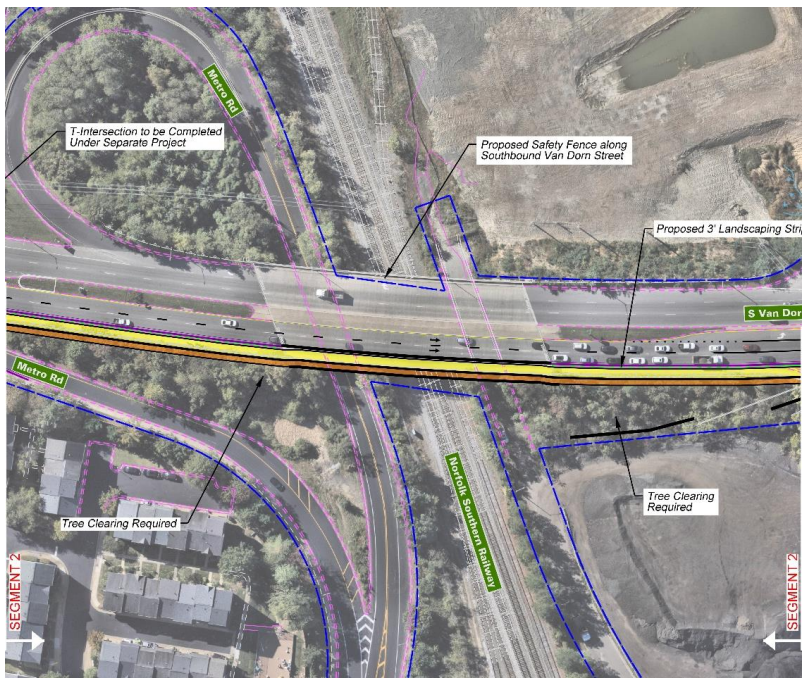
Concept 2

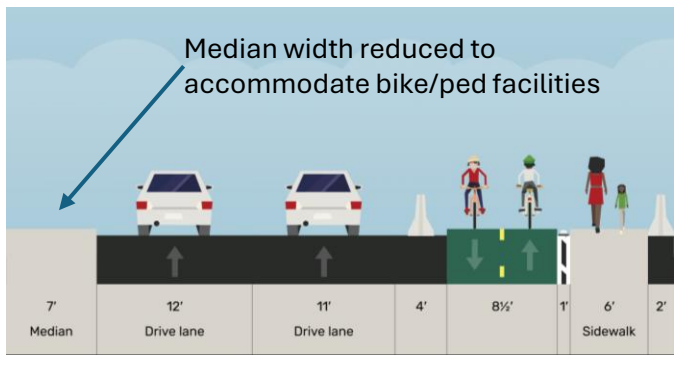


Benefits
- Separated bicycle and pedestrian facilities
- Reduced travel lane widths on S Van Dorn

Challenges
- Narrower cycle track
- Existing bridge structure must be widened to support bike/ped facilities
- Coordination with Norfolk Southern Railroad required

Concept 3





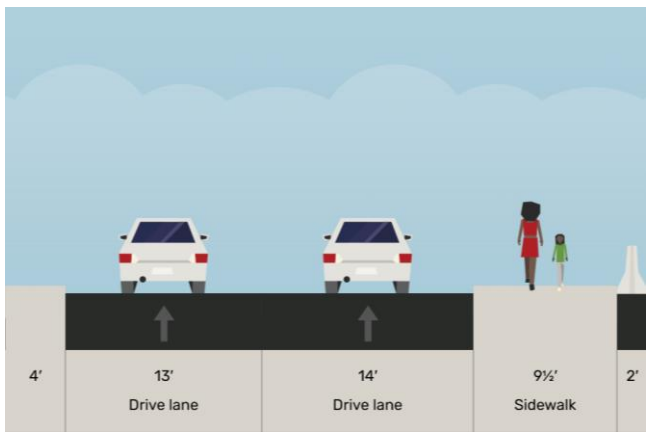
Benefits
- Separated bicycle and pedestrian facilities
- Reduced travel lane widths on S Van Dorn
- No widening of the existing bridge; therefore, no coordination with Norfolk Southern

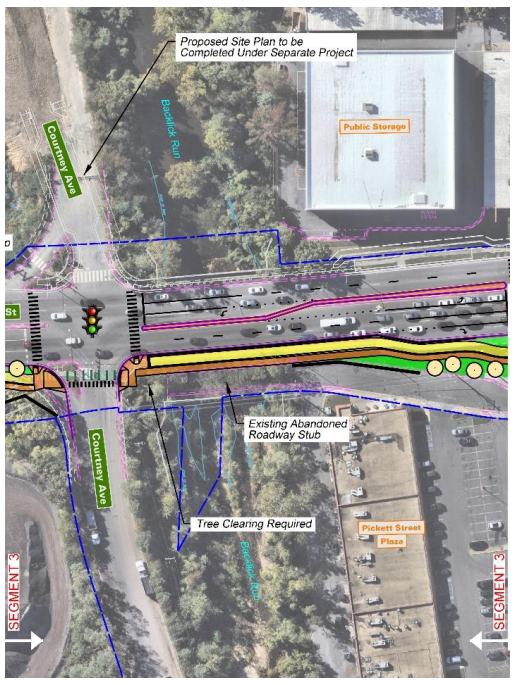
Challenges
- Narrower cycle track

Van Dorn Street and Bridges Design

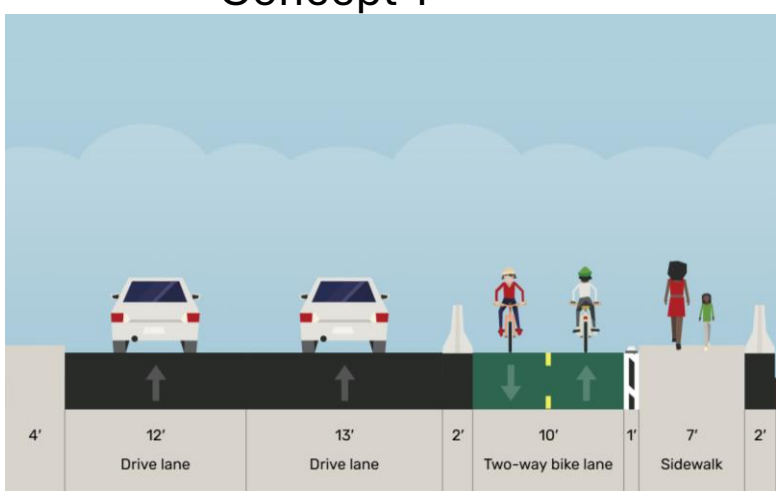
Segment 3

Existing Conditions



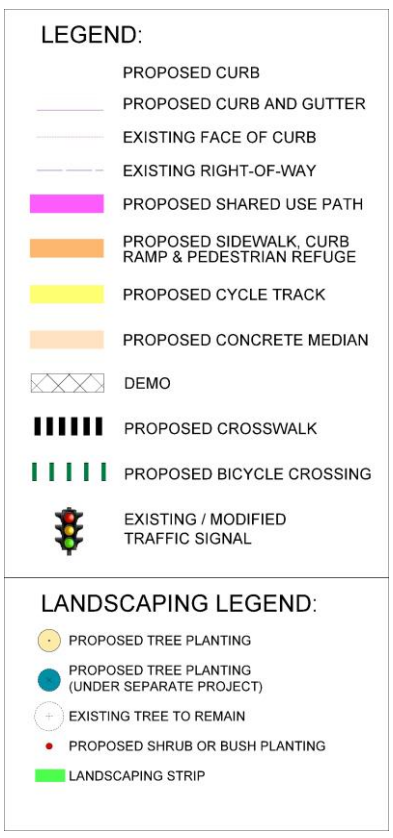


Concept 1

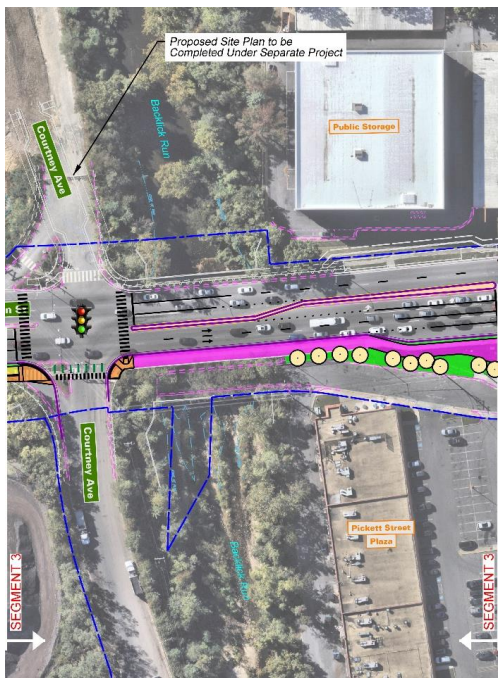


Benefits
- Separated bicycle and pedestrian facilities
- Barrier between cycle track and roadway
- Reduced travel lane widths on S Van Dorn traveling north

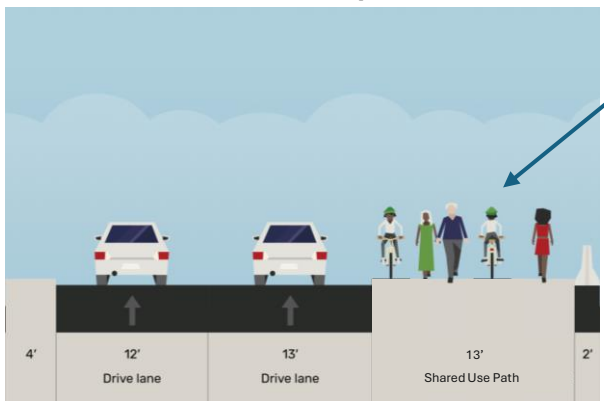
Challenges
- Requires significant earthwork to provide the separated bicycle and pedestrian facilities



REFER TO CONCEP 1 AND CONCEPT 3
FOR POTENTIAL SEGMENT 3 IMPROVEMENTS



Concept 3



13' Shared-Use Path Possible by reclaiming 1' from each travel lane on S Van Dorn

Benefits
- Wide shared use path to accommodate bicyclists and pedestrians
- Reduced travel lane widths on S Van Dorn northbound and southbound

Challenges
- No separation between the shared use path and roadway

Van Dorn Street and Bridges Design

Segment 4

LEGEND:
- PROPOSED CURB
- PROPOSED CURB AND GUTTER
- EXISTING FACE OF CURB
- EXISTING RIGHT-OF-WAY
- PROPOSED SHARED USE PATH
- PROPOSED SIDEWALK, CURB RAMP & PEDESTRIAN REFUGE
- PROPOSED CYCLE TRACK
- PROPOSED CONCRETE MEDIAN
- DEMO
- PROPOSED CROSSWALK
- PROPOSED BICYCLE CROSSING
- EXISTING / MODIFIED TRAFFIC SIGNAL

LANDSCAPING LEGEND:
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- PROPOSED TREE PLANTING (UNDER SEPARATE PROJECT)
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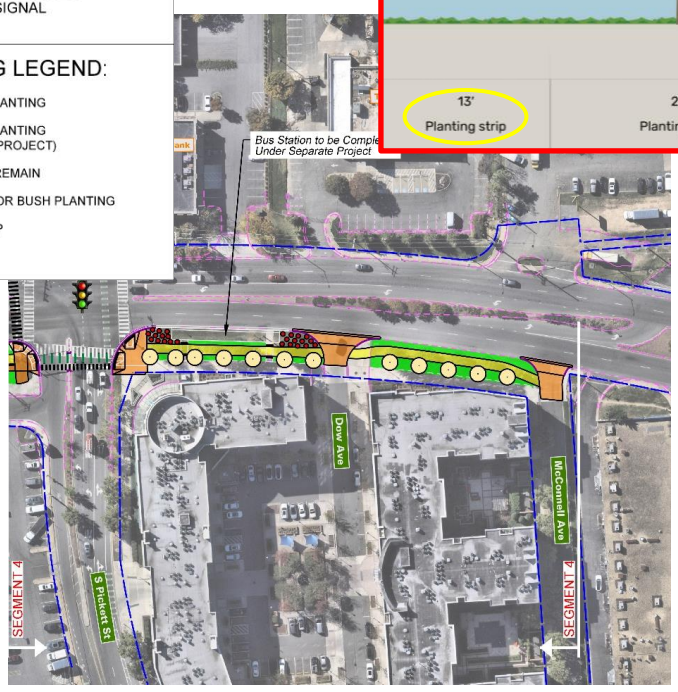
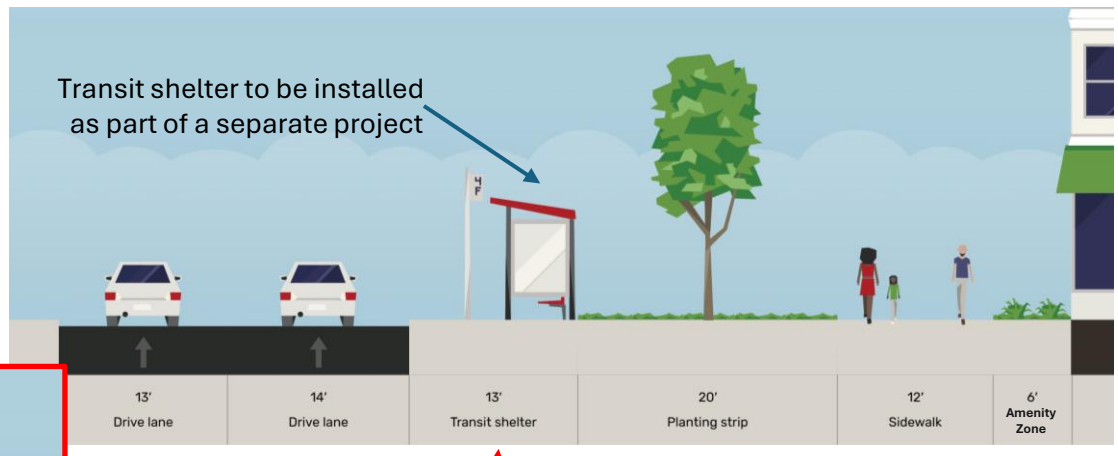
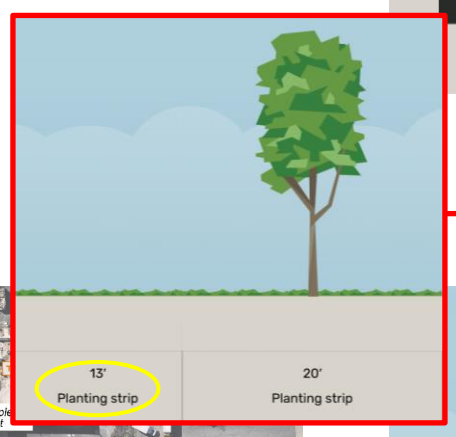


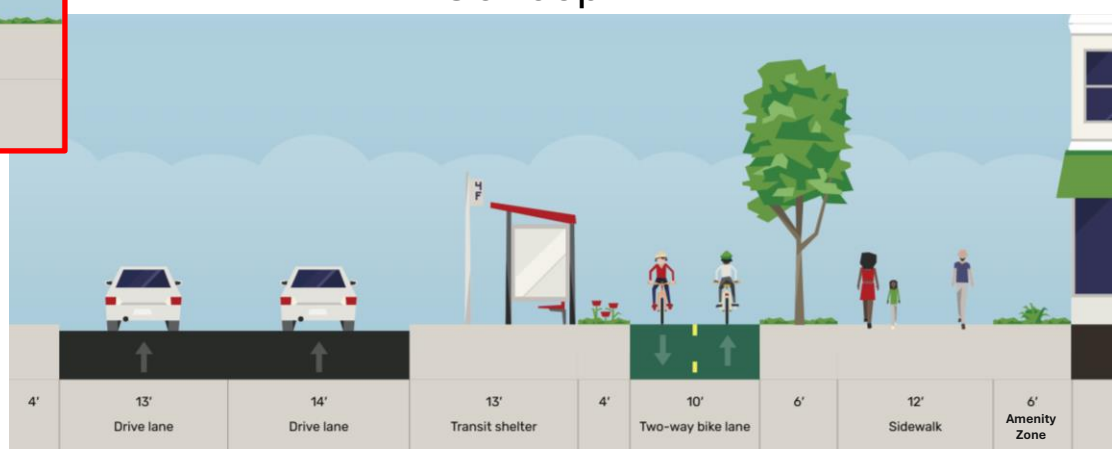
Existing Conditions





Transit shelter only present from S Pickett St to Dow Ave. North of Dow Ave, this area is green space/planting strip (existing and all concepts)

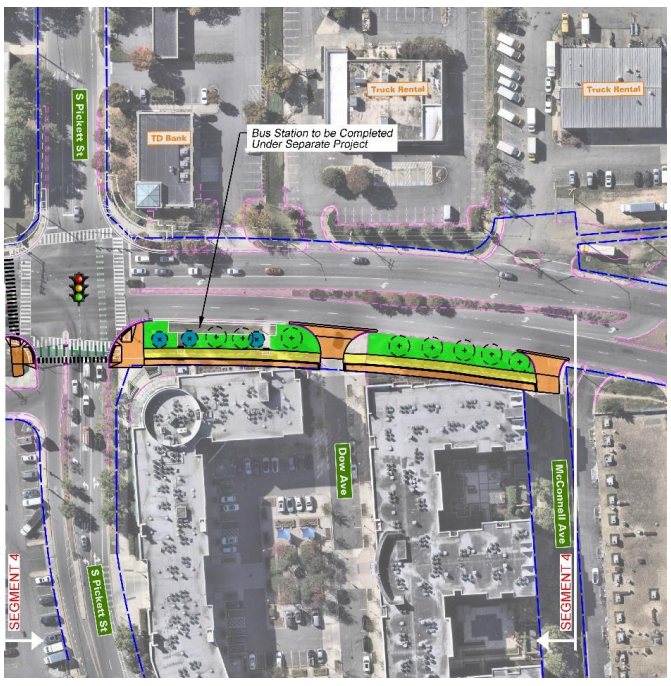
Concept 1

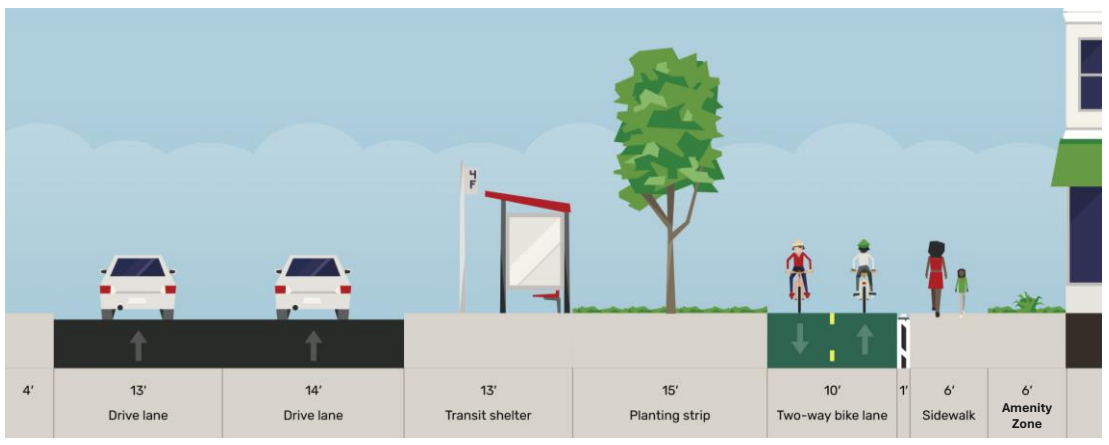


Benefits
- Landscape buffer with planted trees separates the cycle track from the sidewalk

Challenges
- Requires removal of all existing trees between S Pickett St and McConnell Ave (new trees to be planted)

Concept 2

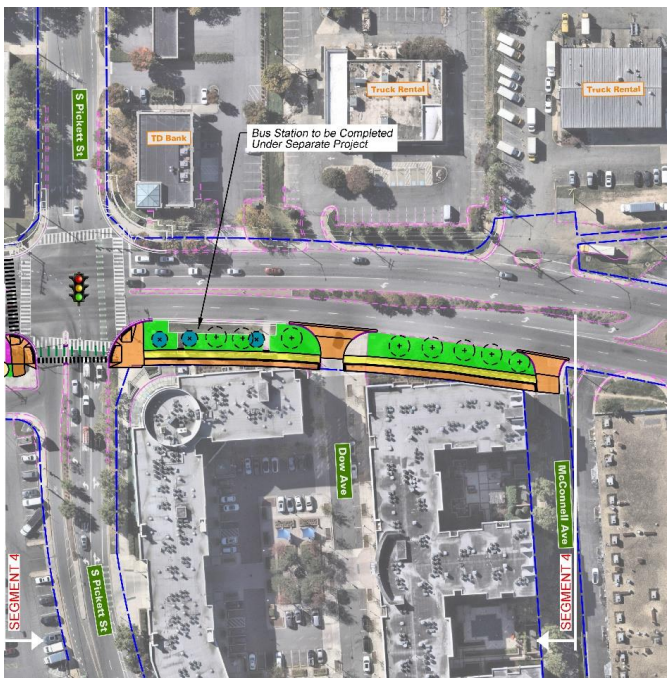


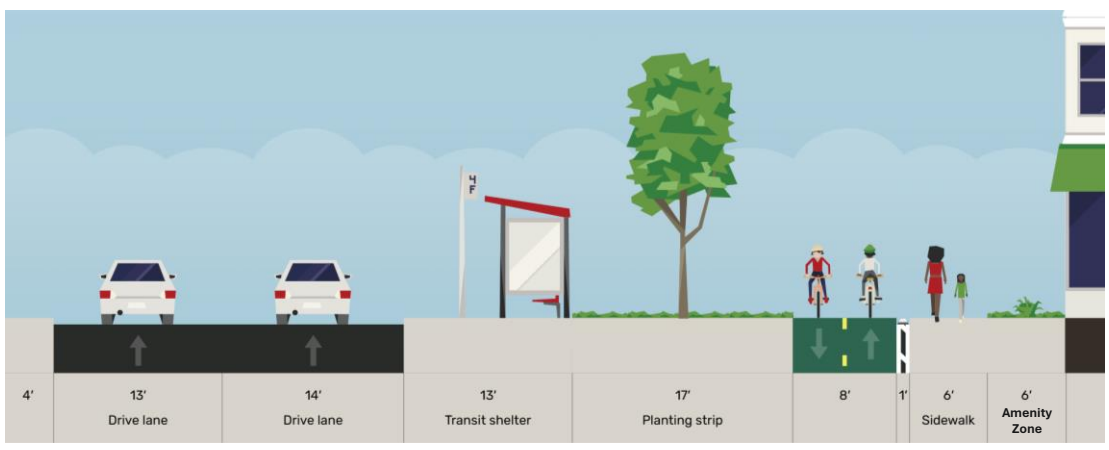


Benefits
- The majority of existing trees can remain
- Separated bicycle and pedestrian facilities

Challenges
- Sidewalk width is reduced from 12' to 6'

Concept 3





Benefits
- Wider planting strip further separates the cycle track from the roadway
- Separated bicycle and pedestrian facilities

Challenges
- Narrower cycle track
- Sidewalk width is reduced from 12' to 6'