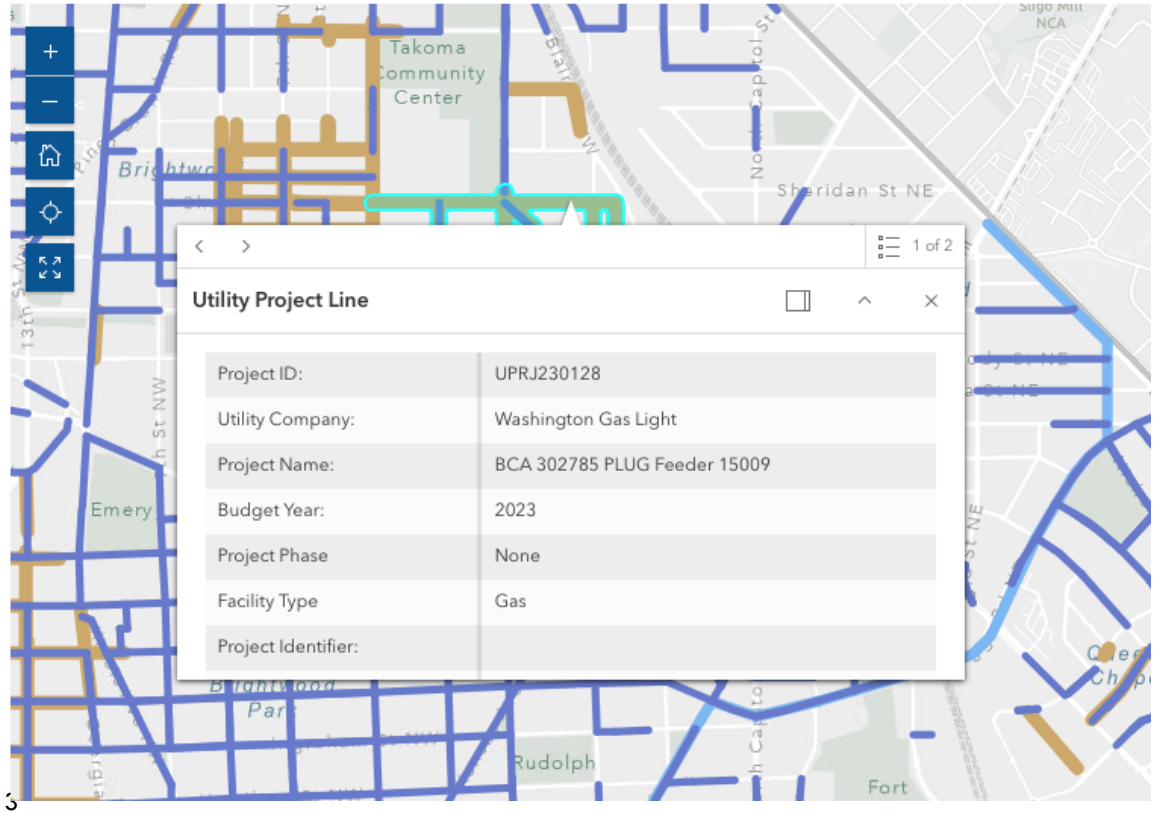
DDOT Improves

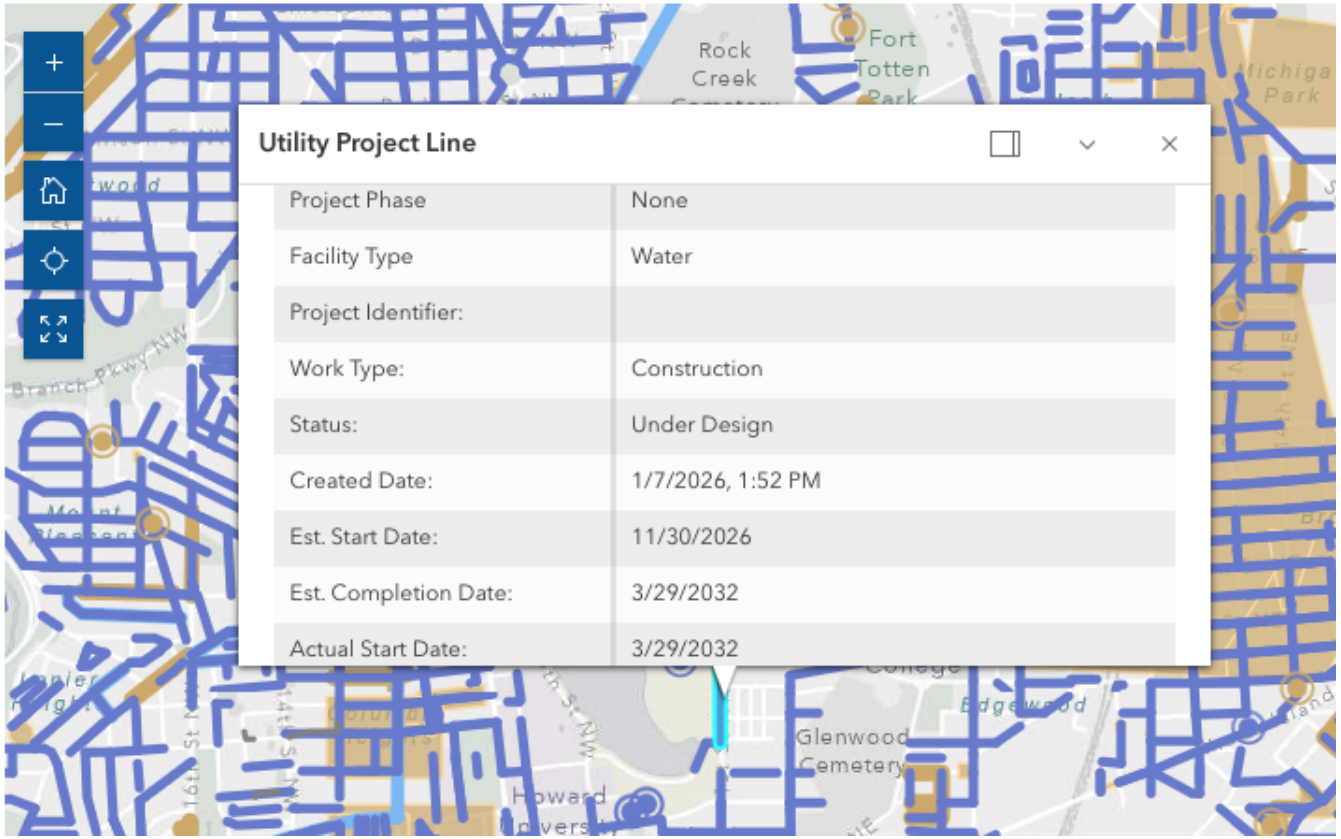
Utility coordination

Utility Coordination

Utility Work Coordination



Utility Work Coordination

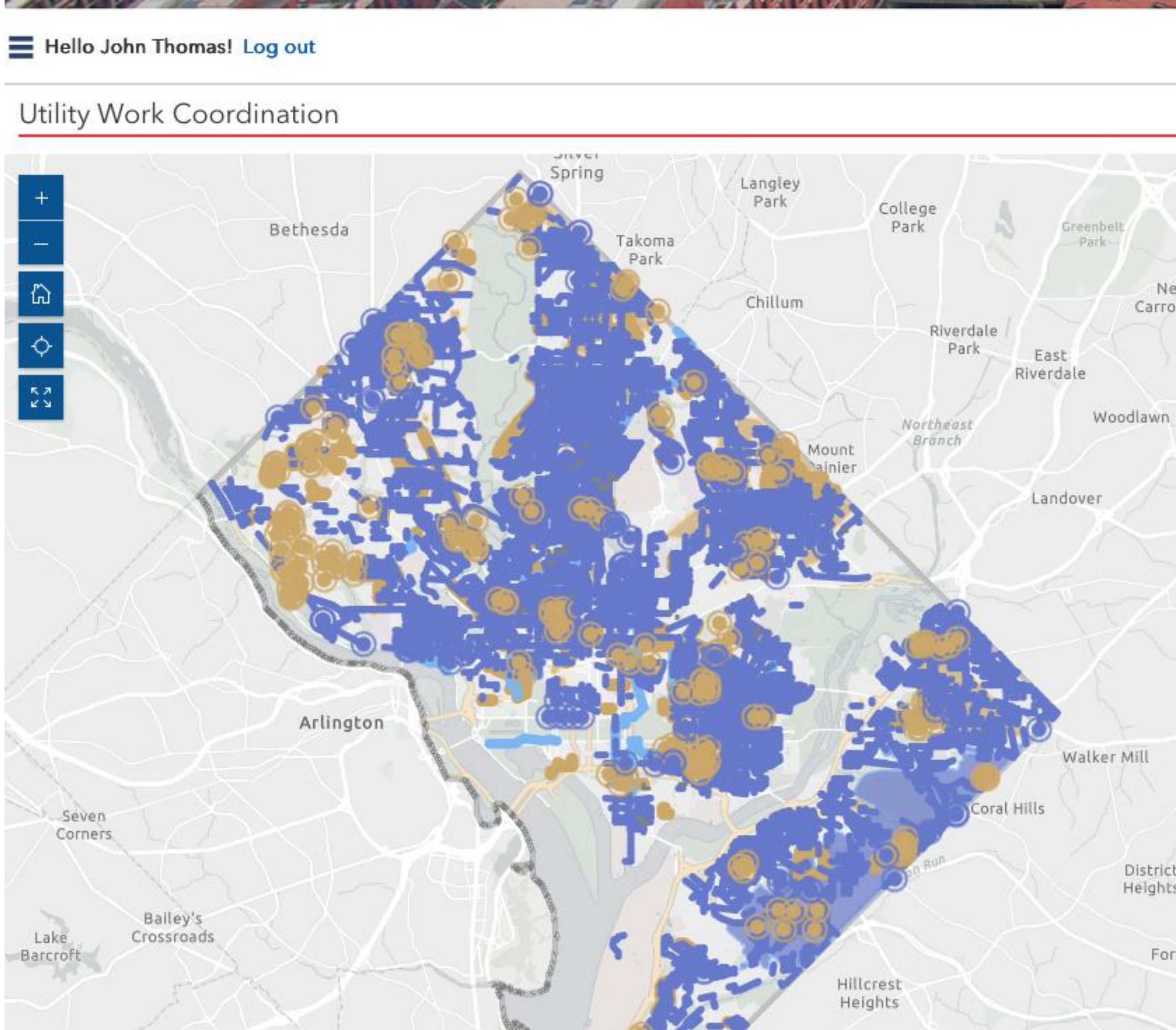


Private & Confidential

Utility Coordination

DDOT is working with utilities to make it way to coordinate on project planning and construction.

Tools like the DTAP tool allow utilities to layout their CIP and see what other plans are out there so they time or sequence the work



GOVERNMENT OF THE DISTRICT OF COLUMBIA
MURIEL BOWSER, MAYOR
Private & Confidential

Utility Coordination

Hello John Thomas! Log out

Edit Project Record

* Required

Project Details

Project ID

UPRJ260007

Organization

Select

Project Name *

BCA-313079-DC SAFE - Connecticut AVE NW - Ward 3

Project Manager *

Select

Program Manager

Select

Description

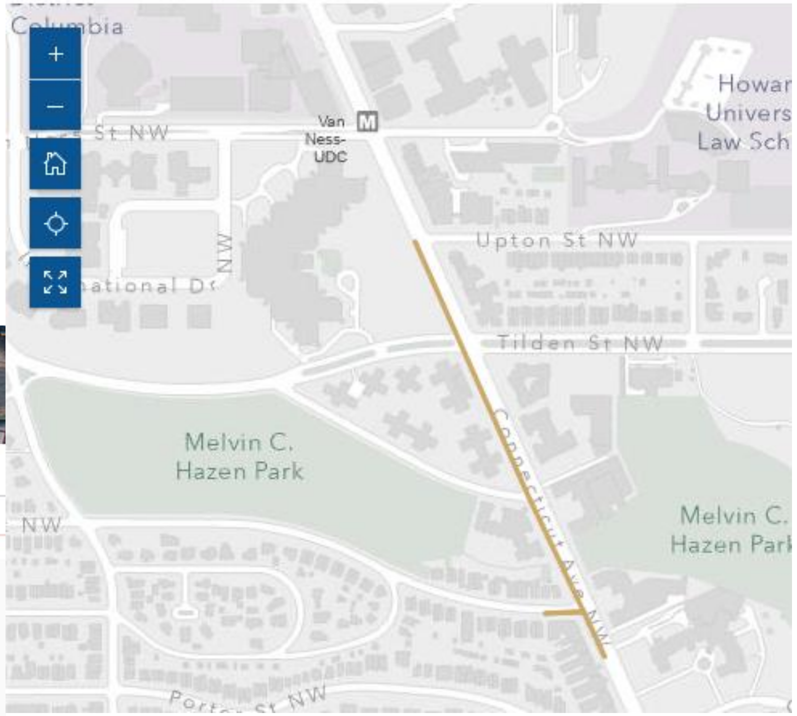
Abandon approx 2000' of main and Install 205' of main.

(Remaining Characters: 4946)

Submit | Cancel

Hello John Thomas! Log out

Add/Edit Utility Projects - Washington Gas Light



GOVERNMENT OF THE
DISTRICT OF COLUMBIA
MURIEL BOWSER, MAYOR
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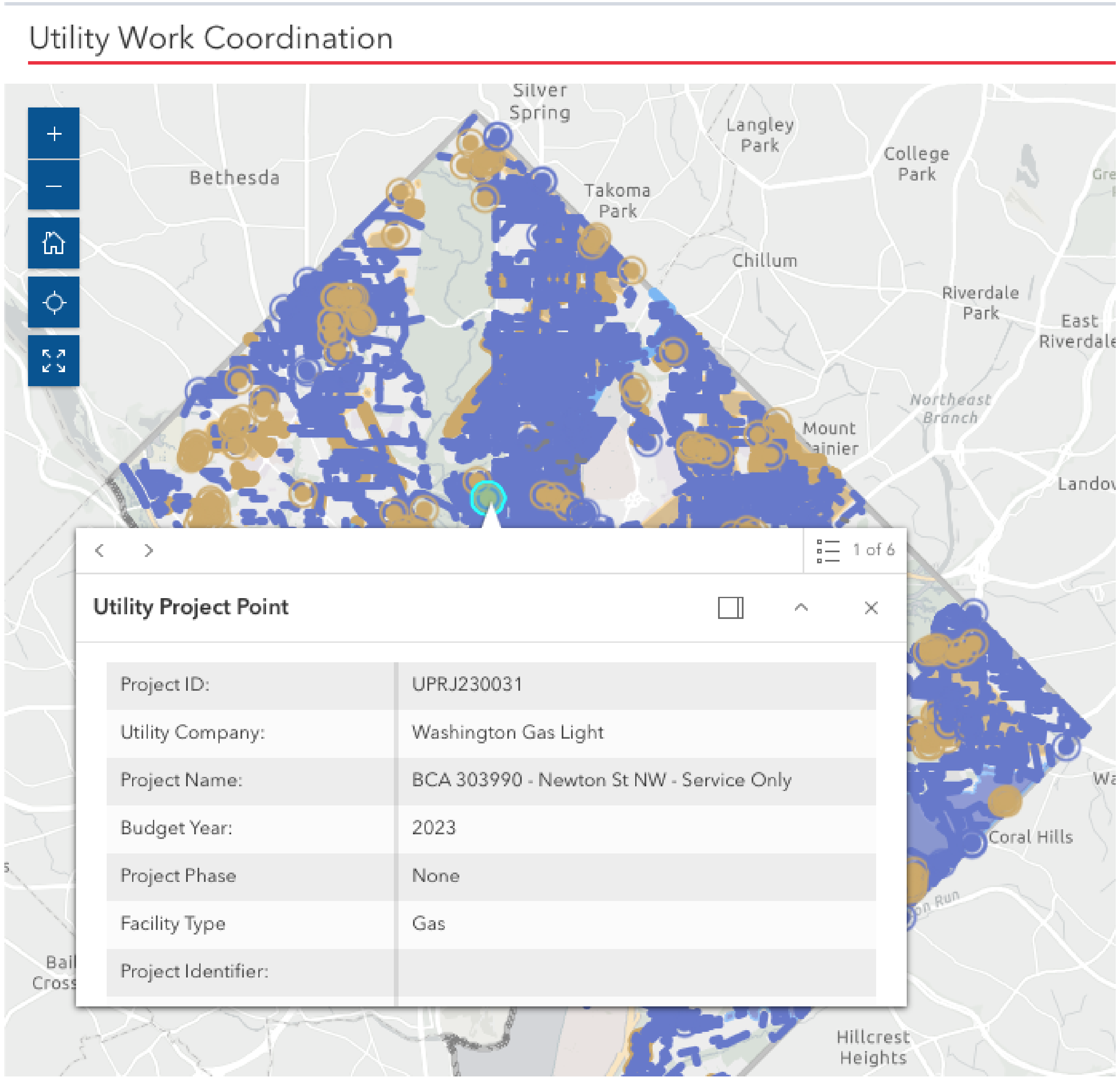
Utility Coordination

DDOT is working with utilities on MOUs and other options that can help with processing permits related to larger scale work programs.

This is a work in progress but will provide clearer expectations for all sides but still will require coordination on timing and construction to avoid conflicts.



asset management

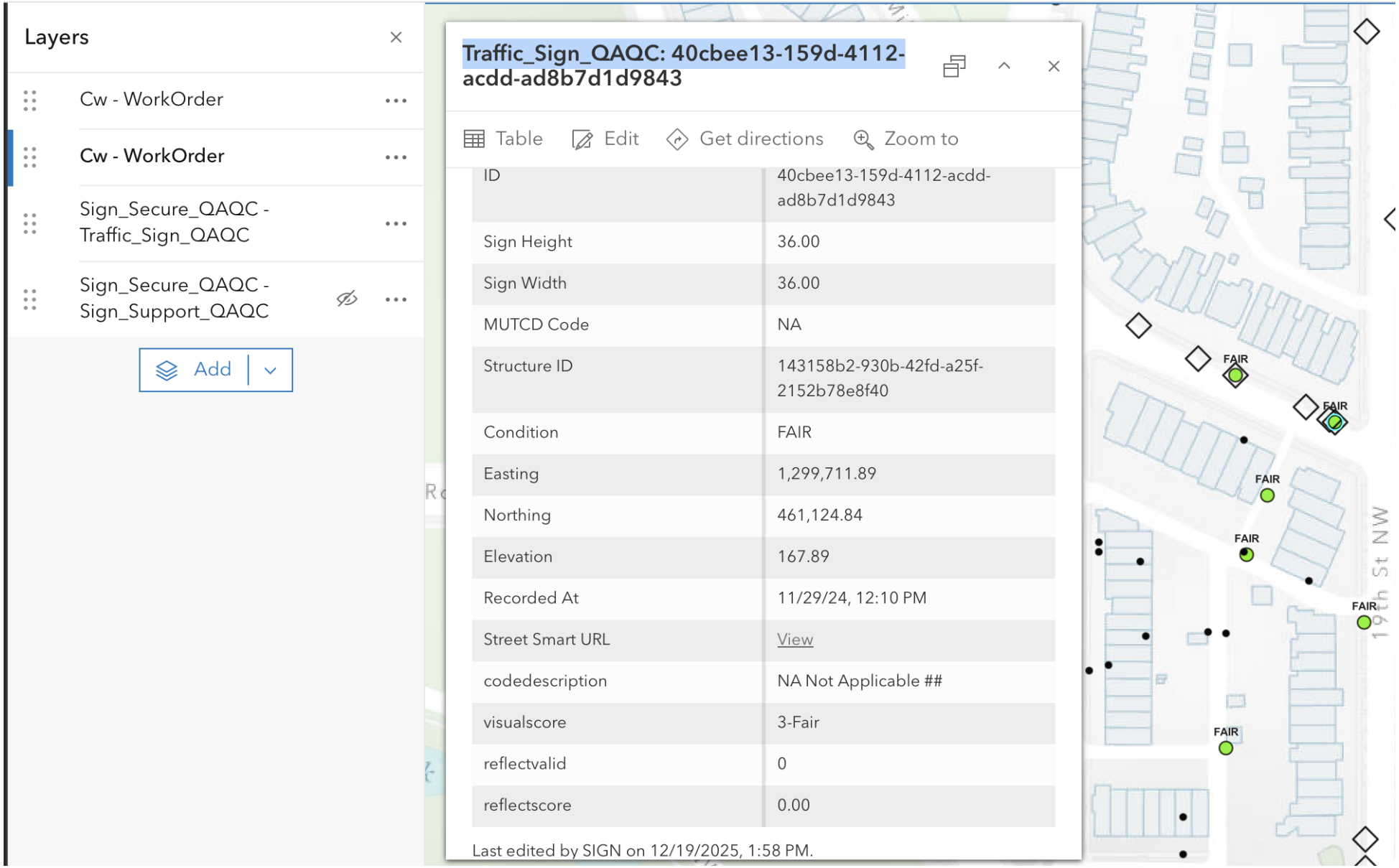
Cyclomedia (LiDAR) at DDOT

- DDOT has been using Cyclomedia LiDAR captures to update or create asset data for the agency that is focused on the roadway between the parked vehicles.

- As seen here with our Pavement Condition Index for local roadways.

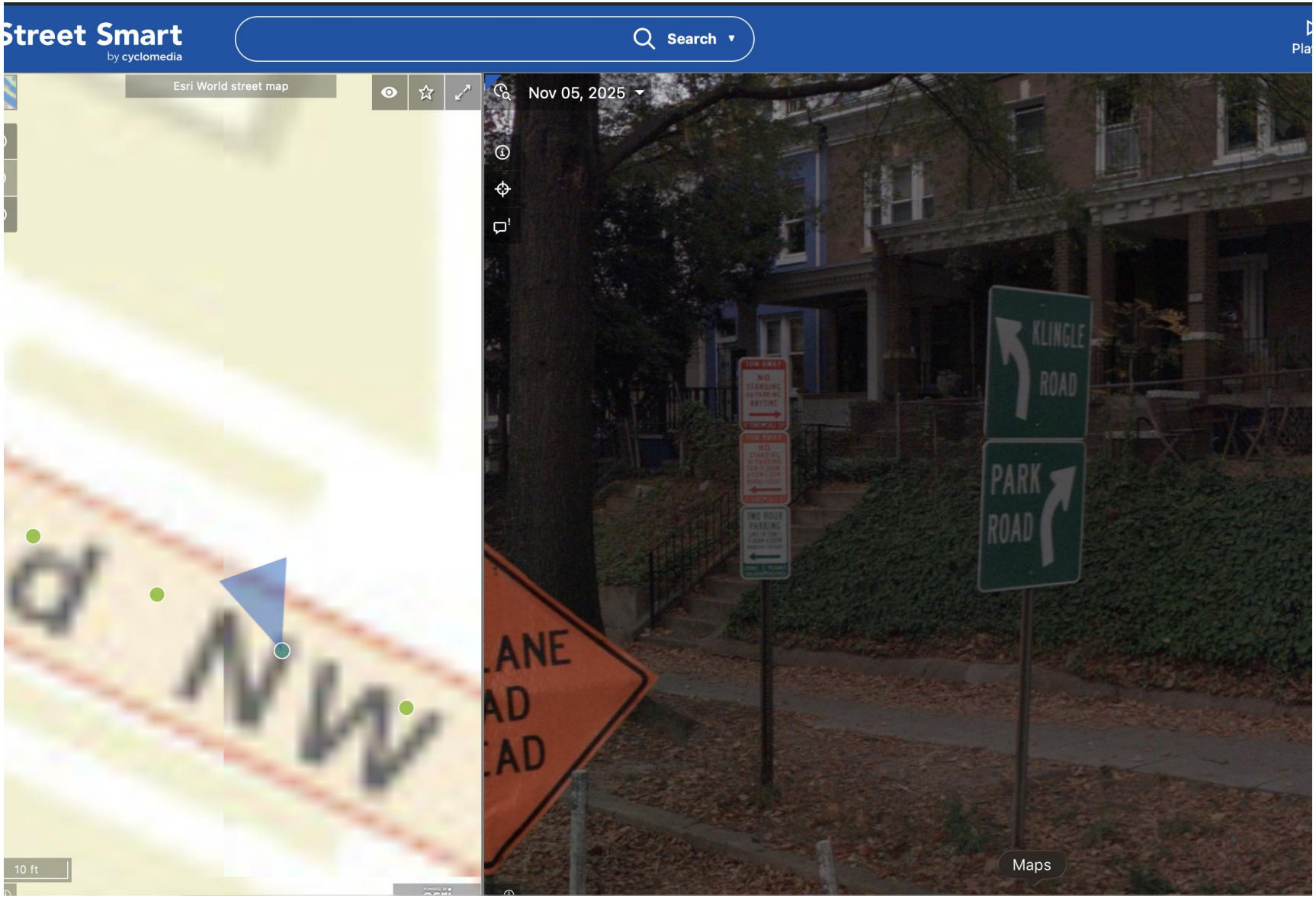
Cyclomedia (LiDAR) at DDOT

Traffic Signs



Cyclomedia (LiDAR) at DDOT

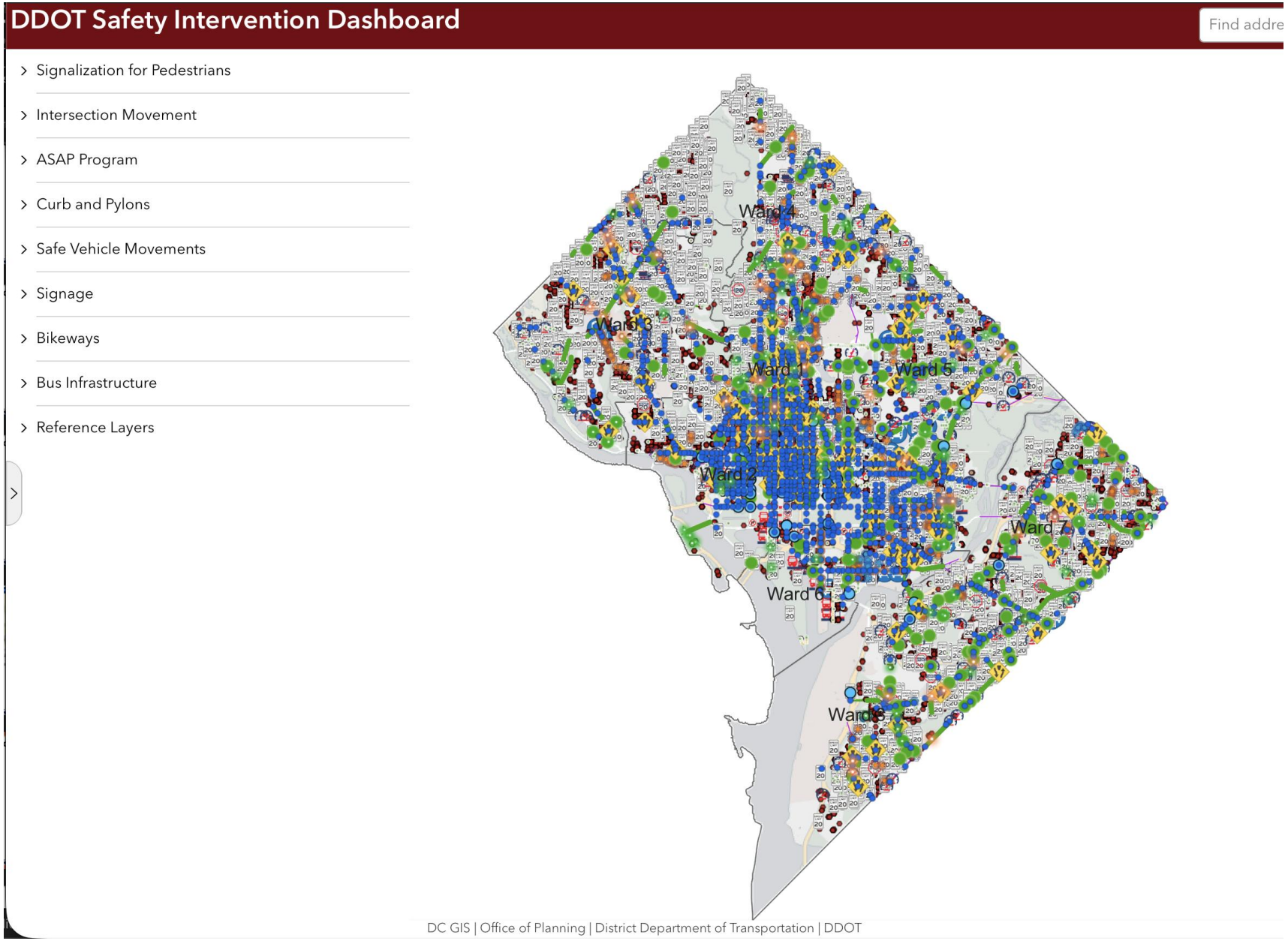
Traffic Signs

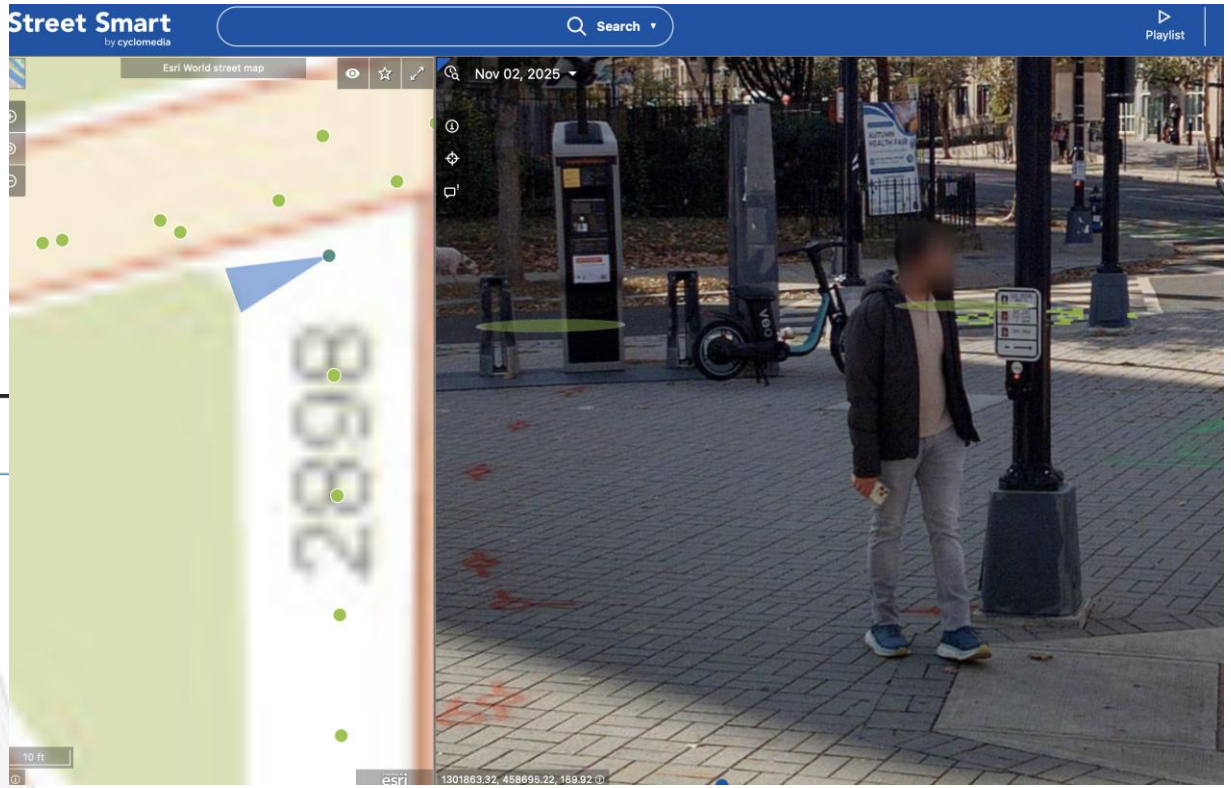


improved transportation safety through lidar

Cyclomedia (LiDAR) at DDOT

Traffic Safety Assets – so many!





SignsDC Dashboard Map

Layers

Search layers

- TrafficSafety Secure QAQC
  - Accessible Pedestrian Signals QAQC
  - LED Pedestrian Flashing Signs QAQC
  - **Push Button QAQC**
  - Rectangular Rapid Flashing Beacons QAQC
  - School Zone Flashers QAQC
- Cw - WorkOrder
- Cw - WorkOrder
- Sign_Secure_QAQC - Traffic_Sign_QAQC
- Sign_Secure_QAQC - Sign_Support_QAQC

2 of 2

Traffic_Sign_QAQC: 8041a7b2-c85d-4441-9694-475ebc496a1b

Table | Edit | Get directions | Zoom to

MUTCD Code	R10-3b
Structure ID	85531a3c-4b19-4ae2-bca0-2898d969bb23
Condition	POOR
Easting	1,301,856.61
Northing	459,062.66
Elevation	198.33
Recorded At	11/30/24, 10:59 AM
Street Smart URL	View
codedescription	pedestrian push button to cross symbol white black
visualscore	1-Critical
reflectvalid	1
reflectscore	0.56

Last edited by SIGN on 12/19/2025, 1:58 PM.

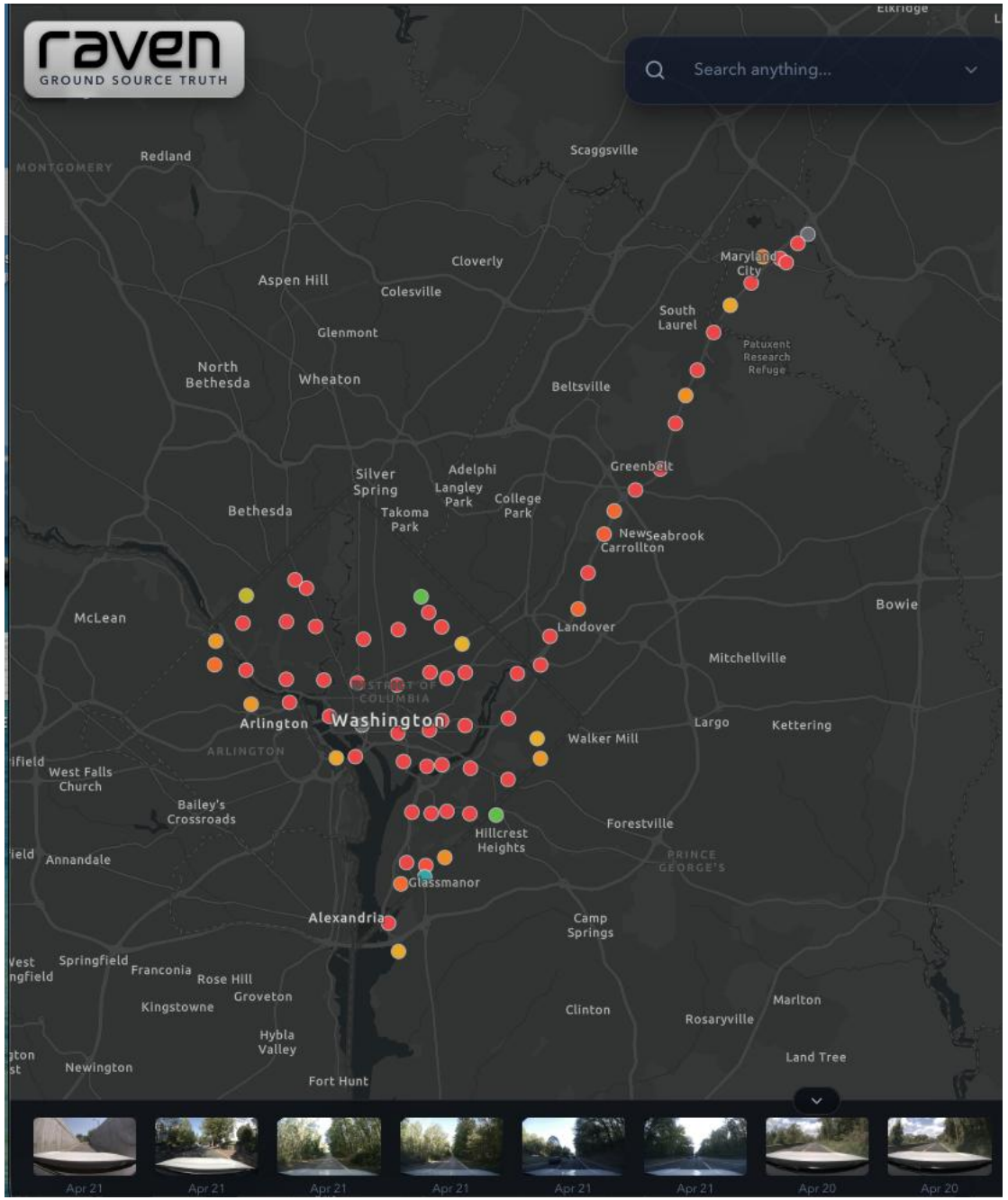
POOR

Ped Push Button

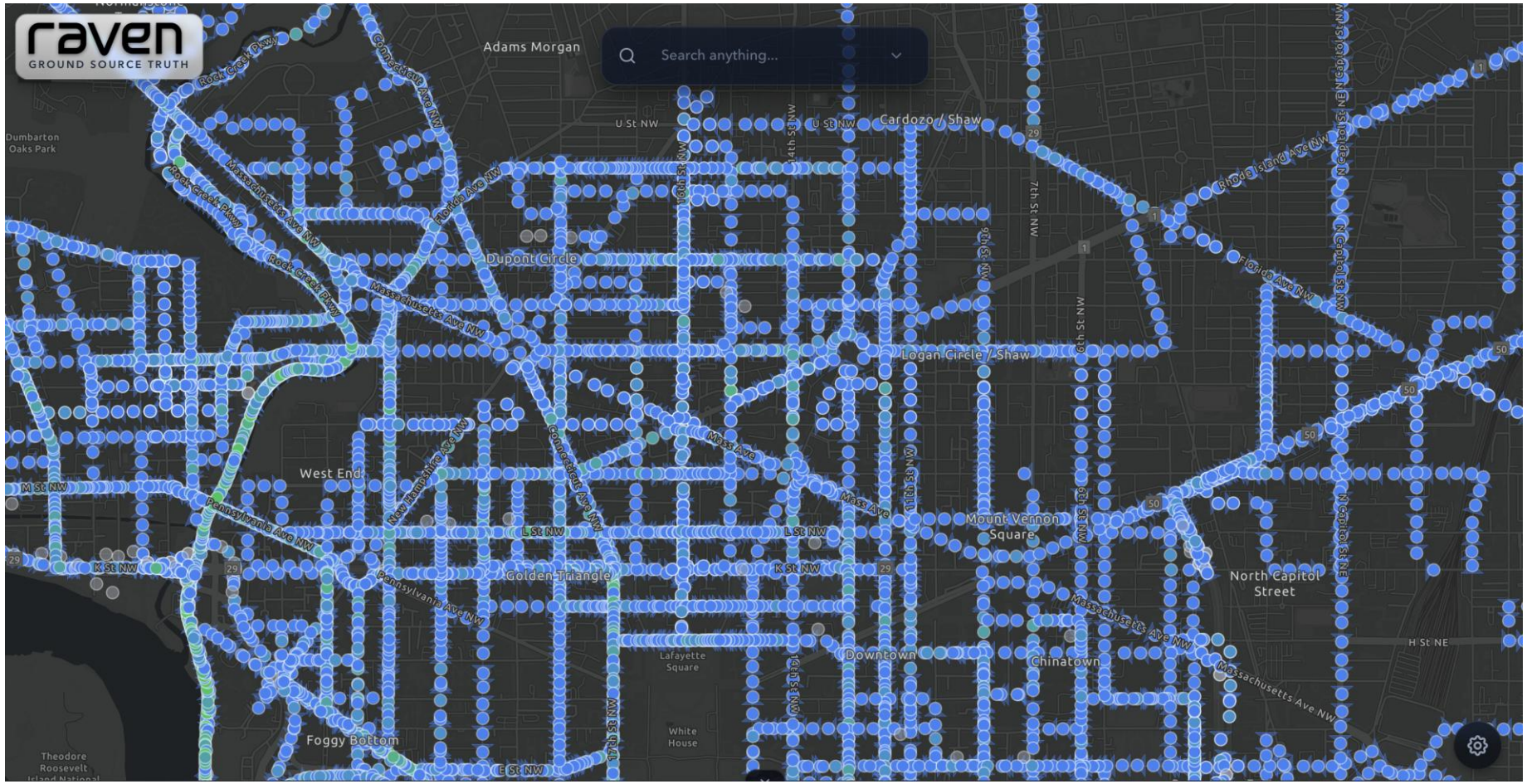
cameras and dashboards

Raven Camera

DDOT Has five Raven Cameras on board in our 75-day pilot test

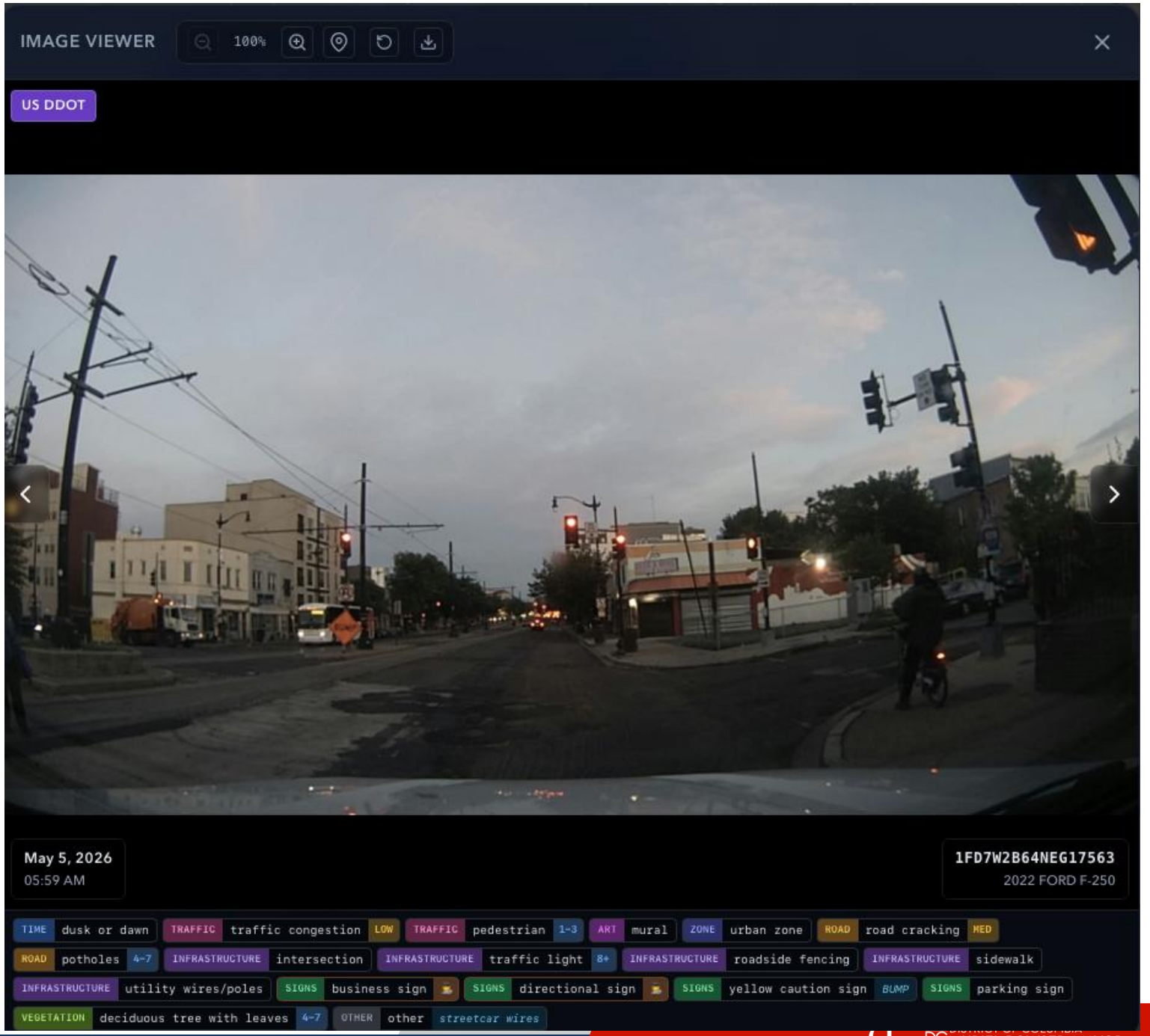


Raven Camera



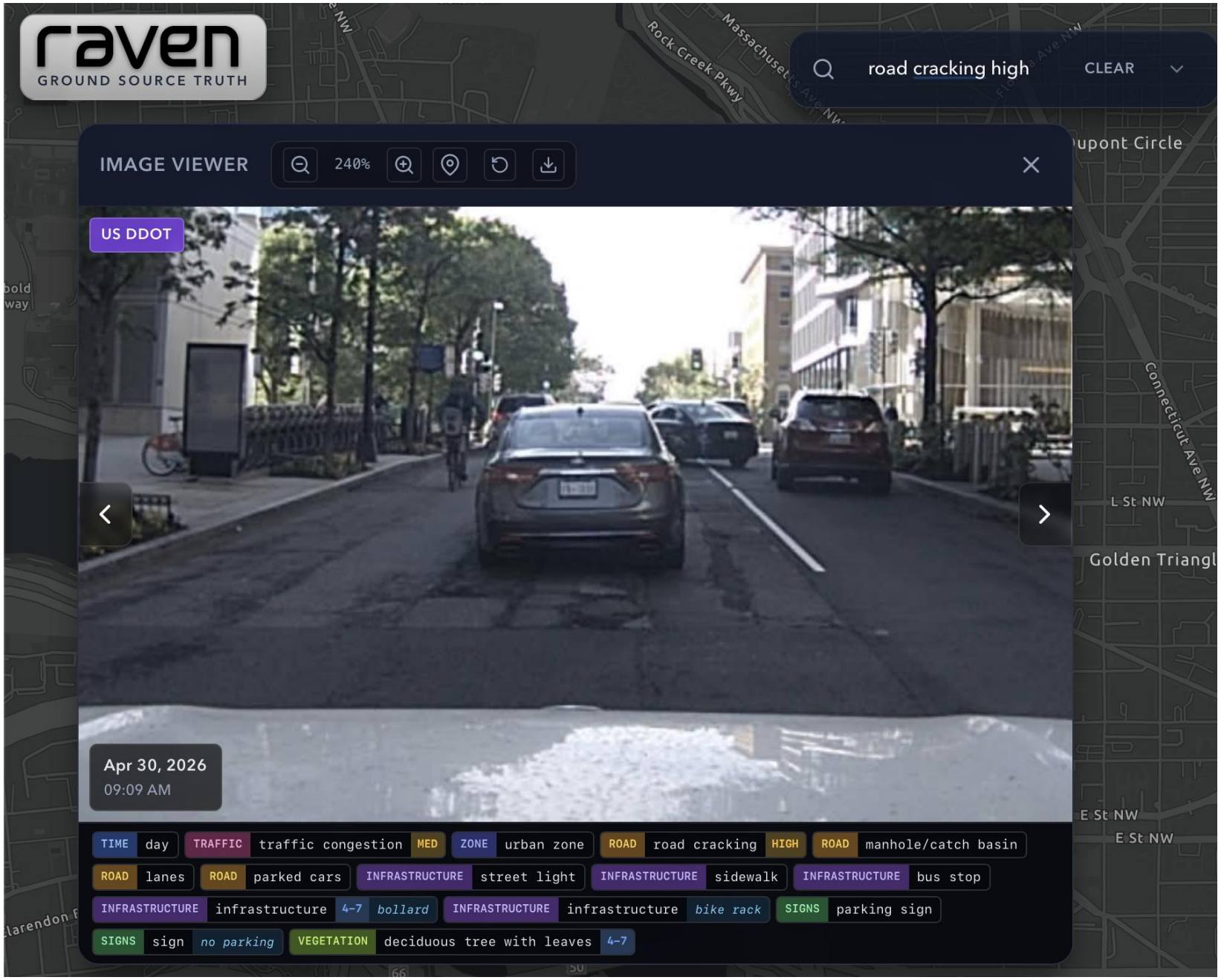
Raven Camera

Pothole detection



Raven Camera

Road Cracking High detection

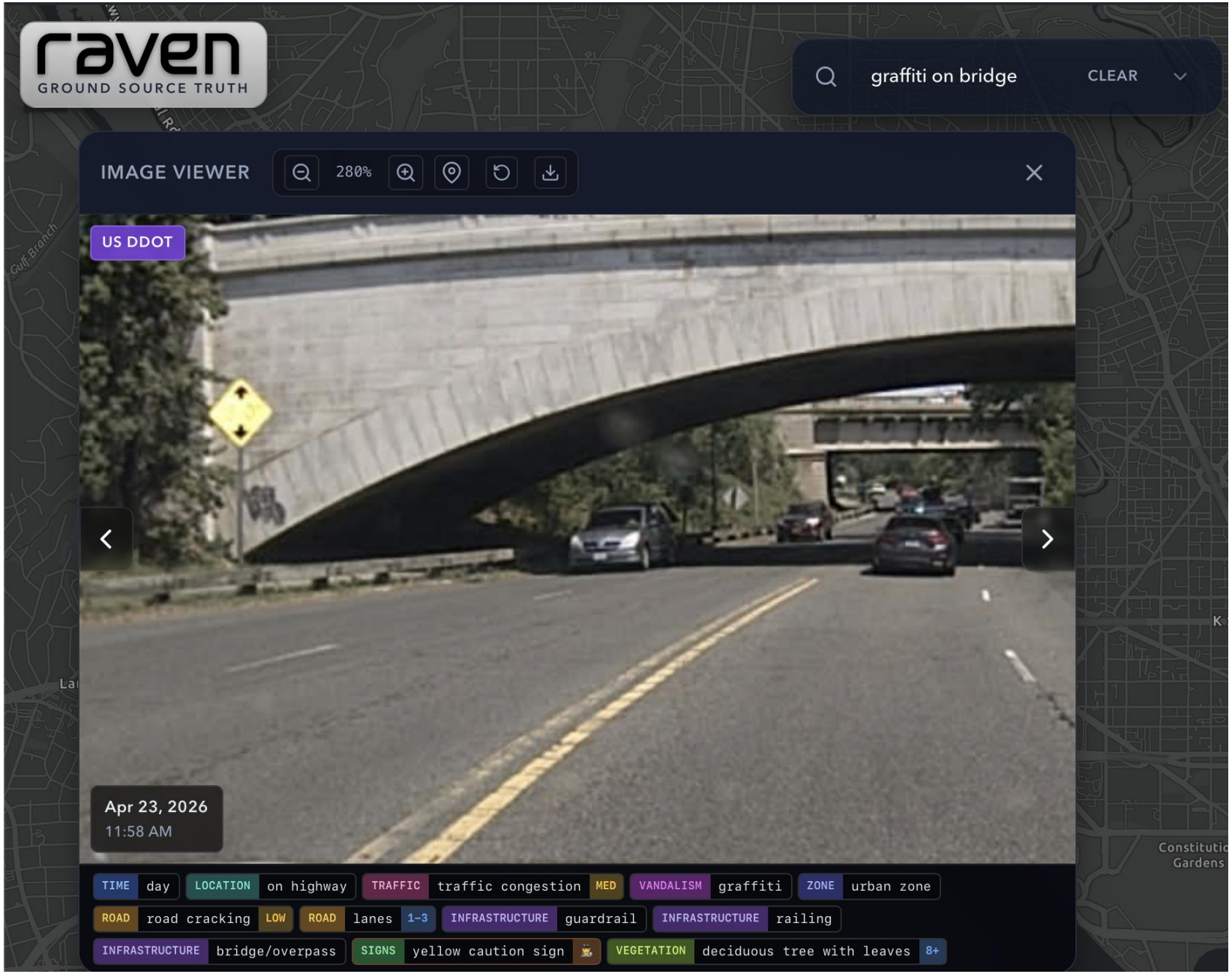


Raven Camera

Stop Sign detection

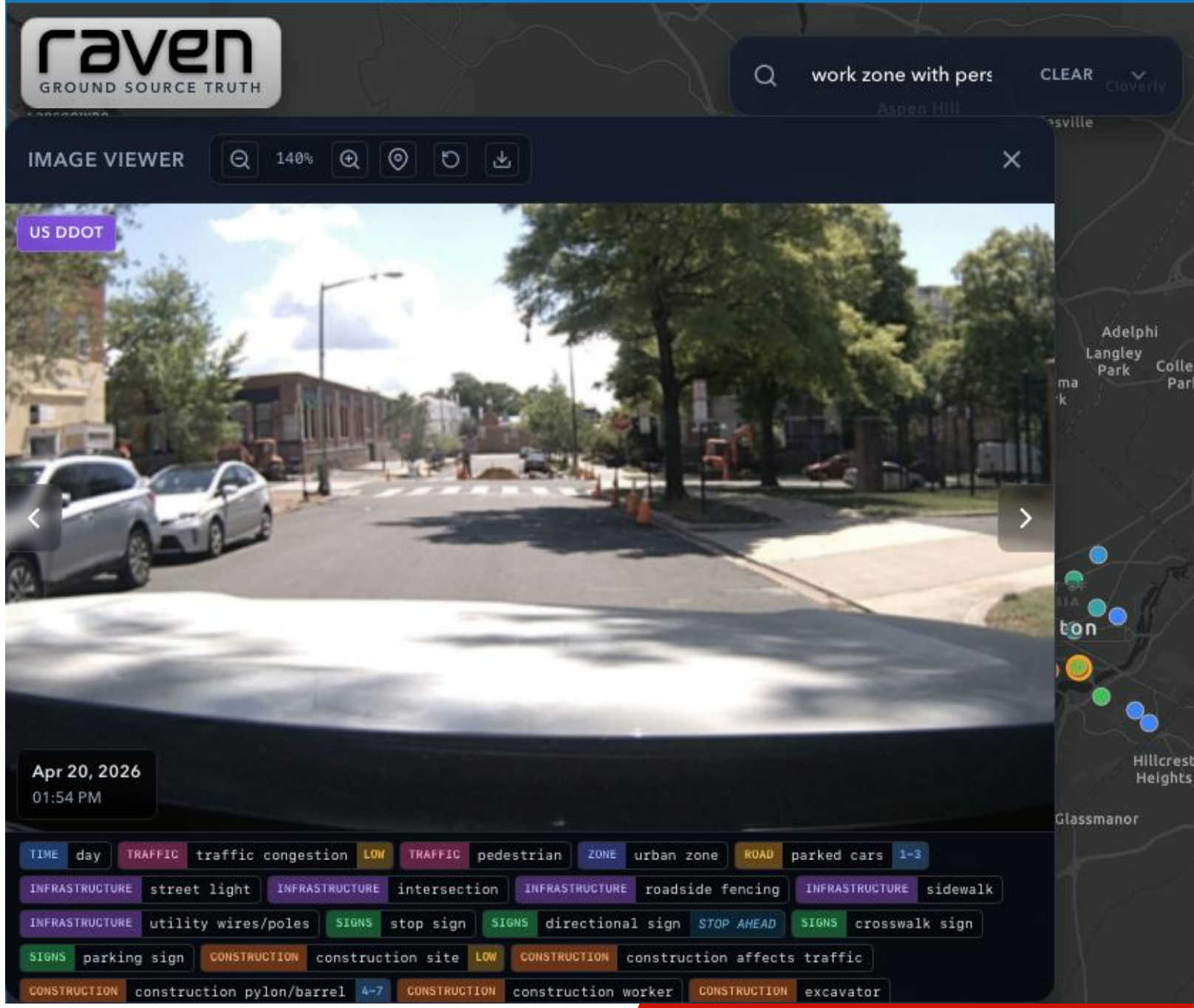
Raven Camera

Graffiti on Bridge detection



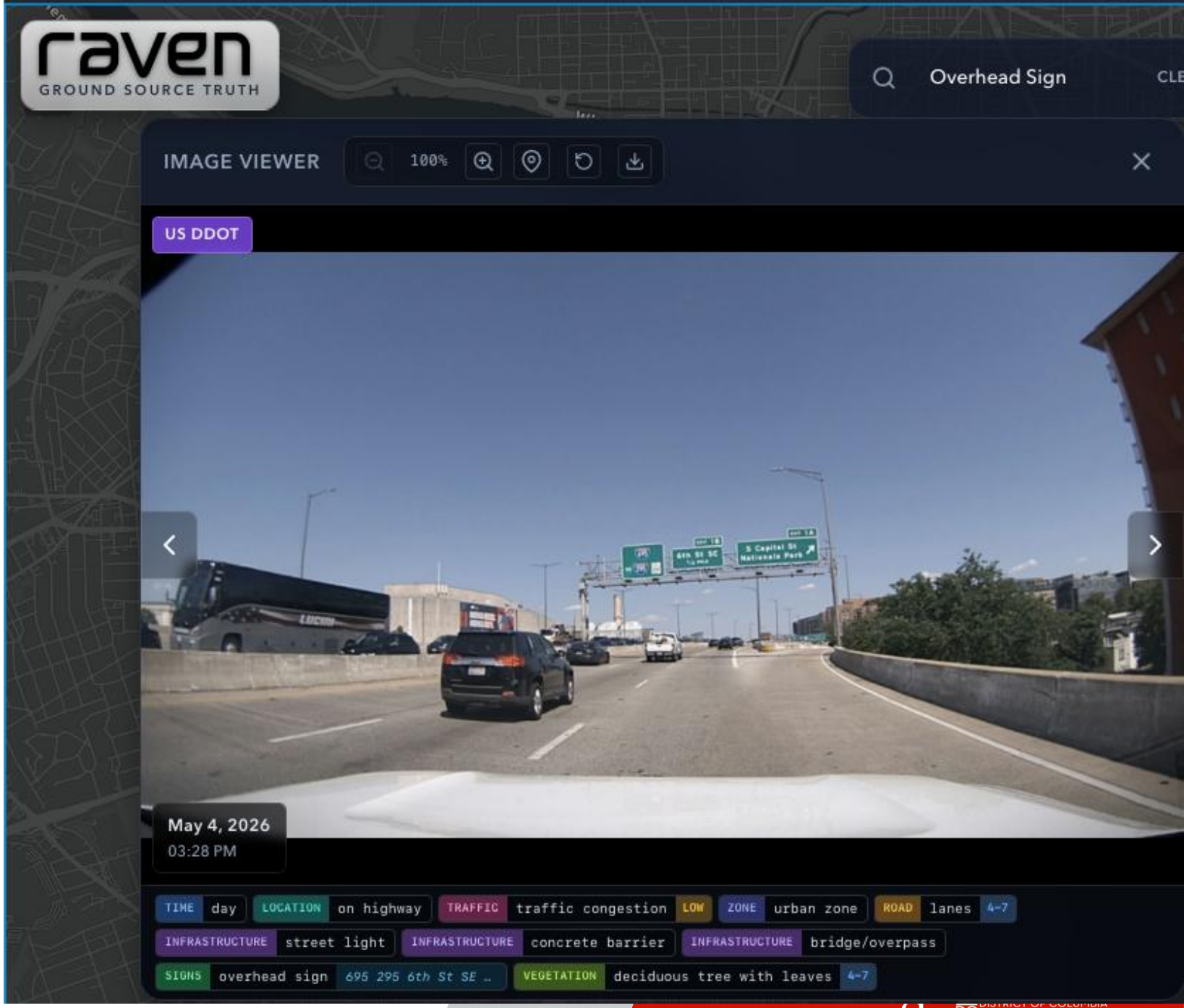
Raven Camera

Work Zone with person detection



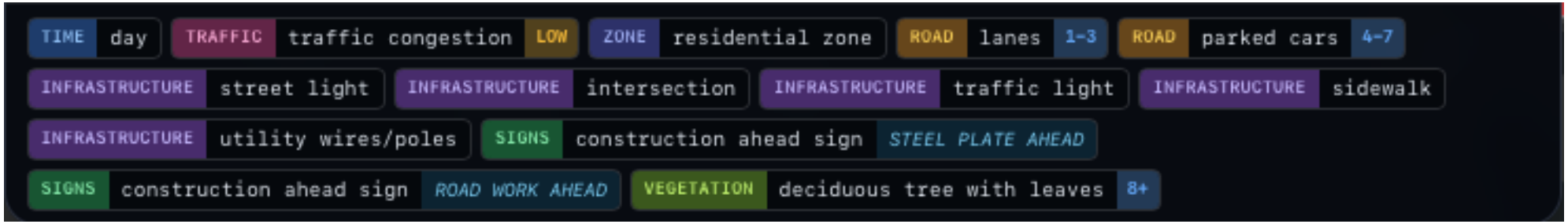
Raven Camera

Overhead Sign detection



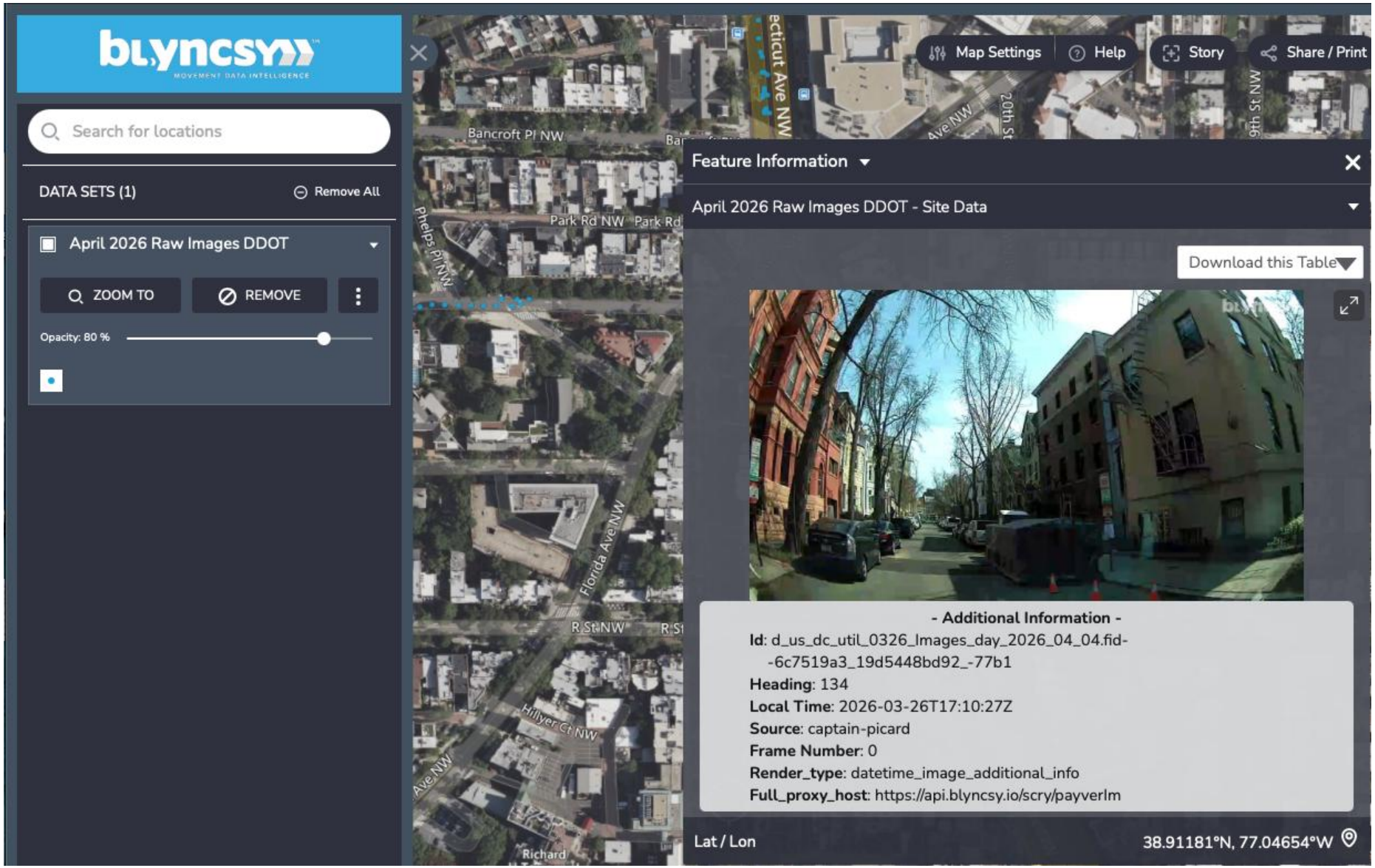
Raven Camera

Things we can detect



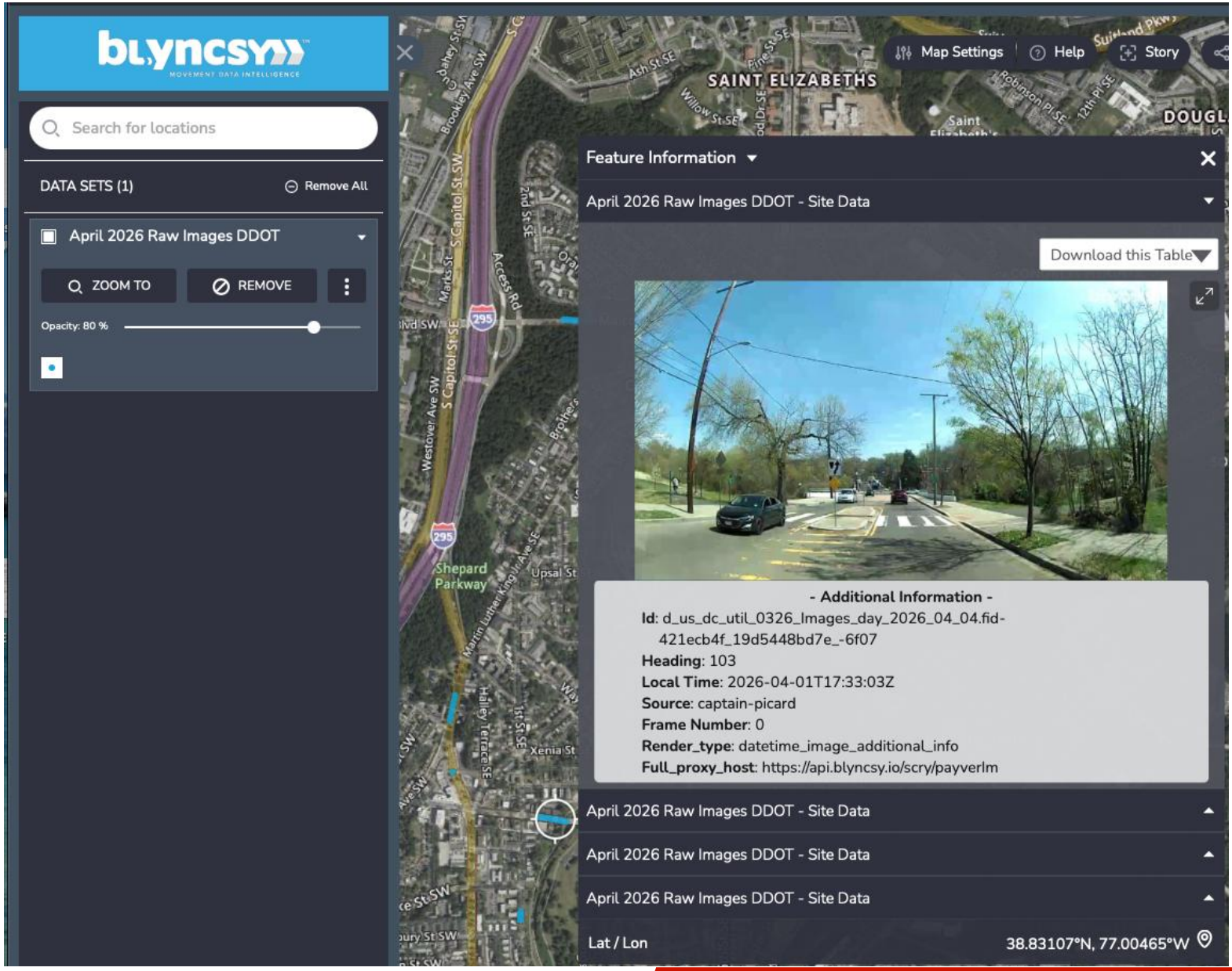
Blyncsy Crowd Sourced Cameras

Utility Patching



Blyncsy Crowd Sourced Cameras

Crosswalk Condition Detection



Drones, Robots and AVs – oh my

Drone Operations

Drone Models Deployed

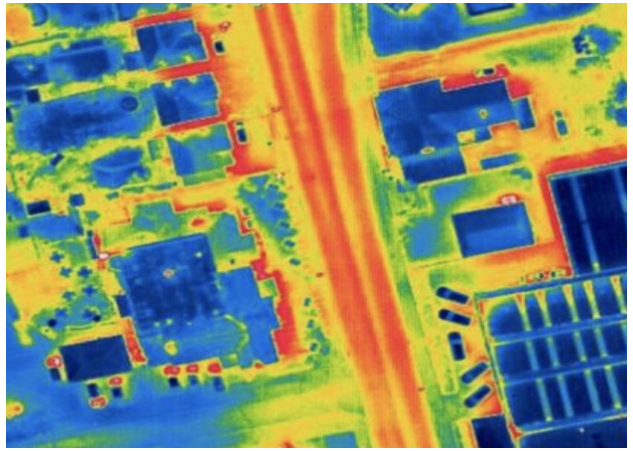
Skydio 2 Plus, Skydio X2E and Autel Evo Max 4T

Data Analytics

Esri 3D Site Scan to enable “phodar” imaging of assets.

Sensor Technology

High-resolution cameras, obstacle detection and avoidance systems, thermal imaging



Drone Operations

Bridge Inspections

- Pennsylvania Ave Bridge
- Theodore Roosevelt Bridge

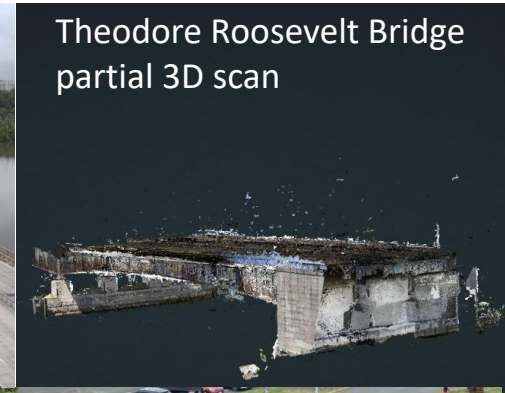
DDOT Partnerships

- DOEE – Linnean Gully Strean Restoration
- DPW – DPW Annual Truck Touch

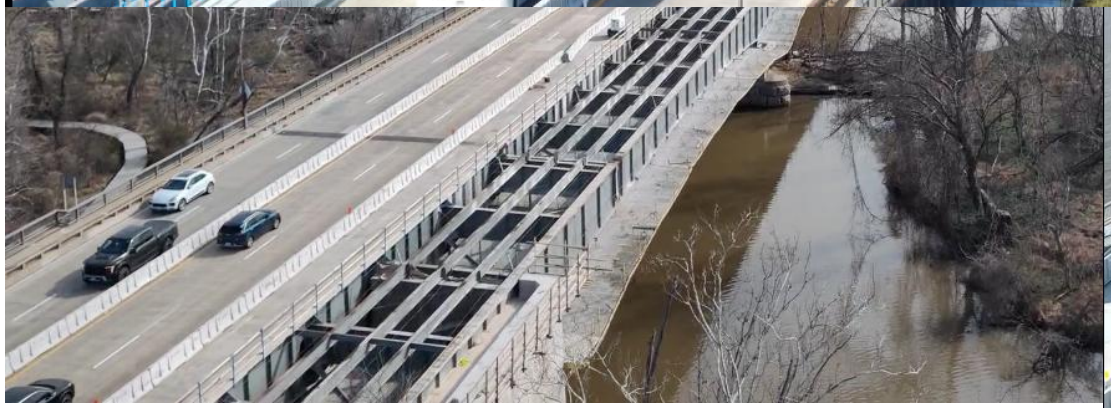
District Public Events

- Open Streets DC

Tree Audits

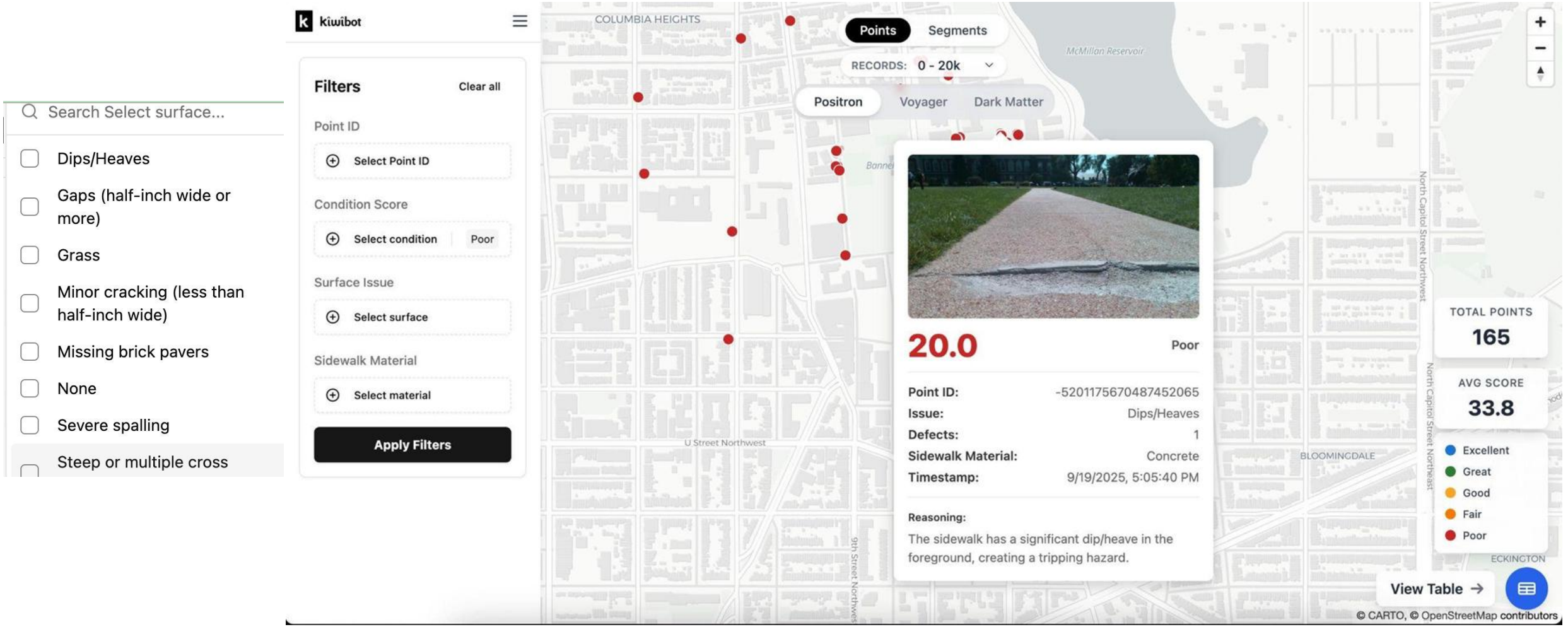


Drone Operations



District of Columbia Confidential

KiwiBot Signwalk Condition



We classified each point and displayed its details, including a photo, the identified issue, a brief explanation of the reasoning, and the corresponding score.

Private & Confidential

KiwiBot Signwalk Condition

We can filter by surface conditions such as dips and heaves, gaps wider than half an inch, grass, minor cracking, missing brick pavers, no issues, and severe spalling.

20.0 Poor

Point ID:	-252280460040101474
Issue:	Dips/Heaves
Defects:	1
Sidewalk Material:	Concrete
Timestamp:	10/1/2025, 3:17:21 PM

Reasoning:

The sidewalk has several areas where bricks are displaced, creating dips and heaves.

45.0 Poor

Point ID:	-8328011543784308876
Issue:	Severe spalling
Defects:	2
Sidewalk Material:	Concrete
Timestamp:	9/26/2025, 9:24:04 PM

Reasoning:

The sidewalk exhibits cracking and spalling, particularly around the curb and in the concrete slabs. There are also some red spray paint markings on the sidewalk.

60.0 Poor

Point ID:	-7417881428805526452
Issue:	Gaps (half-inch wide or more)
Defects:	1
Sidewalk Material:	Concrete
Timestamp:	9/26/2025, 4:00:55 PM

Reasoning:

The sidewalk has a large circular gap filled with leaves, which is a significant defect.

20.0 Poor

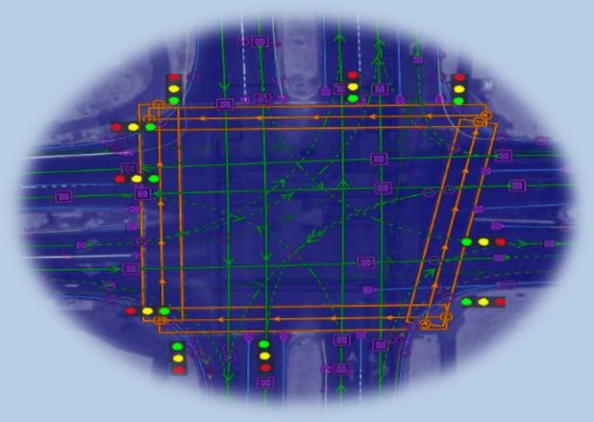
Point ID:	-7188046740038378496
Issue:	Missing brick pavers
Defects:	1
Sidewalk Material:	Concrete
Timestamp:	7/15/2025, 9:01:04 PM

Reasoning:

The paver section of the sidewalk exhibits minor dips and heaves where some individual pavers are slightly uneven, creating small height differences. The concrete section appears to be in good condition. No other significant defects such as cracking, spalling, large gaps, non-uniform cross slopes, grass/weeds in joints, or missing bricks are visible.

AVs may be an option in the future

Mapping and Simulation



Drivers in sensor-equipped vehicles navigate streets to create highly detailed maps. Simulated scenarios using map data allow testing and improvement of the autonomous system before field testing

Field Testing with a Safety Driver

Vehicles operate <u>with</u> a safety driver ready to take over in case of emergency, system failure, or if the vehicle exits its operational limits. **DC law allows testing with a safety driver on DC-owned streets** (separate permission required for NPS and other non-DC owners)**.**

Field Testing With No Driver

Vehicles operate <u>without</u> a safety driver. The system or a remote operator acts as the fallback driver in an emergency or system failure.

District Department of Transportation

250 M St SE | Washington, DC 20003 | 202.673.6813