

32nd Street and Main Street Intersection Improvements

TOWN COUNCIL MEETING

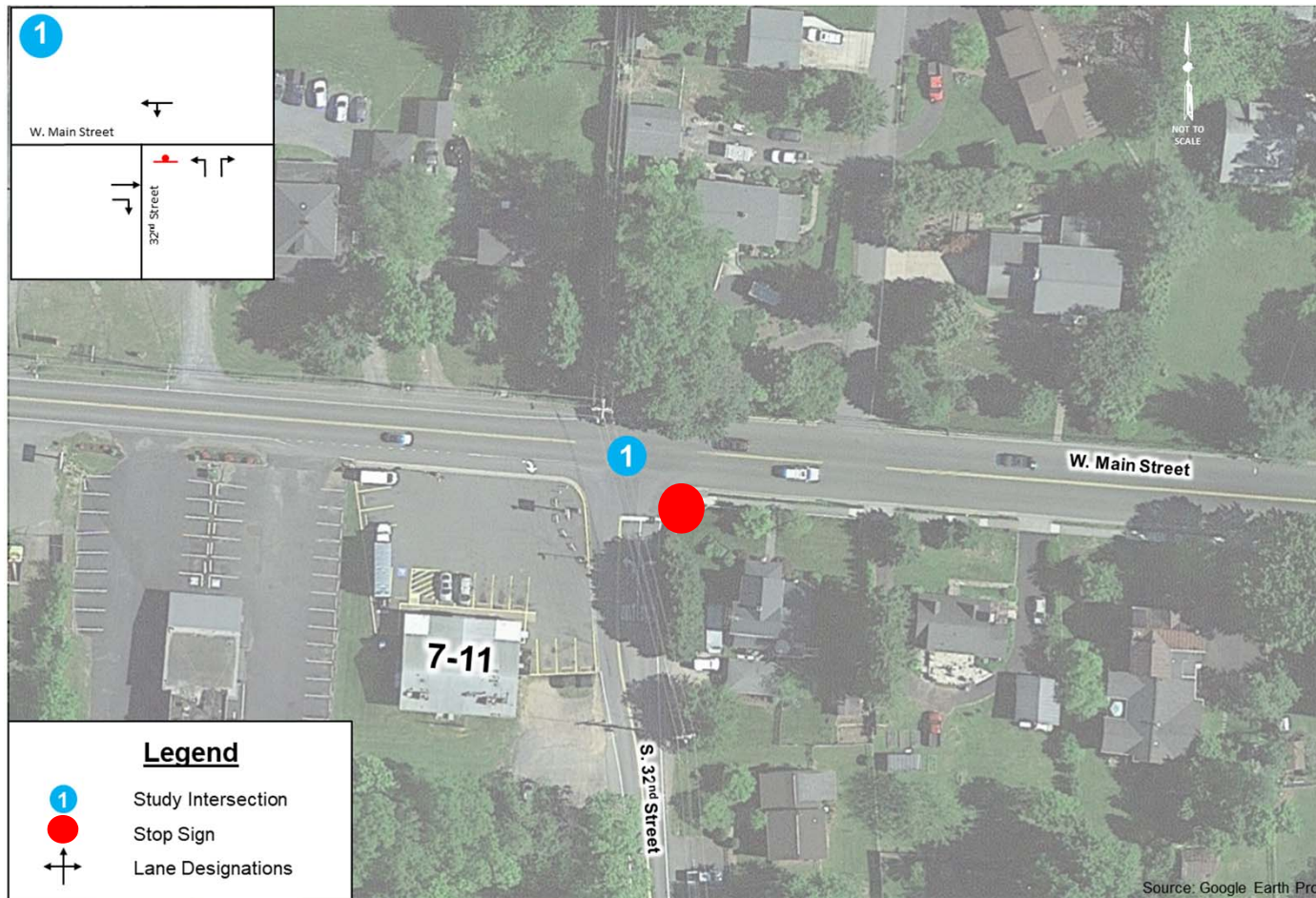
JULY 26, 2022



32nd Street & Main Street Intersection Improvements

- ❑ Background
- ❑ Existing Conditions
- ❑ Concepts
- ❑ Input from February/June 2020 Public Meetings
- ❑ Results of Speed Limit change and PMSD signs





Background

Timeline

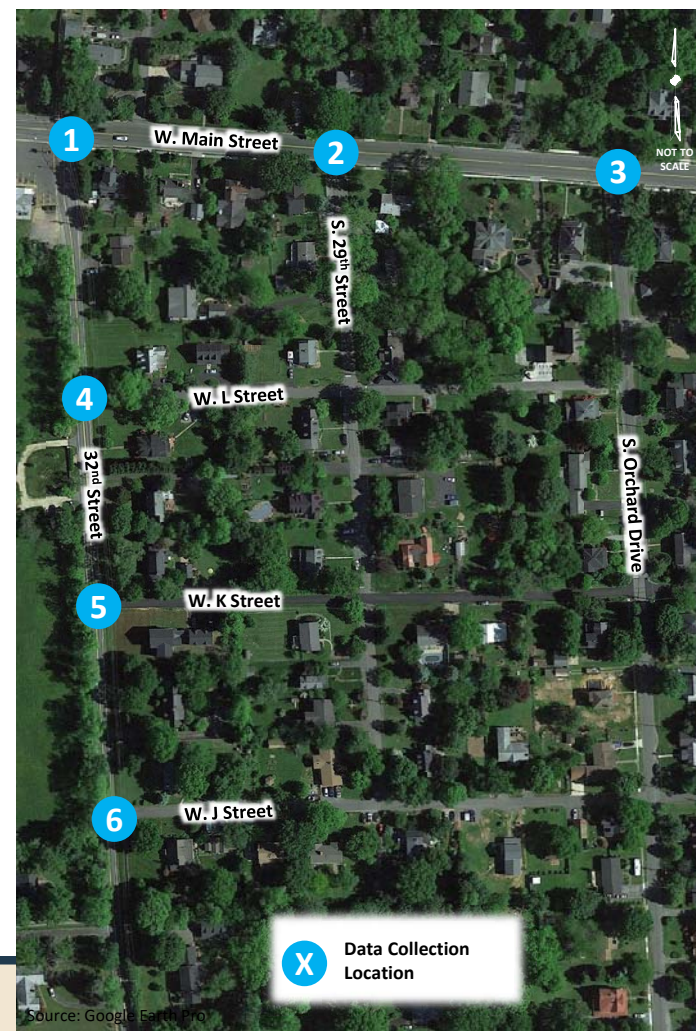
- Citizens and Council have been seeking improvements
- Town received VDOT and NVTA funding – Initiated study May 2019
- Town Council Meeting held on 12/10/2019
- Public Information Meeting held on 2/27/2020
- Public Information Meeting (virtual) held on 6/16/2020
- Town Council Meeting held on August 11, 2020
 - Speed Study approved by VDOT to lower speed on Main St – April 14, 2021
 - Speed limit modification and installation of PMSD signs – February 11, 2022
 - Data collected to review new speeds – April 2022
 - Reporting back to Town Council

Background



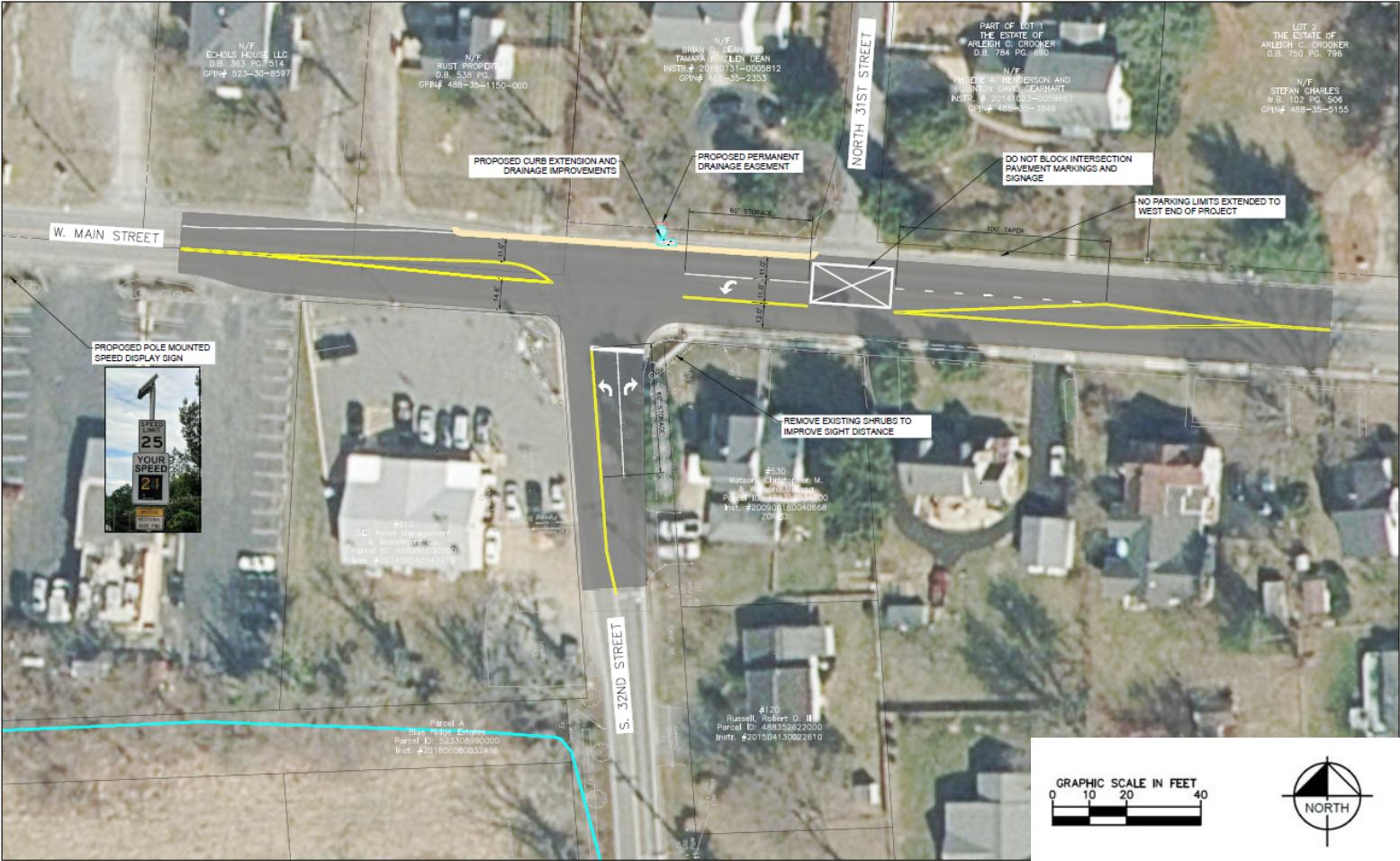
Existing Conditions

- Two reported crashes (rear end) during the three-year time period (2016 -2018) – near misses were observed
- Traffic peak periods:
 - Weekday 7:30-8:30 AM and 4:30-5:30 PM
 - Saturday 11:15 AM -12:15 PM
- Cut Through Traffic Review
 - Observations
 - Traffic data collected
- Other Issues
 - No westbound left-turn lane on Main Street
 - Difficult to turn from 32nd Street onto Main Street
 - Few pedestrian facilities and non-ADA compliant
 - Parked trucks block street
 - Presence of utilities and limited right-of-way

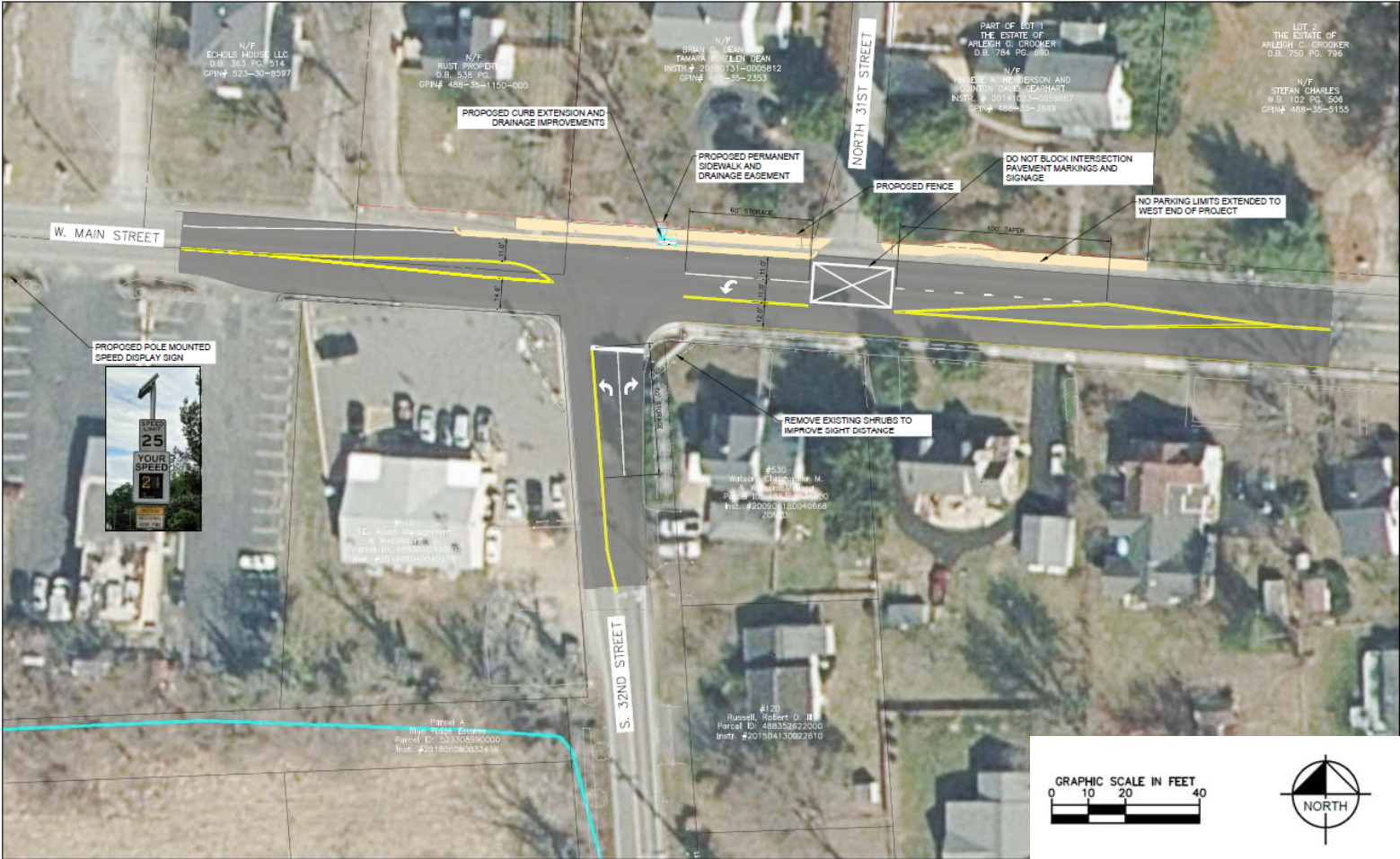


Background

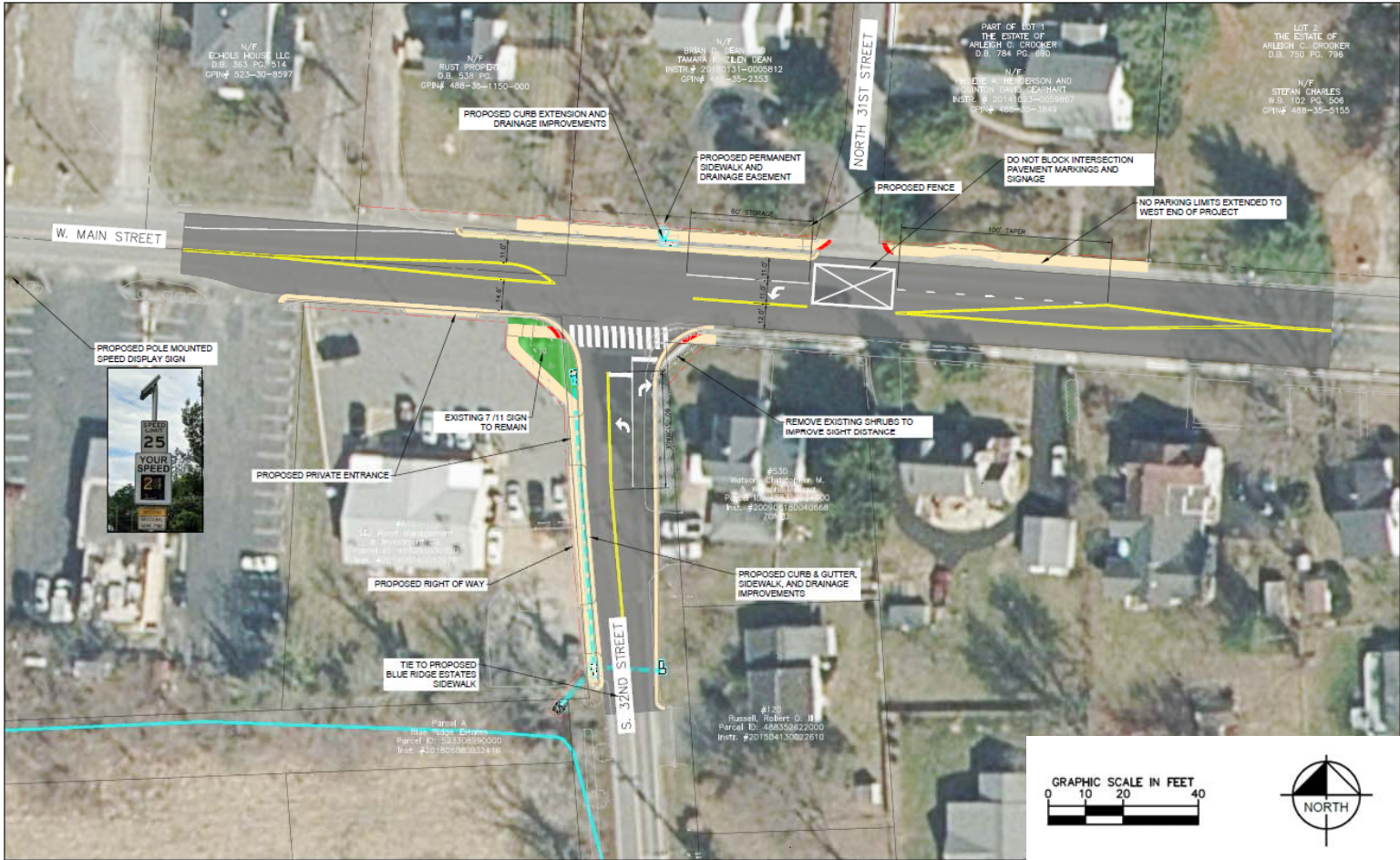
Concept 1A – Westbound Left-Turn Lane



Concept 1B – Westbound Left-Turn Lane with Sidewalk



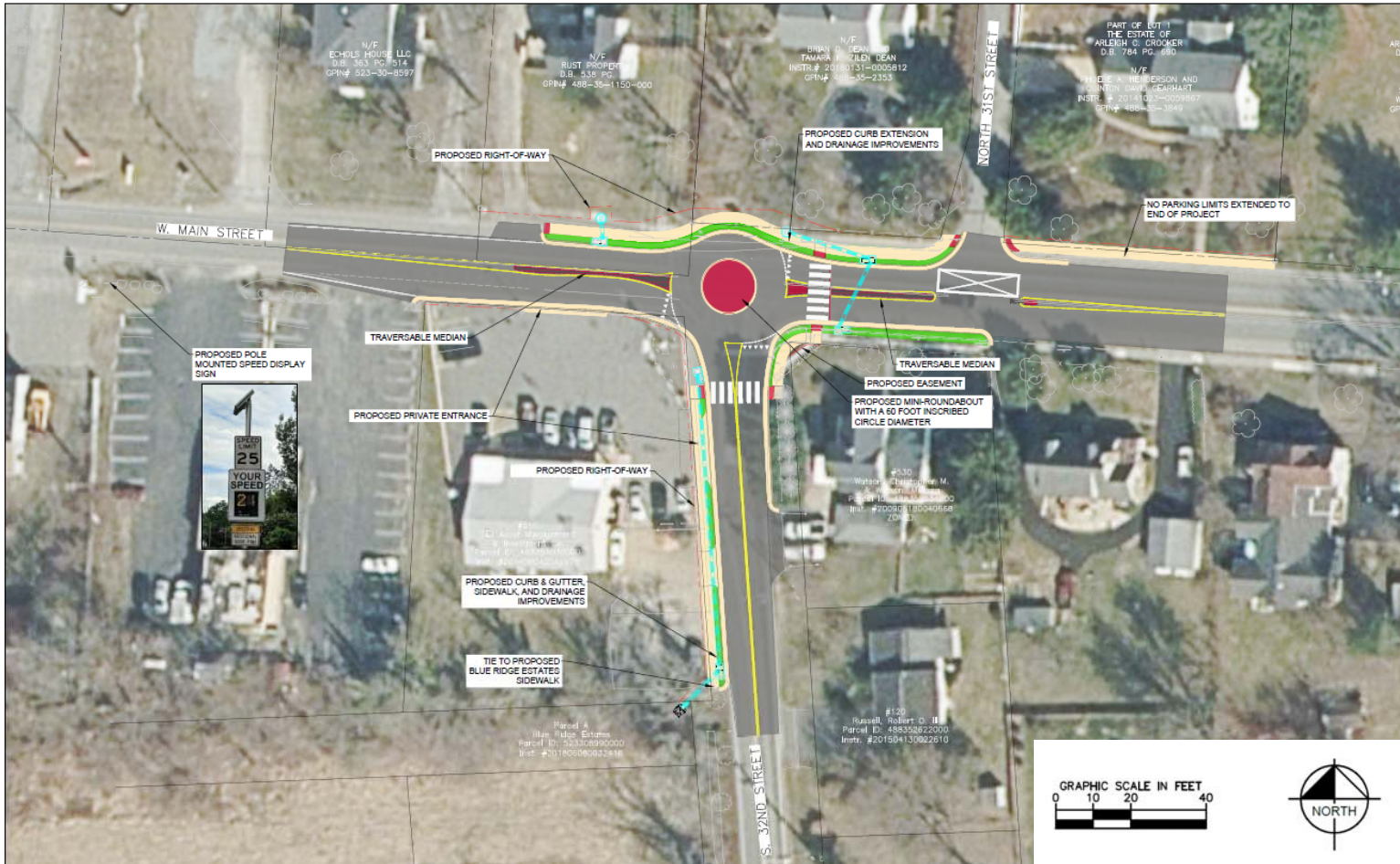
Concept 1C – Turn Lane with Sidewalk Improvements



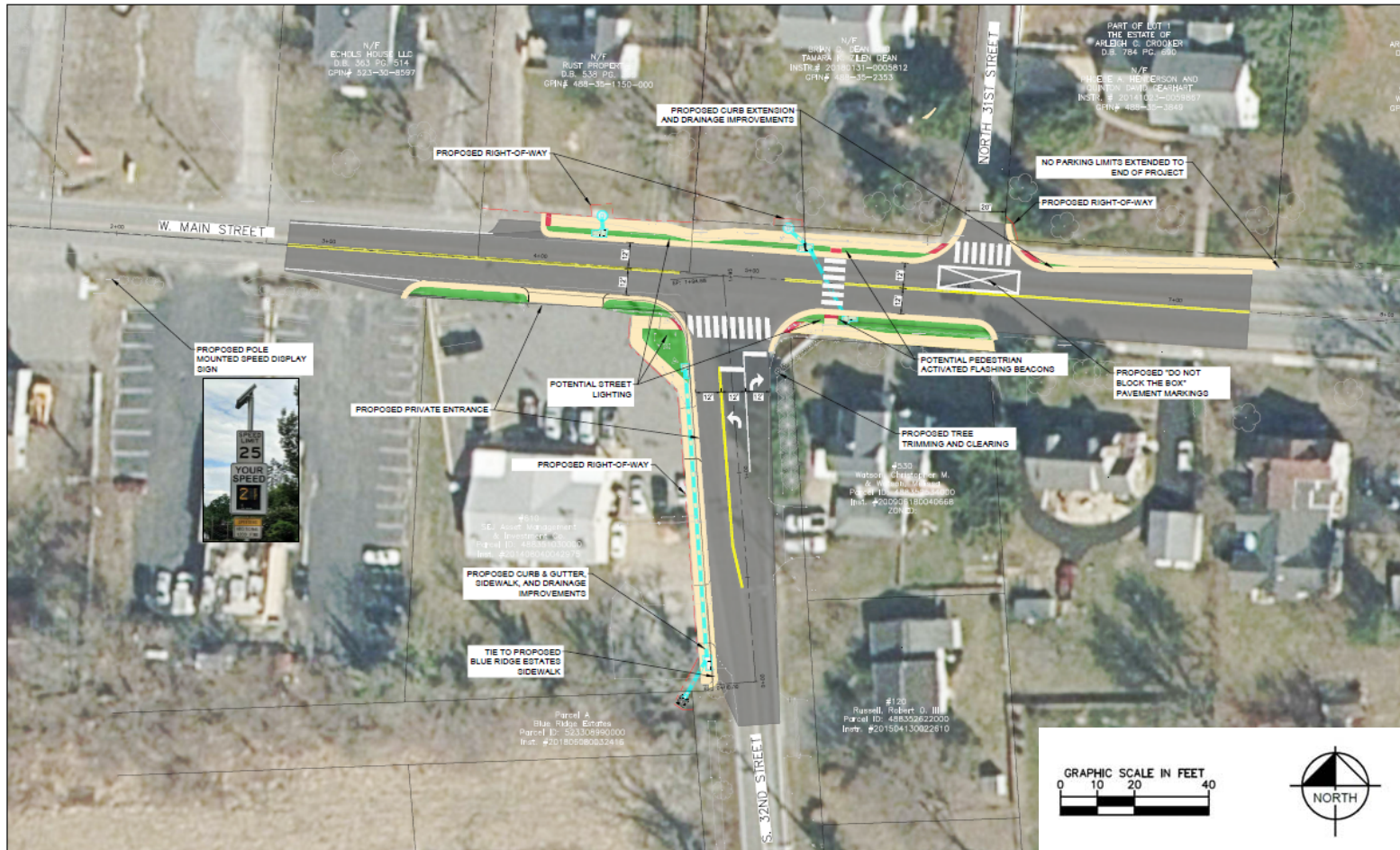
Concept 2 – Signalization with Westbound Left-Turn Lane



Concept 3 – Mini-Roundabout



Concept 4 – Traffic Calming



Public Input from 2/27/2020 Public Meeting

18 Attendees

Common themes based on comments:

- Focus on safety
- Expand 25mph speed limit west and increase enforcement
- The entrances and delivery trucks at 7-11 cause issues with the intersection and safety
- Concerns about impacts to N. 31st Street
- Traffic calming and improved pedestrian connectivity including sidewalks and crosswalks are very important



Public Input from 2/27/2020 Public Meeting

Results:

97 Total Survey Responses

91 online

6 paper forms

Signalization - 61% ranked #1

Mini-Roundabout – 21% ranked #1

Concepts 1A, 1B, 1C combined – 15% ranked #1

Ranking	Number of Votes				
	Concept 1A - Westbound Left -Turn Lane	Concept 1B - Westbound Left-Turn Lane with Sidewalk	Concept 1C - Turn Lane with Sidewalk Improvements	Concept 2 - Signalization with Westbound Left-Turn Lane	Concept 3 - Mini-Roundabout
1	3	3	9	59	20
2	4	25	17	11	31
3	15	30	39	4	2
4	25	28	18	9	8
5	42	3	5	11	31
Total	89	89	88	94	92

Public Input from 6/16/2020 Virtual Public Meeting

28 Virtual Attendees

Common themes based on comments:

- Opposed to traffic signal and mini-roundabout
- Focus on safety and walkability
- Traffic calming and improved pedestrian connectivity including sidewalks and crosswalks are very important
- Expand 25mph speed limit west and increase enforcement
- Take a phased approach to improvements



Public Input from 6/16/2020 Virtual Public Meeting

Results:

156 Total Survey Responses

155 online

1 email

Signalization - 44% ranked #1

Mini-Roundabout – 32% ranked #1

Traffic Calming – 8% ranked #1

Concepts 1A, 1B, 1C (combined) – 14% ranked #1

Did not list a #1 rank – 2%

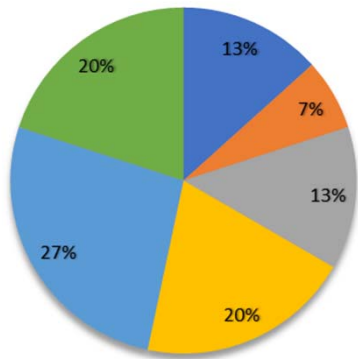
Ranking	Number of Votes					
	Concept 1A - Westbound Left-Turn Lane	Concept 1B - Westbound Left-Turn Lane with Sidewalk	Concept 1C - Turn Lane with Sidewalk Improvements	Concept 2 - Signalization with Westbound Left-Turn Lane	Concept 3 - Mini-Roundabout	Concept 4 - Traffic Calming
1	5	9	7	69	50	13
2	20	30	21	27	35	11
3	20	44	47	5	5	22
4	35	36	37	11	10	13
5	40	21	23	8	22	28
6	24	2	8	27	23	60
Total	144	142	143	147	145	147

Public Input from 6/16/2020 Virtual Public Meeting

Survey Response Location Data:

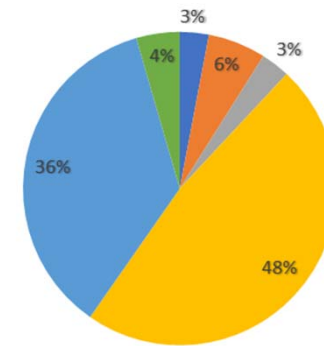
- 103 of 156 (66%) responses provided address data
- Locations grouped based on three areas

Area 1: Within ¼ mile from intersection

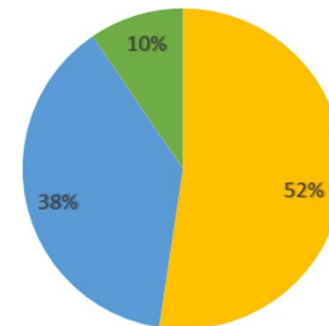


- Concept 1A - Westbound Left -Turn Lane
- Concept 1B - Westbound Left-Turn Lane with Sidewalk
- Concept 1C - Turn Lane with Sidewalk Improvements
- Concept 2 - Signalization with Westbound Left-Turn Lane
- Concept 3 - Mini-Roundabout
- Concept 4 - Traffic Calming

Area 2: Within Town limits but outside ¼ mile from intersection



Area 3: Outside of Town limits



Summary of Technical Findings and Public Input

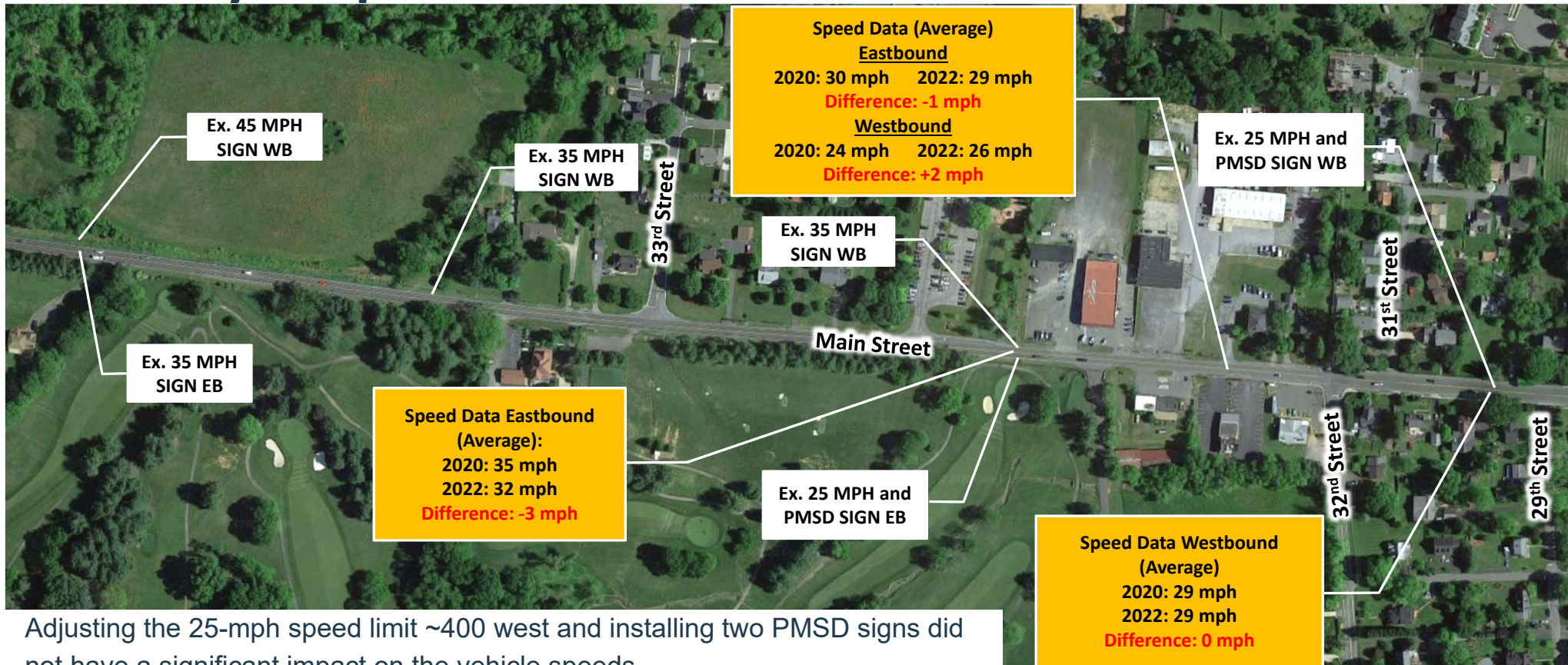
Concept 2 (Traffic Signal) had the highest public support based on the online surveys. Signalization addresses the ability to turn onto Main Street from 32nd Street as well as pedestrians crossing Main Street

Concept 4 (Traffic Calming) was strongly supported by the public who attended the June 2020 public meeting

Concepts 1A, 1B, 1C could be implemented as a phased approach



Summary of Speed Data – Before and After



- Adjusting the 25-mph speed limit ~400 west and installing two PMSD signs did not have a significant impact on the vehicle speeds
- Staff recommends pursuing additional traffic calming measures and explore increased police enforcement along West Main Street to achieve the desired decrease in speed within the study area

Next Steps

- The Town is seeking input from Town Council to move forward with the next phase of the project. Staff recommends Concept 4 (Traffic Calming)
- VDOT Revenue Sharing and NVTAF funding is available to continue towards implementation of the preferred alternative
- VDOT Owned Roadway – Improvements require VDOT approval
- Based on Town Council direction on the preferred Concept, complete engineering design of improvements
- VDOT review and permitting
- Construct improvements



Questions?

