Walnut Street Reconstruction

NEIGHBORHOOD MEETING

FEBRUARY 3, 2022

MEETING OBJECTIVE and AGENDA

OBJECTIVE

To share information on project survey and infrastructure, to obtain abutter and neighborhood insights and feedback, to discuss potential "complete streets" application and grants opportunities for this project, and to discuss project budget, schedule and construction impacts

AGENDA

- History and Condition
- Traffic data and corridor functions
- Project challenges and opportunities
- Complete Streets alternatives and discussion
- Next Steps
- Questions and Answers

PROJECT BACKGROUND

- Walnut Street is one of the primary corridor that is part of the Town's Street Restoration Program
- Project limits are Washington Street (at Warren Park) to Walnut/Wales Street Bridge (Charles River at Newton Town Line)
- Roadway was last paved late 1990's, except for the Cedar Intersection which was reconstructed in 2006/7

Washington Street Intersection
(at Warren Park)

Walnut/Wales Street Bridge
(Charles River at Newton Town Line)

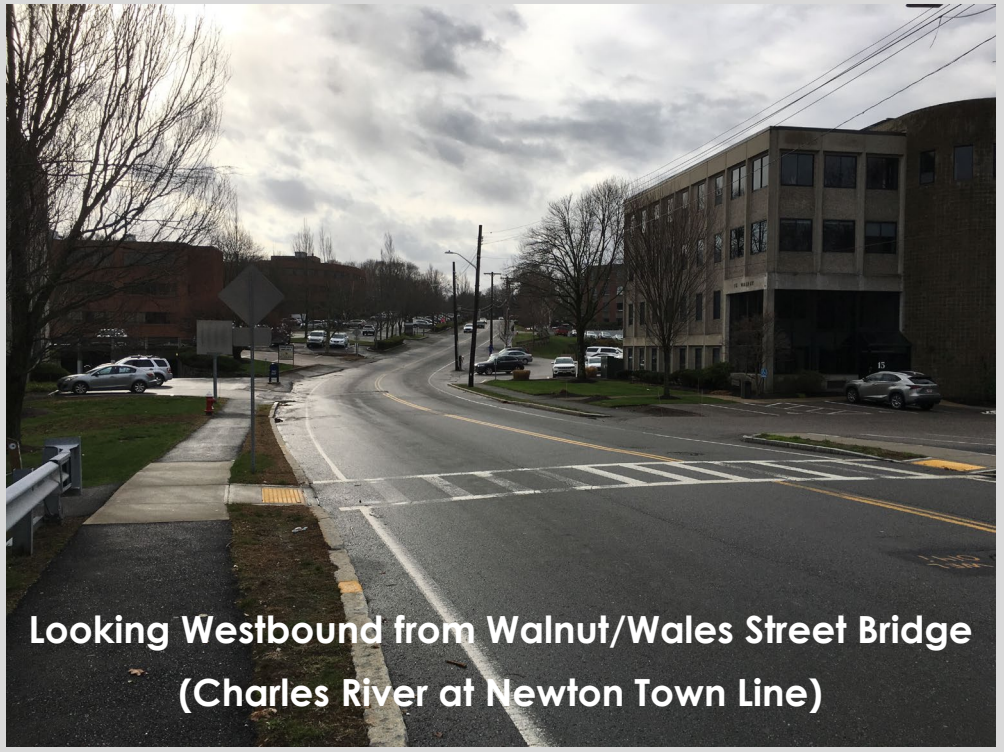
PROJECT BACKGROUND

Walnut Street Facts

- 0.9 miles (4,772 feet) long
- 11 intersecting streets
- 46 utility poles
- 0.7 miles (3,916 feet) sewer main with 23 sewer manholes
- 0.8 miles (4,448 feet) water main – 12" main cleaned & lined in 1988
- 0.3 miles (1,675 feet) drain pipe with 24 drain structures (21 catch basins and 3 drain manholes)
- 118 service connections (60 sewer & 58 water)
- 2 signalized light intersections
- 1 new pedestrian activated crossing light (Damien Road intersection)
- 1 old pedestrian activated crossing light (Warren Park)

PROJECT BACKGROUND

- Walnut Street laid out by the County Commissioner December, 1886
- Relocated & Widening from Cedar/River Street intersection to the Newton Town Line – January, 1903
- Accepted by the Town of Wellesley June 19, 1903
- Mostly 50 foot Right-of-Way with 30 feet average paved width and 3.5 to 5’ wide sidewalks mostly, but not entirely on both sides
- Walnut Street is classified as an urban collector meaning low to moderate capacity, connecting several intersecting streets often joining districts or neighborhoods, commercial areas, churches, schools, recreation facilities and sometimes having signalized intersections



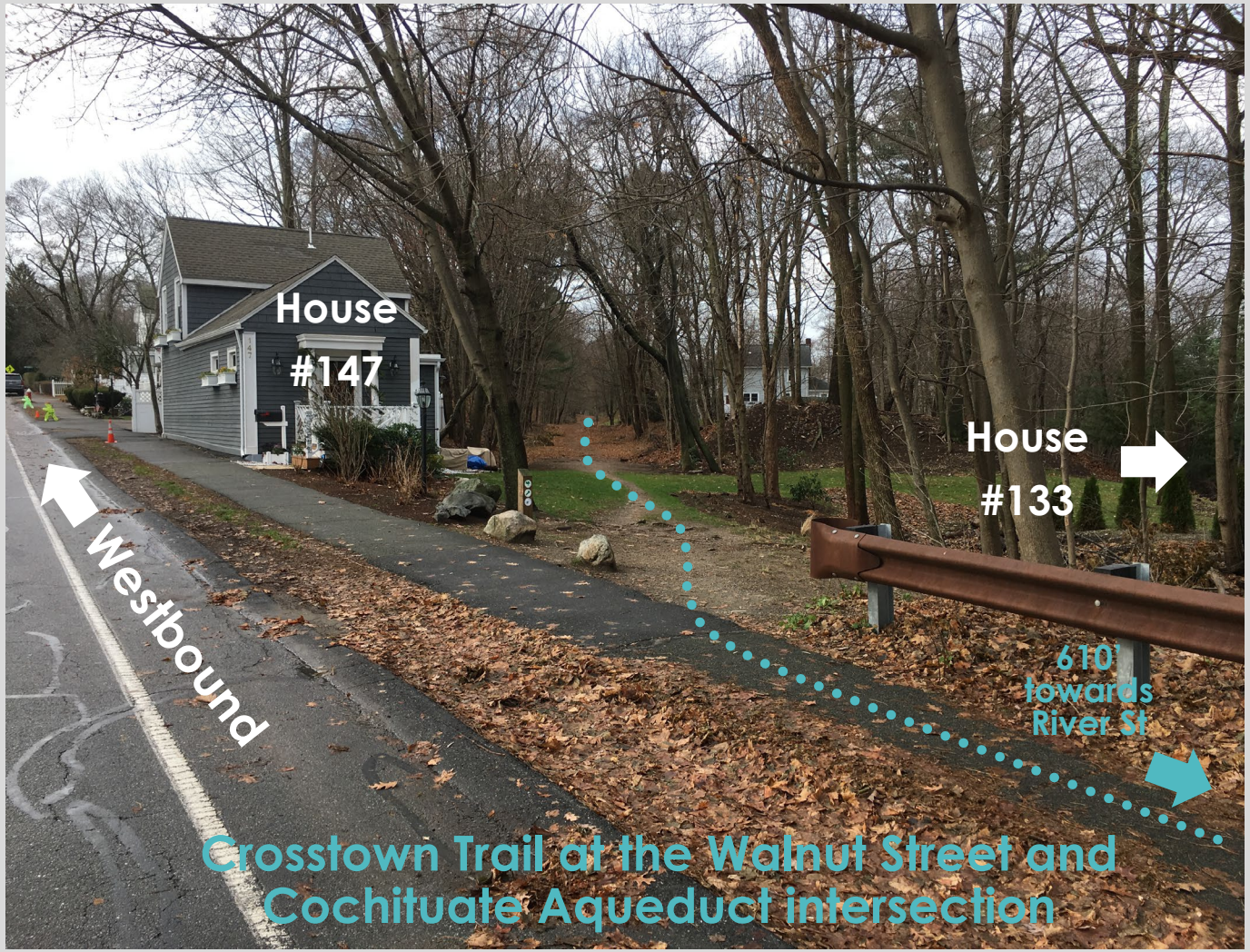
Looking Westbound from Walnut/Wales Street Bridge (Charles River at Newton Town Line)

PAVEMENT CONDITION

- Pavement condition is subpar due to age and wear
- Recent National Grid gas main replacement project has created additional trench patches
- There is underlining fabric layer from Washburn Ave to Cedar/River St Intersection
- 15 roadway pavement cores indicated an average of 6.5" of mix (5" min and 10" max)

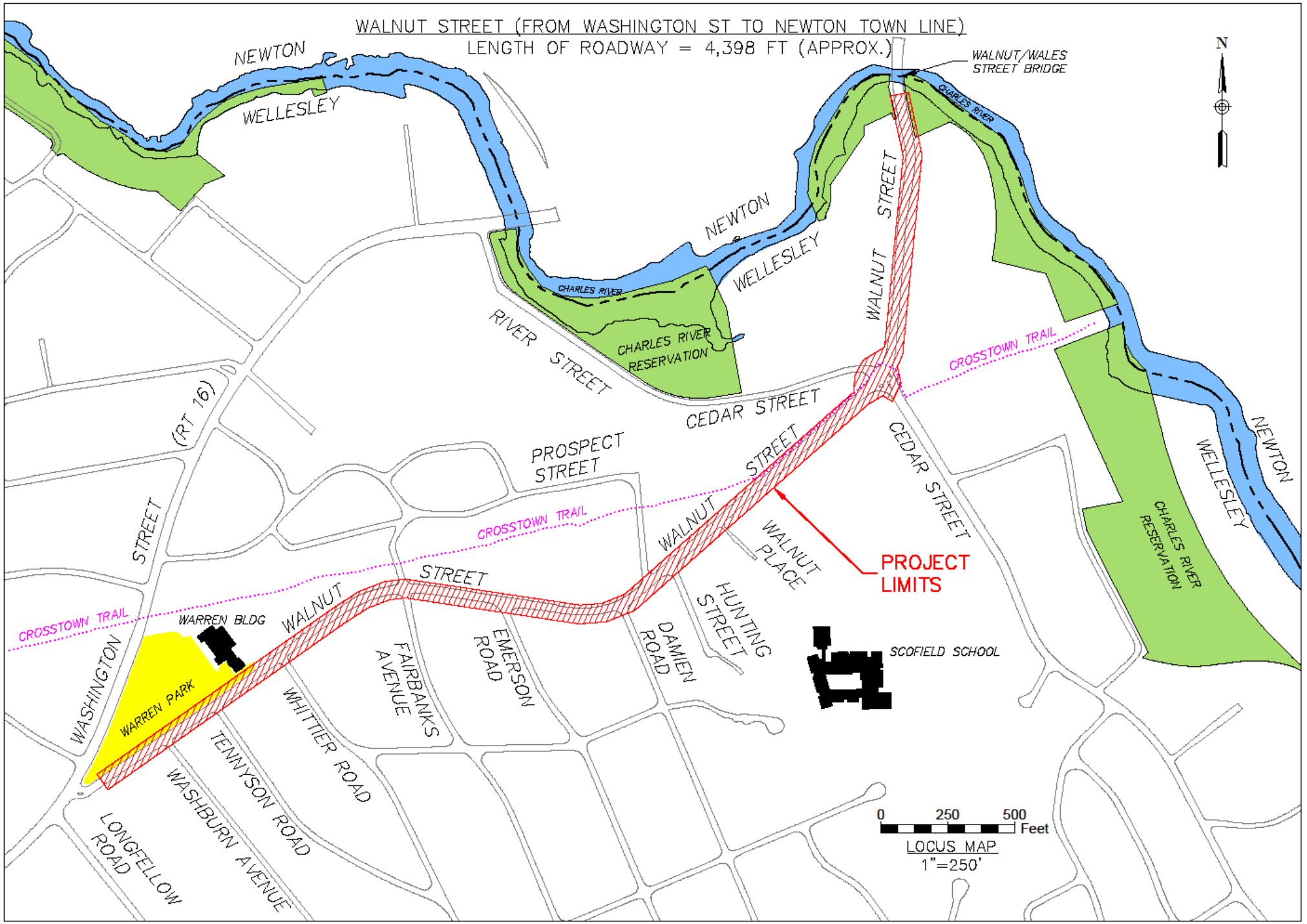
IMPORTANT STREET FUNCTIONS

- The Crosstown Trail runs along the Cochituate Aqueduct and intersects Walnut Street between houses 133 & 147 Walnut Street and extends approximately 610 feet on Walnut Street to the River Street intersection before crossing over Walnut Street to Cedar Street and the Cochituate Aqueduct
- Late season pedestrian counts during the mild weather Thanksgiving holiday indicate that about 75 trail users during non work days and 50 on work days



MORE IMPORTANT STREET FUNCTIONS

- Common Schofield School drop off and pick up at Damien Road intersection
- Provides access and on street parking to Warren Park and the Warren Public Building
- Provides access to the DCR's Charles River Reservation
- Experiences high commuter traffic volume on Lower Walnut at the Cedar Street Intersection


WALNUT STREET (FROM WASHINGTON ST TO NEWTON TOWN LINE)
LENGTH OF ROADWAY = 4,398 FT (APPROX.)
N
NEWTON
WELLESLEY
WALNUT/WALES STREET BRIDGE
CHARLES RIVER
CHARLES RIVER RESERVATION
RIVER STREET
CEDAR STREET
WALNUT STREET
CROSSTOWN TRAIL
(RT 16)
PROSPECT STREET
WASHINGTON STREET
WARREN BLDG
WARREN PARK
WALNUT PLACE
HUNTING STREET
DAMEN ROAD
EMERSON ROAD
FAIRBANKS AVENUE
WHITTIER ROAD
TENNYSON ROAD
WASHBURN AVENUE
LONGFELLOW ROAD
PROJECT LIMITS
SCOFIELD SCHOOL
0 250 500 Feet
LOCUS MAP
1"=250'

TRAFFIC DATA

Pre-Covid traffic counts indicate a volume of 1,500 to 2,000 vehicles per day between Washington and River and 6,000 to 7,000 vpd north of the Cedar and River

Walnut Street is governed by the common Speed Limit of 30 mph and the 85th percent speed was measured at 31 to 32 mph

Accident History: 63 crashes on or abutting Walnut Street since 2016, majority are in parking lots and entering / exiting parking lots, as well as at the Cedar & River intersection, 7 on street accidents in 2017, 3 in 2018, 3 in 2019, 4 in 2020 and 4 in 2021

Walnut Street Traffic Data Summary During November 10 - 17, 2020

	Vehicle Volume		Percentile Speed	Vehicle Classification						
Location	Average Daily Total	Week Total	85%	Motor Bikes	Cars	2 Axle	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single
Damien Road Area	1,862	12,479	31.1 mph	0.3%	77.6%	17.6%	0.3%	3.1%	0.3%	0.0%
Business Area	6,537	43,512	31.8 mph	0.8%	80.1%	14.2%	1.2%	2.9%	0.1%	0.0%

PROJECT CHALLENGES AND OPPORTUNITIES

- **Continuous Sidewalks** on both sides of the Street – the traffic volumes and number of intersection streets make dual sidewalks and crosswalks important for this project. Sidewalk currently missing between Hunting and Cedar
- **Crosswalks** – There are 8 crosswalks on Walnut Street, 3 controlled by signalized intersections, 2 by pedestrian activated signals and 3 mid-block un-signalized, these locations seem to serve the crossing need safely

MORE PROJECT CHALLENGES AND OPPORTUNITIES

- **Drainage, water and sewer infrastructure** is adequate and the DPW is assessing the potential for additional catch basins and possibly lining some other section of sewer main
- **Curbing** is mostly low profile or non existent except for near Warren Park where there is on-street parking. Curbing improvements are needed in the commercial portion of the street where traffic volumes are highest and where the sidewalks are poorly defined

COMPLETE STREETS BASICS

- What is a Complete Street… at a basic level it's an effort to re-envision how we use our public streets, to be more inclusive of all modes of transportation
- The basic requirements are;

  Provide safe and accessible options for all travel modes, including walking, biking, transit and vehicular, for people of all ages and abilities

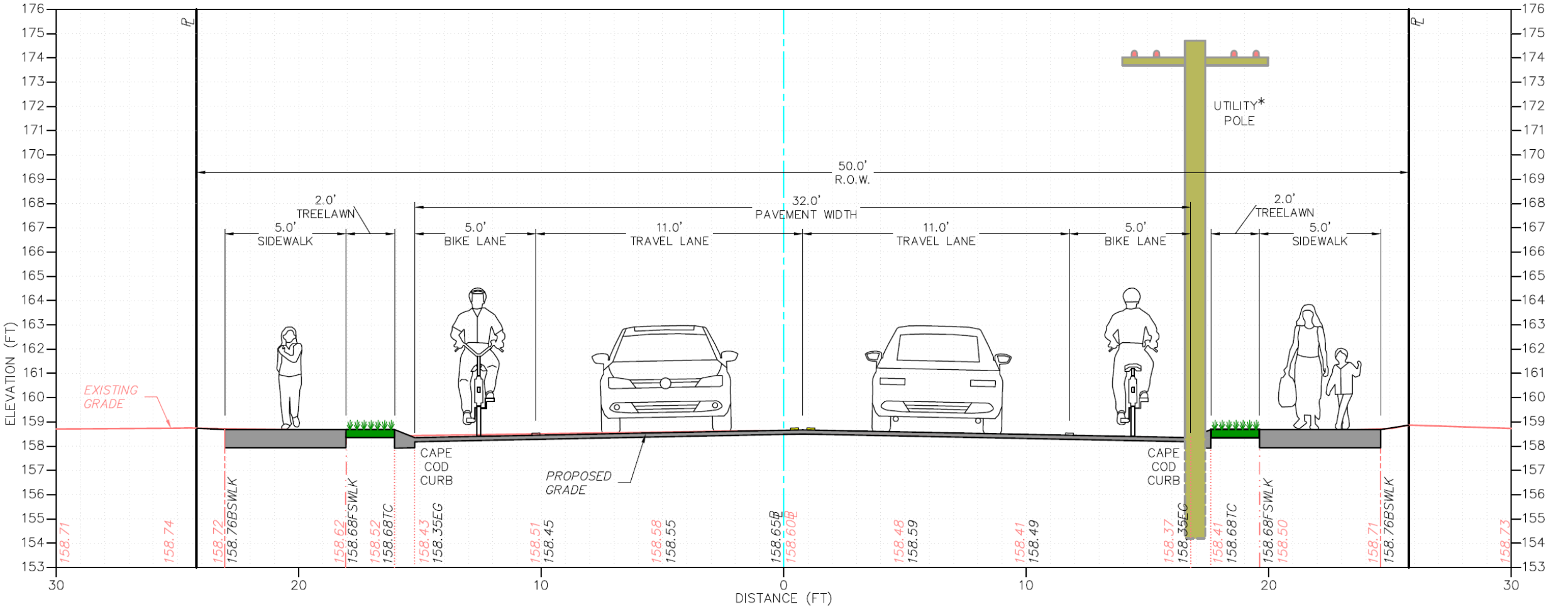
  Consider how users connect to and move along the street currently and in the future and capitalize on all modes of transportation

  When done correctly Complete Streets should improved safety, traffic efficiency, livability, health, environment and economy

COMPLETE STREET IDEAS on WALNUT STREET

- **Option 1 Bike Lanes** – this requires a 34' paved width, consisting of two 12' driving lane (striped at 11') and two 5' wide bike lanes, with some width variability at Washington Street and at Cedar Street, however this will likely require the relocation of numerous utility poles
- **Option 2 "Share the Lane" or Sharrows** – this involves bicyclist and vehicles sharing the same lane and allows the road to be reduced to 26' paved, would reduce impervious area, aid with stormwater goals and could result in wide grass plot (6 to 7') on both side of the street and would eliminate or significantly reduce the need to relocate utility poles
- **Option 3 Multi-Use Path** – this involves a wide (8' min) multiuse path on the North side of the road with a narrowed, possibly 24 or 25' paved road, and a 5' sidewalk on the south side, the multi-use path would be unstriped but would support 2 way pedestrian and bike traffic, this would require some utility pole relocations, an increase in imperviousness and may require some additional drainage

Option 1 – Bike Lanes

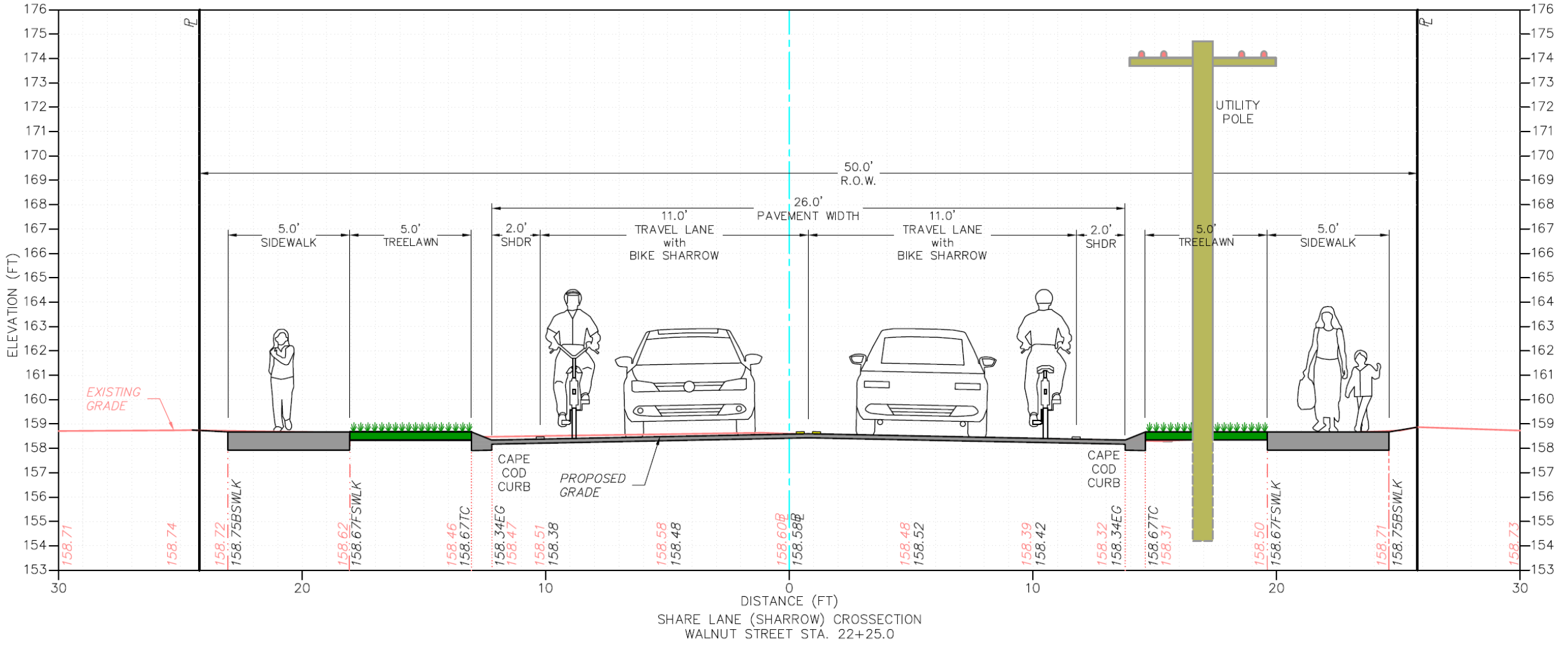


ON ROAD BIKE LANE CROSSECTION
WALNUT STREET STA. 22+25.0

* OPTION WILL REQUIRE APPROXIMATELY 20 UTILITY POLES TO BE RELOCATED

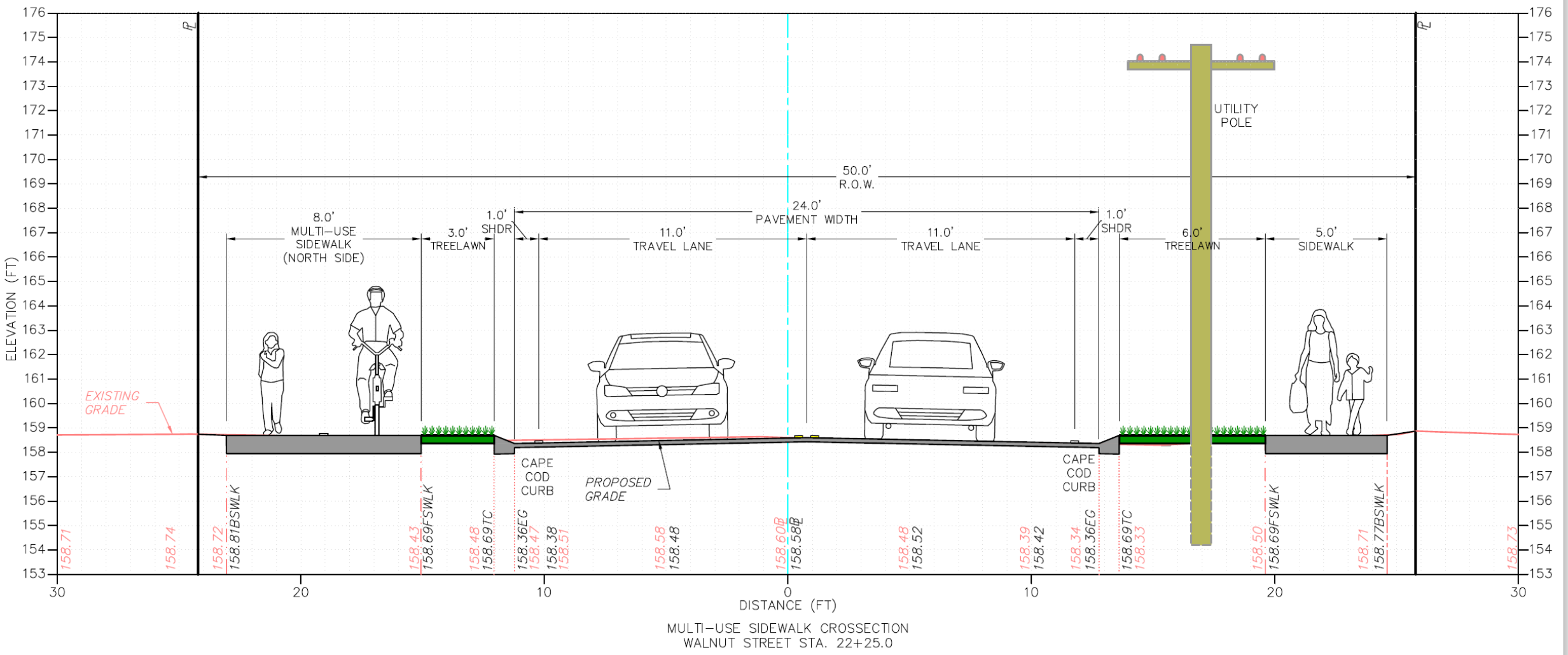
Option 1 - Bike Lane (non-buffered)

Option 2 - Sharrows



Option 2 - Sharrow Street Example

Option 3 – Multi-Use Path



MULTI–USE SIDEWALK CROSSECTION
WALNUT STREET STA. 22+25.0

Option 3 - Multi-Use Path Example General Green Ave - Natick

Next Steps

- February – Advance design and project plans, specifications and estimate (PS&E)
- Early March– Presentation to Select Board
- March – Finalize PSE and bid project
- March/April – Annual Town Meeting presentation
- June – Start Construction, contingent on advance access to funds, construction may be done in two phases, letters to abutter with contact info and a project web site, also be aware that at completion the road will be under moratorium!

Questions and Answers

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Spare Slides and Photos

PROJECT BACKGROUND

- Walnut Street has two signalized intersections at:

  Washington Street

  Cedar/River Street

Washington Street Intersection

Cedar/River Street Intersection

PROJECT BACKGROUND