



NORTH MAIN STREET

**ROAD PAVING, BUS STOPS, AND
CROSSWALK SAFETY IMPROVEMENTS**

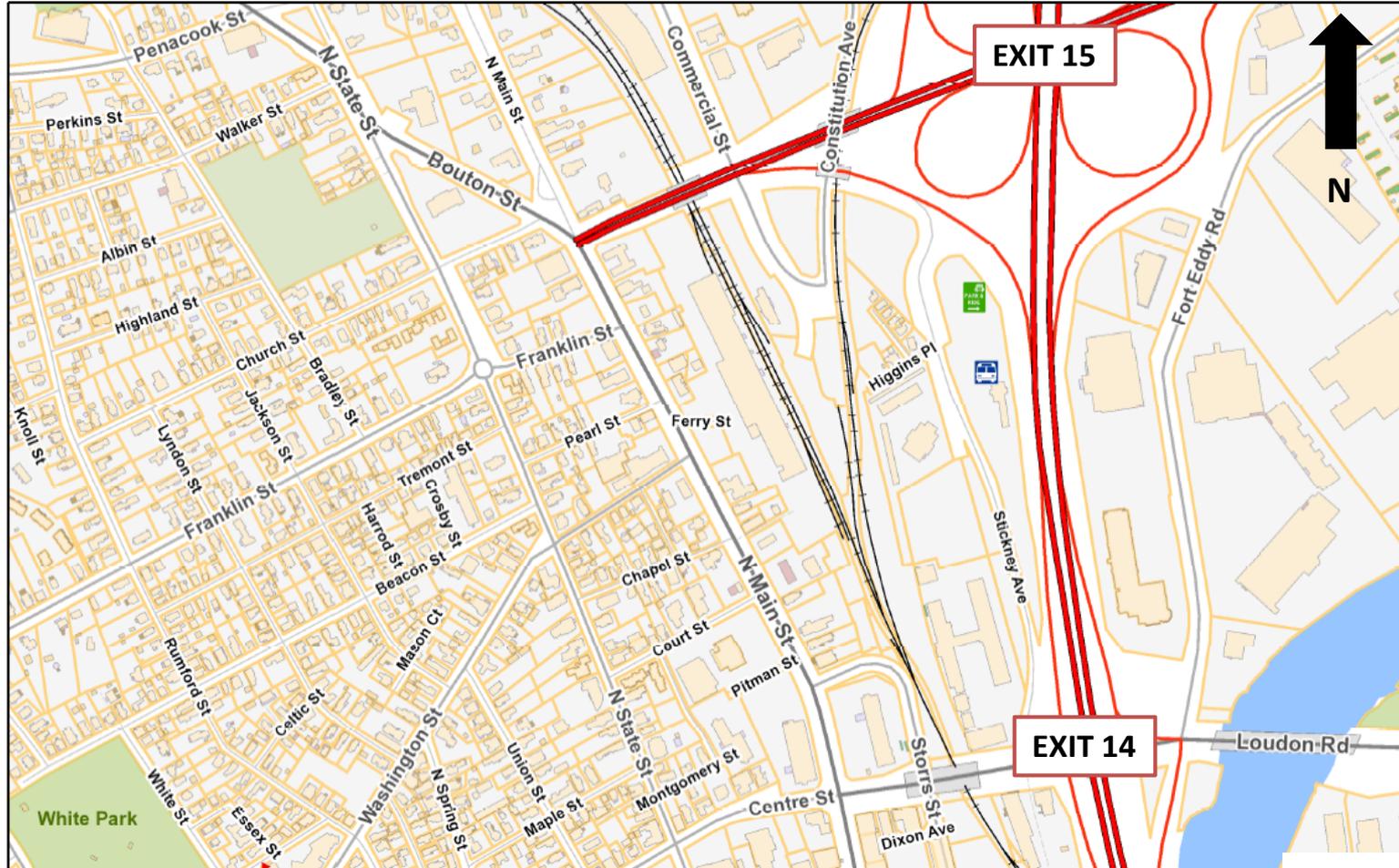
PUBLIC MEETING

November 19, 2024

WWW.CONCORDNH.GOV



PROJECT LOCATION



PROJECT LOCATION



WHY ARE WE HERE?

CIP #78 – Annual Highway Improvement Program

- Fiscal year **2026*** – cold plane & overlay North Main Street (Storrs Street to Bouton Street). ***Not yet approved**

CIP #17 – Sidewalk, Bikeway and Streetscape Improvements

- Fiscal year **2025** – sidewalk and crosswalk design for North Main Street (Storrs Street to Bouton Street).
- Fiscal year **2026*** – sidewalk and crosswalk construction for North Main Street (Storrs Street to Bouton Street). ***Not yet approved**

September 9, 2024 City Council Public Hearing Action

- Resolution appropriating the sum of \$10,000 in the Sidewalk, Bikeway, and Streetscape Improvements project (CIP #17) for the design of bus stop improvements on North Main Street and authorizing the use of Highway Reserve funds for this purpose.



WHY ARE WE HERE?

CIP #283 – Traffic Signals and Traffic Operations Improvements

- Fiscal year **2026*** – Install Rectangular Rapid-Flashing Beacons (RRFB) at N Main Street un-signalized crosswalks between Storrs Street and Bouton Street. Estimate \$30,000 each @ Pitman, Court, Chapel and Franklin. To be coordinated with CIP #17 sidewalk and crosswalk improvements. ***Not yet approved**



Whitney Road – Concord, NH
Courtesy: Google maps



Rectangular Rapid Flashing Beacons
Courtesy: Federal Highway Administration



PROPOSED IMPROVEMENTS

Short to Mid-term Safety Improvements:

- ✓ Improve visibility and safety of existing crosswalks.
- ✓ Construct ADA compliant sidewalk ramps.
- ✓ Examine proper bus pull-off locations that are ADA compliant and allow the bus to pull completely out of the travel lane.

Long term goal:

- ✓ CIP #659 –North Main Street Corridor Improvements
- ✓ Study the corridor for needed lanes and traffic improvements, influenced by:
 - I-93 Bow-Concord project
 - Storrs Street extension, north
 - North Main Street and Storrs Street intersection improvements



CHALLENGES & CONSIDERATIONS

- Interim safety improvements **only**
- 34 Driveways (curb cuts) – some are very wide
- 7 Side Streets
- Multiple street trees, utility poles, street lights, drainage, and hydrants
- Existing on-street parking
- Existing grading challenges (steep grass strips and retaining walls)
- Variable roadway and shoulder widths



CROSSWALK SAFETY IMPROVEMENTS



Multiple lanes of traffic create challenges for pedestrians crossing at unsignalized locations.



RRFBs can make crosswalks and/or pedestrians more visible at a marked crosswalk.



RRFBs can reduce pedestrian crashes by

47%

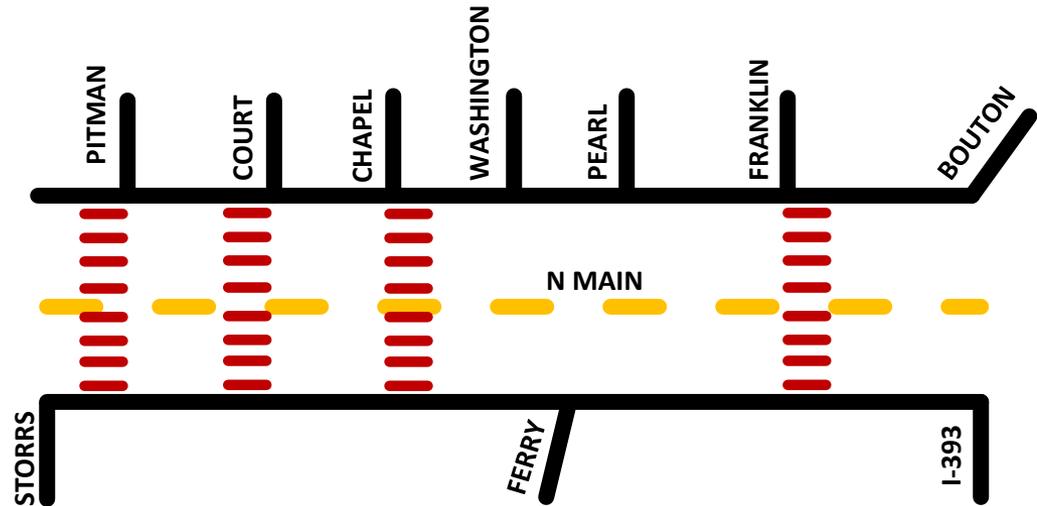


FEATURES:

- Enhanced warning improves motorist yielding

OFTEN USED WITH:

- Crosswalk visibility enhancements
- Pedestrian refuge island
- Advance STOP or YIELD markings and signs



- ✓ Improve visibility and **safety** of 4 existing non-signalized crosswalks.
 - ✓ Construct ADA compliant sidewalk ramps
 - ✓ Consider bumpouts and/or median refuge islands
 - ✓ Consider installing Rectangular Rapid-Flashing Beacons (RRFB).



CROSSWALK SAFETY IMPROVEMENTS



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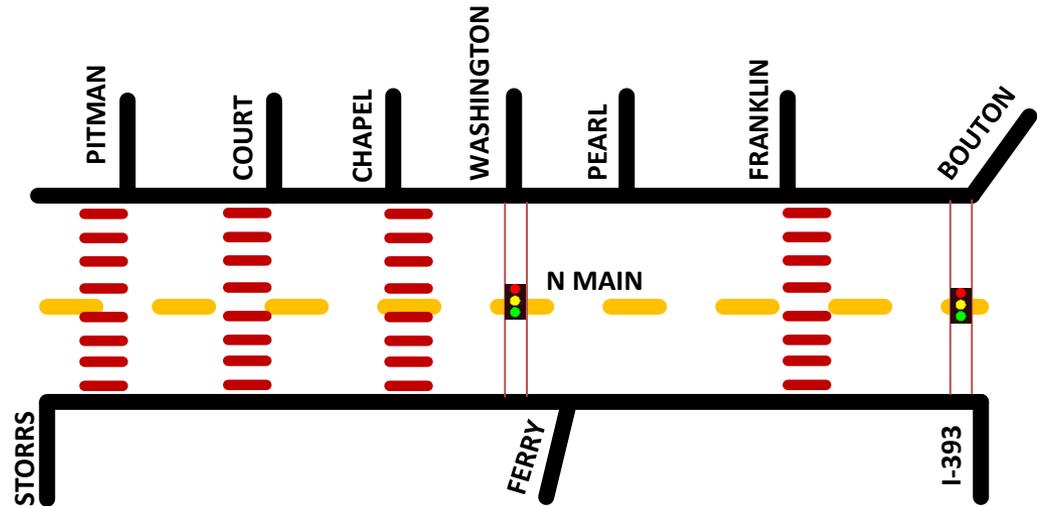


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 - ✓ Construct ADA compliant sidewalk ramps
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EXISTING INTERSECTION – PITMAN STREET



EXISTING INTERSECTION – PITMAN STREET



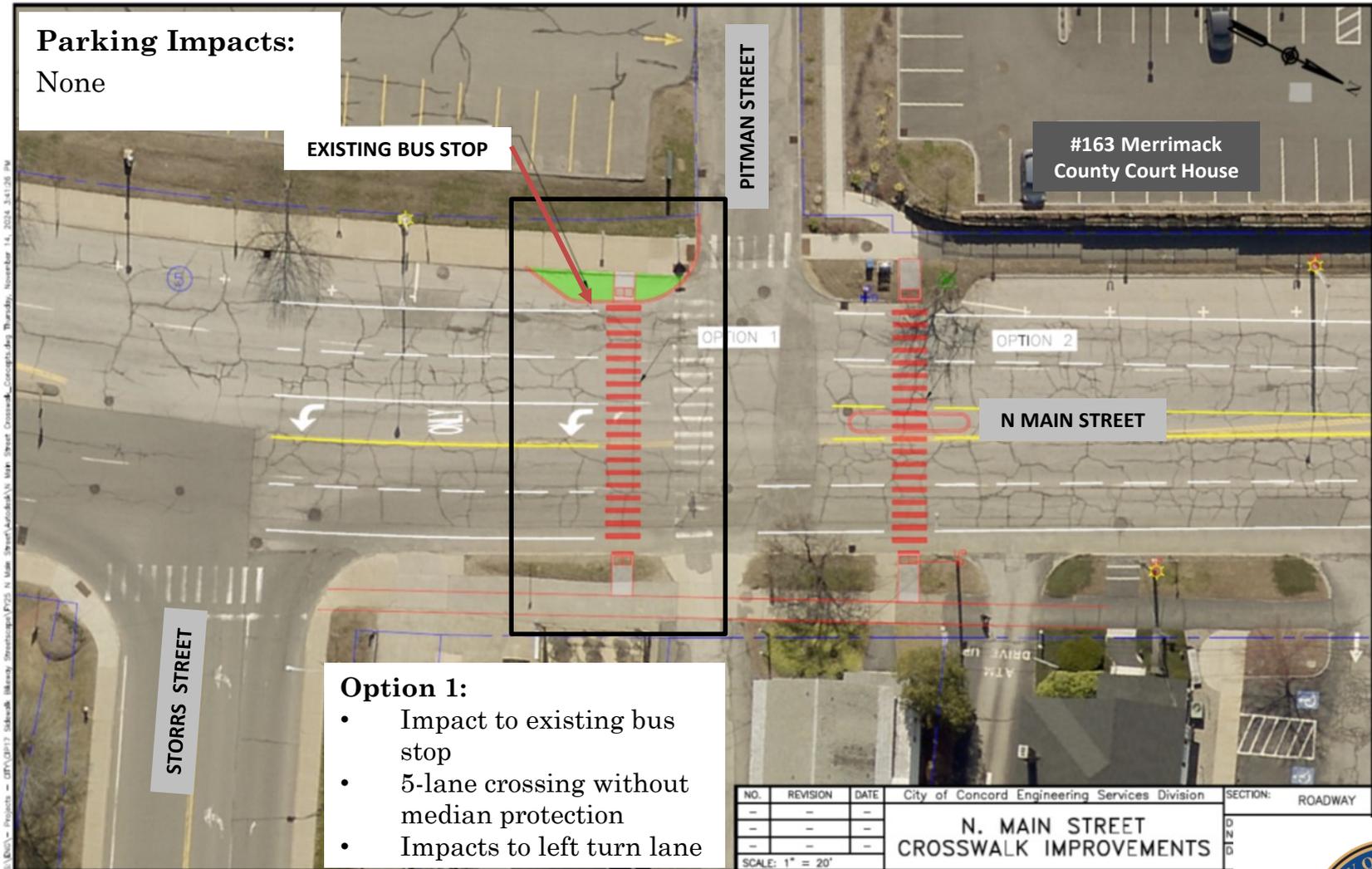
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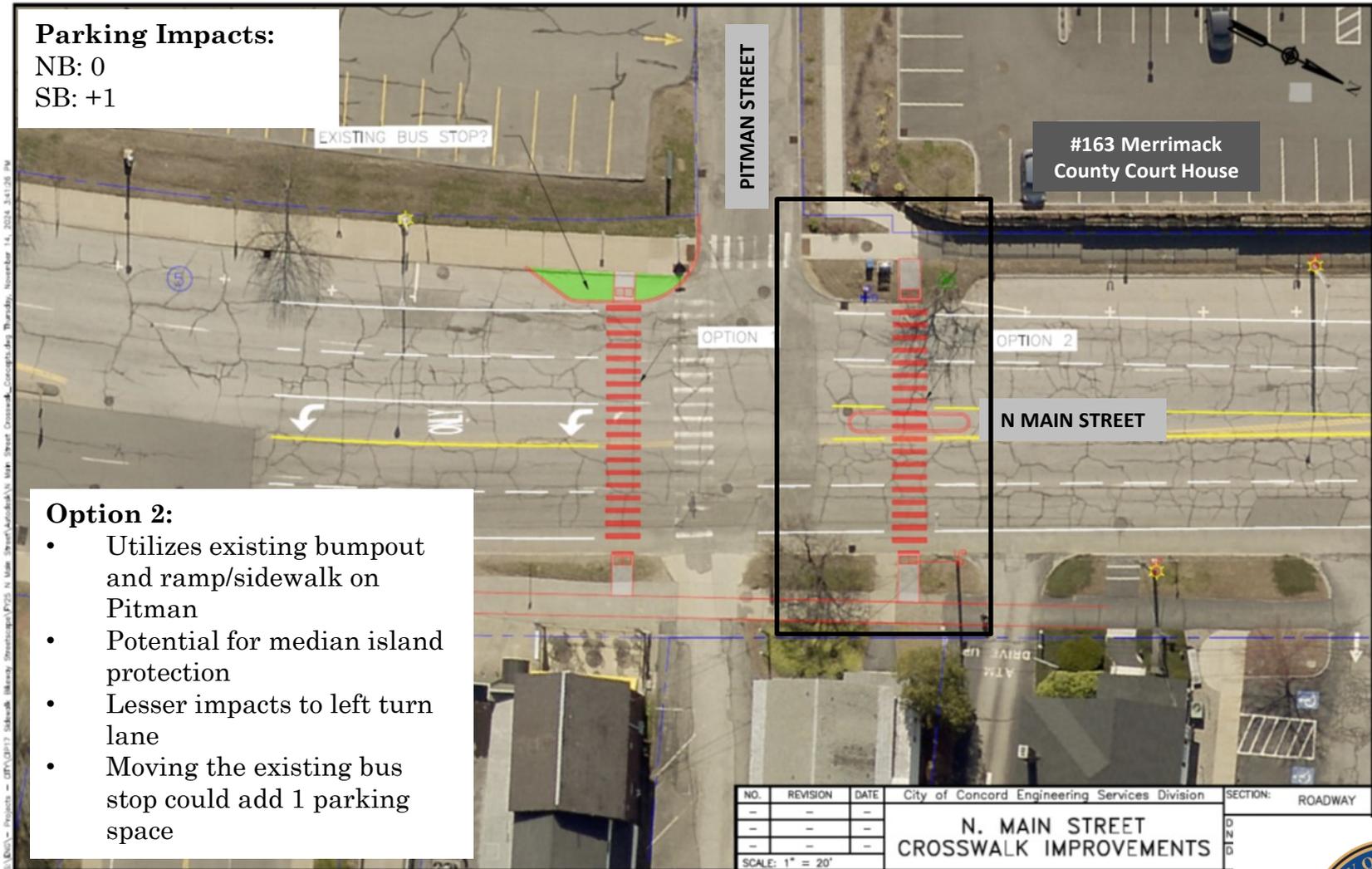
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CROSSWALK CONCEPTS – PITMAN STREET



CROSSWALK CONCEPTS – PITMAN STREET



EXISTING INTERSECTION – COURT STREET



EXISTING INTERSECTION – COURT STREET



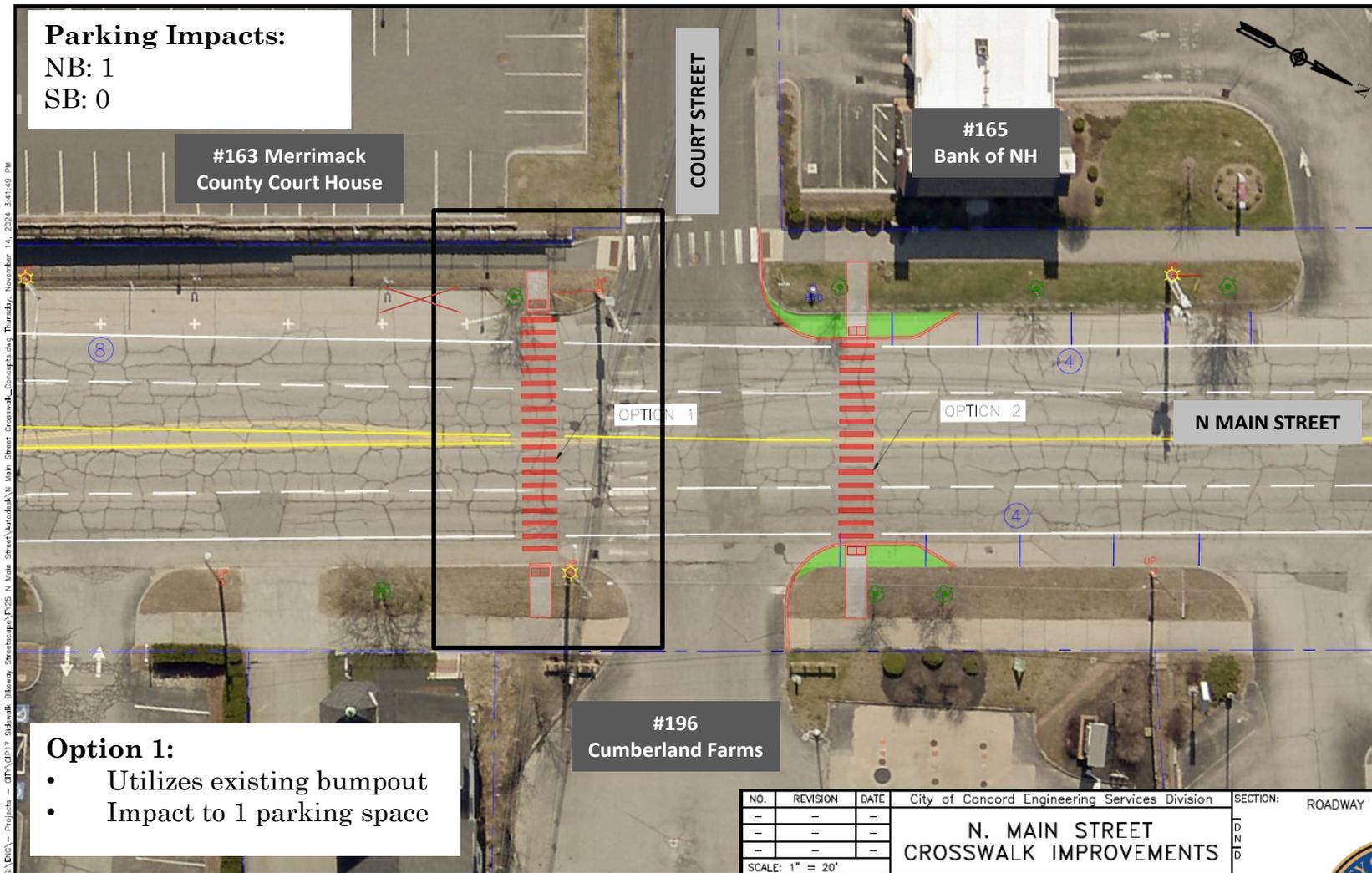
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SCALE: 1" = 20'



CROSSWALK CONCEPTS – COURT STREET



Parking Impacts:

NB: 1
SB: 0

#163 Merrimack
County Court House

#165
Bank of NH

#196
Cumberland Farms

COURT STREET

N MAIN STREET

OPTION 1

OPTION 2

Option 1:

- Utilizes existing bumpout
- Impact to 1 parking space

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SCALE: 1" = 20'

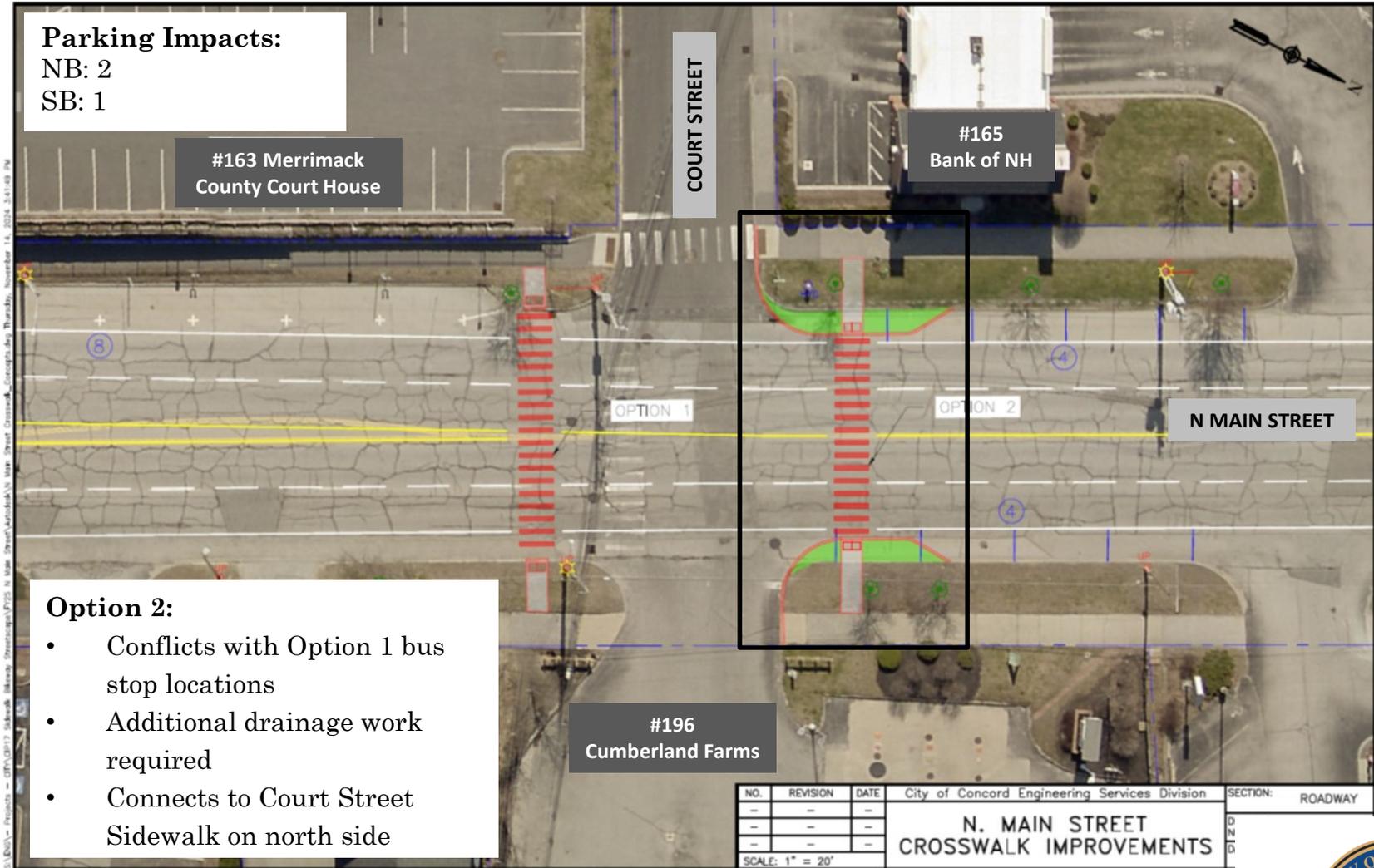
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N. MAIN STREET
CROSSWALK IMPROVEMENTS



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CROSSWALK CONCEPTS – COURT STREET



Parking Impacts:
 NB: 2
 SB: 1

#163 Merrimack
 County Court House

#165
 Bank of NH

COURT STREET

OPTION 1

OPTION 2

N MAIN STREET

Option 2:

- Conflicts with Option 1 bus stop locations
- Additional drainage work required
- Connects to Court Street Sidewalk on north side

#196
 Cumberland Farms

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SCALE: 1" = 20'

**N. MAIN STREET
 CROSSWALK IMPROVEMENTS**



EXISTING INTERSECTION – CHAPEL STREET



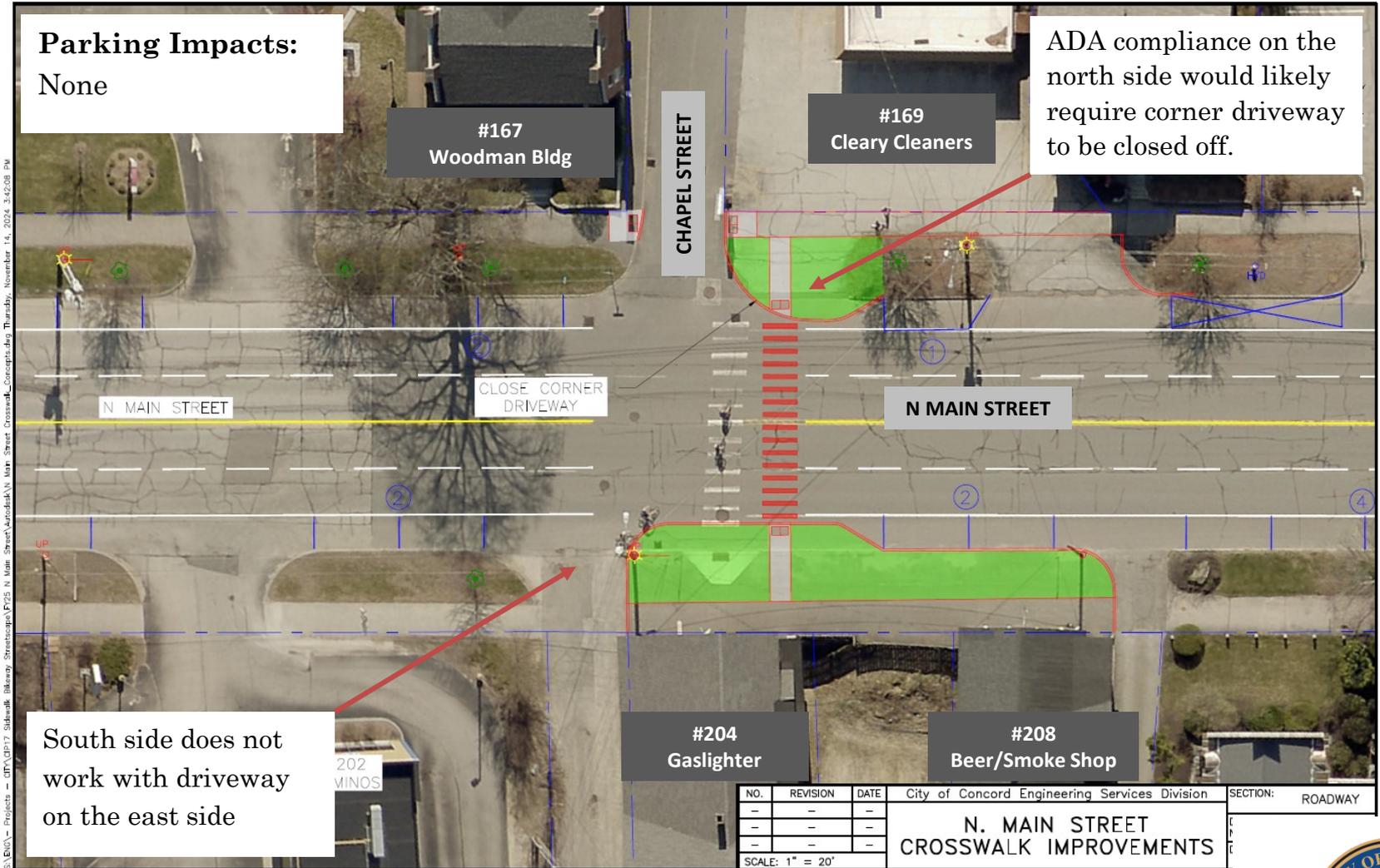
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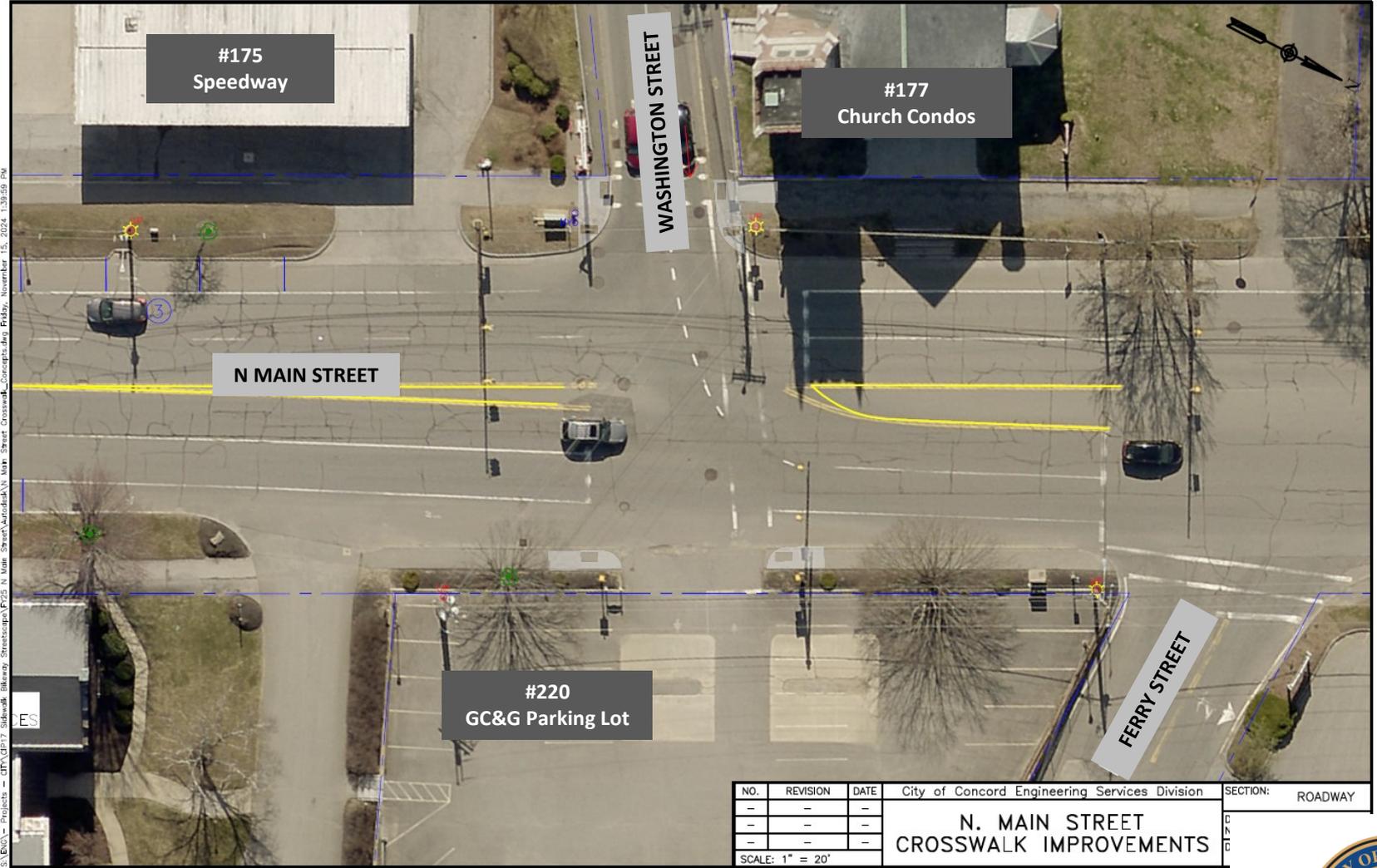
CROSSWALK CONCEPTS – CHAPEL STREET



EXISTING INTERSECTION – WASHINGTON STREET



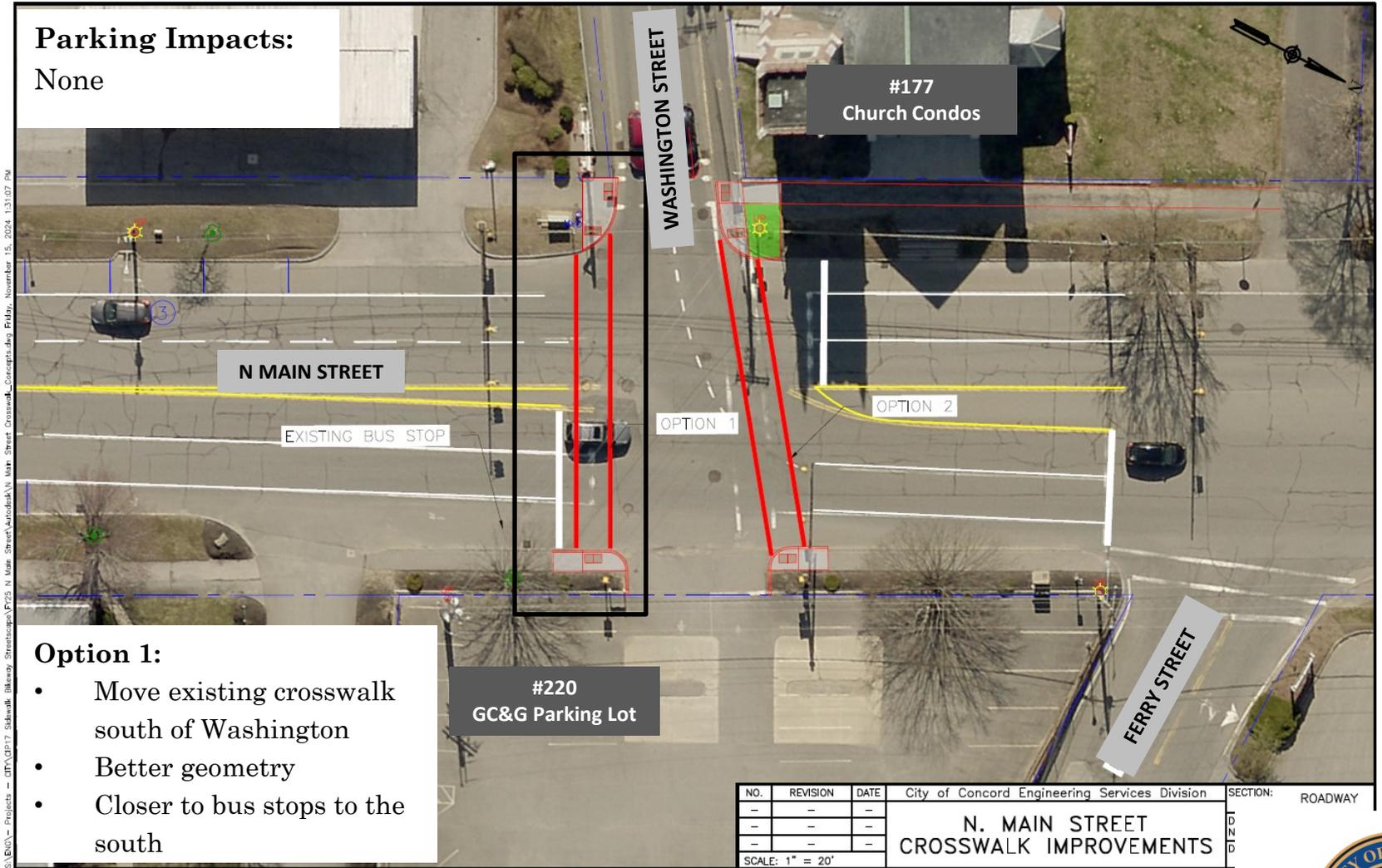
EXISTING INTERSECTION – WASHINGTON STREET



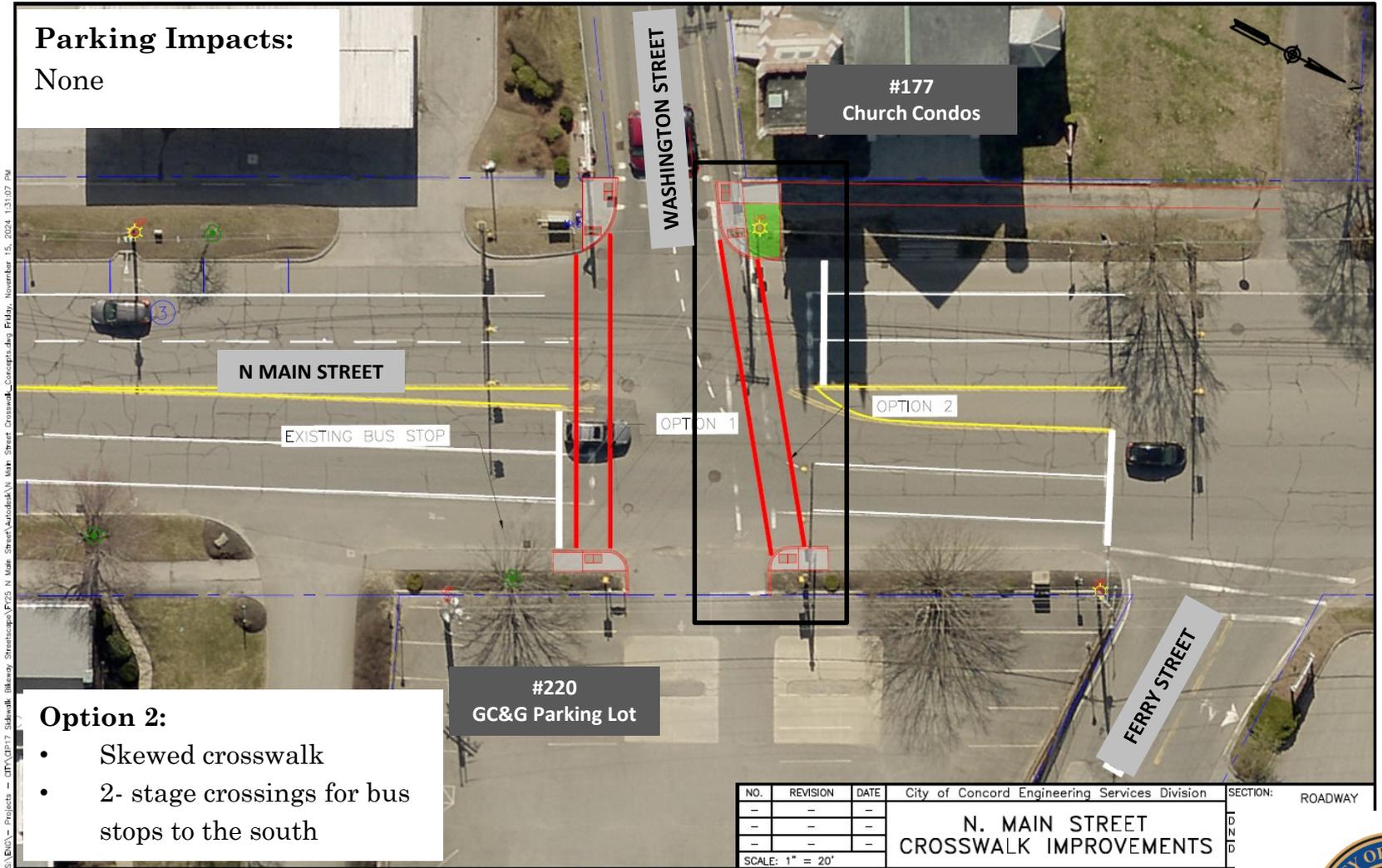
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SCALE: 1" = 20'			N. MAIN STREET CROSSWALK IMPROVEMENTS		



CROSSWALK CONCEPTS – WASHINGTON STREET



CROSSWALK CONCEPTS – WASHINGTON STREET



Parking Impacts:
None

- Option 2:**
- Skewed crosswalk
 - 2- stage crossings for bus stops to the south

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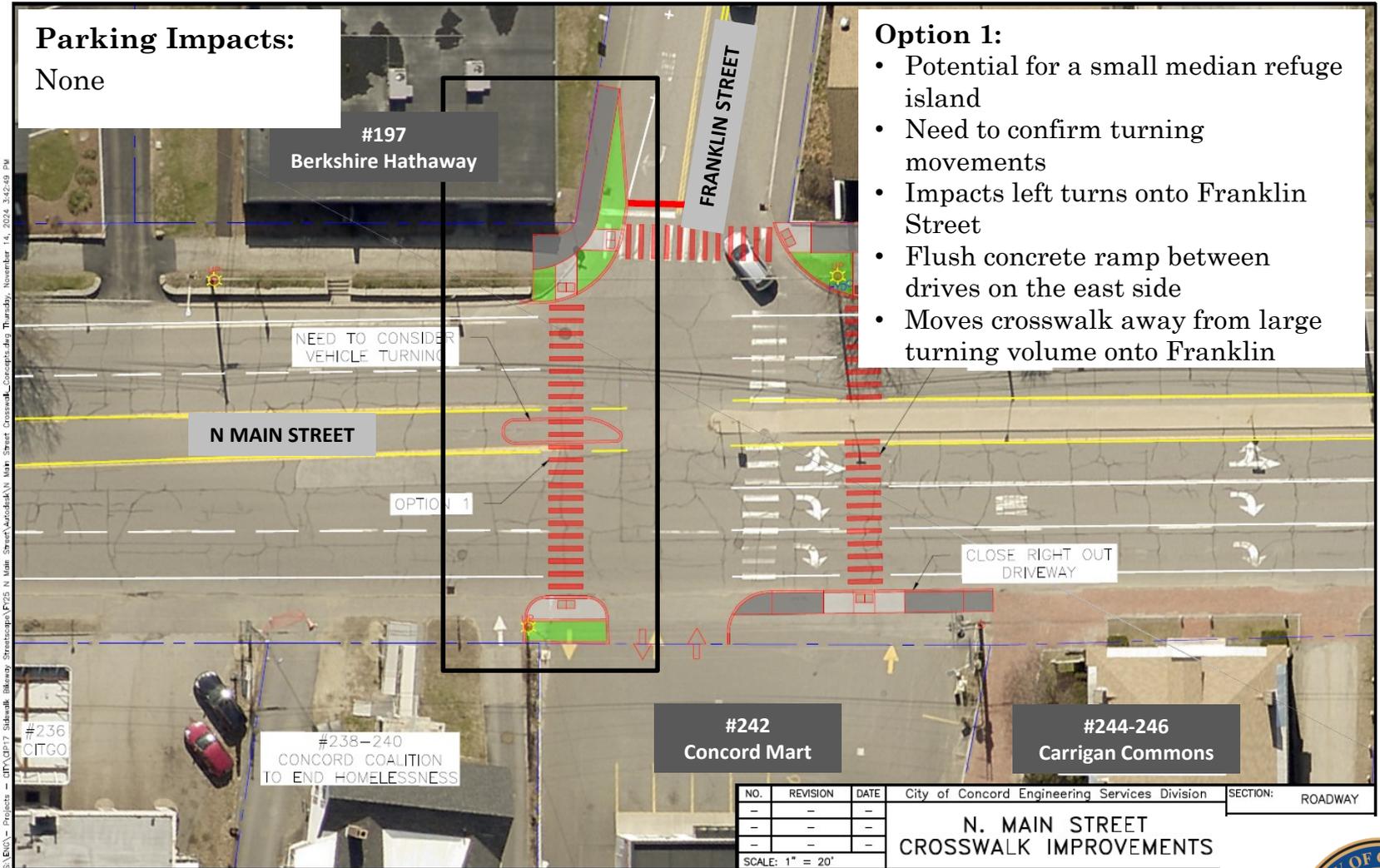
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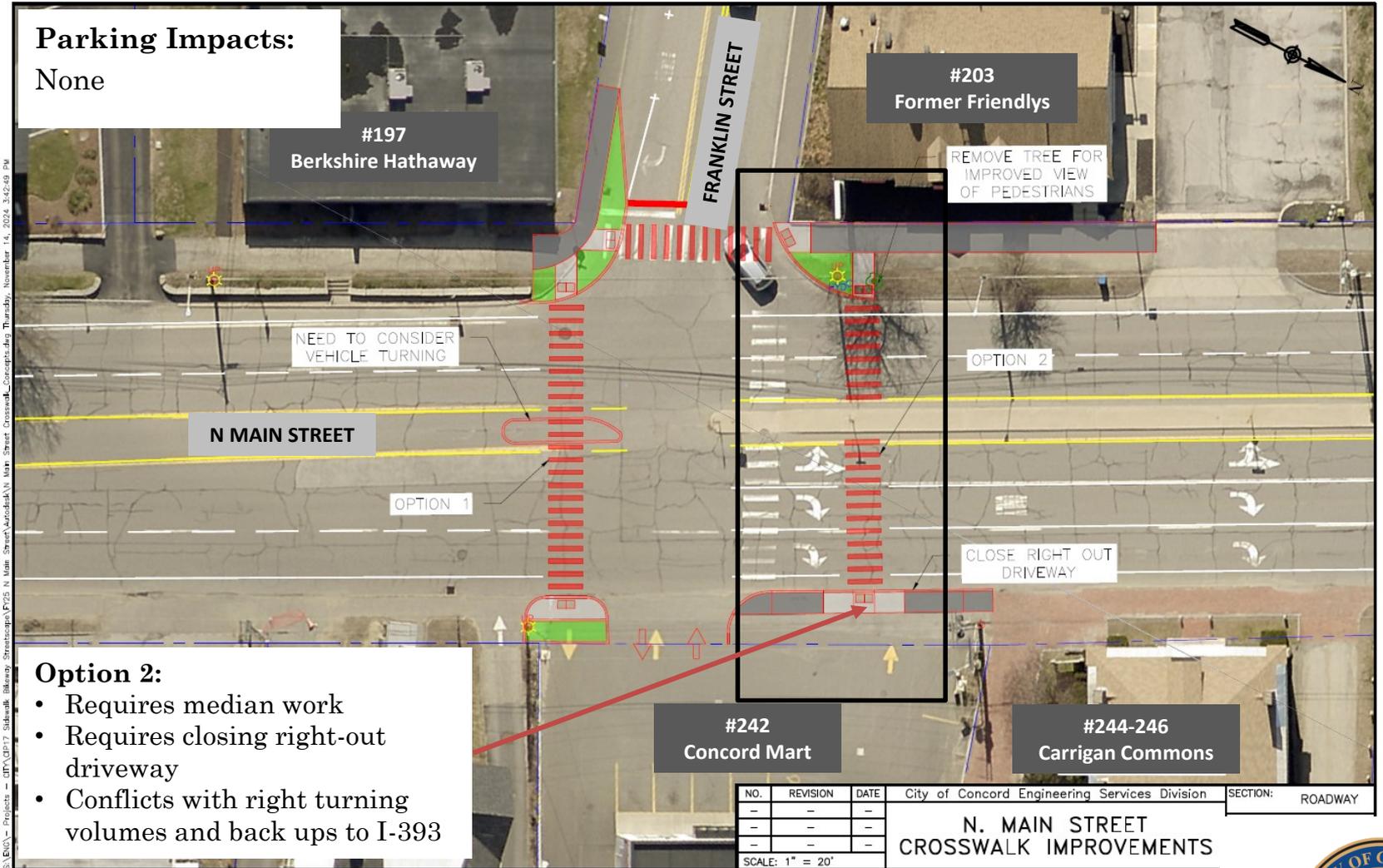
EXISTING INTERSECTION – FRANKLIN STREET



CROSSWALK CONCEPTS – FRANKLIN STREET



CROSSWALK CONCEPTS – FRANKLIN STREET



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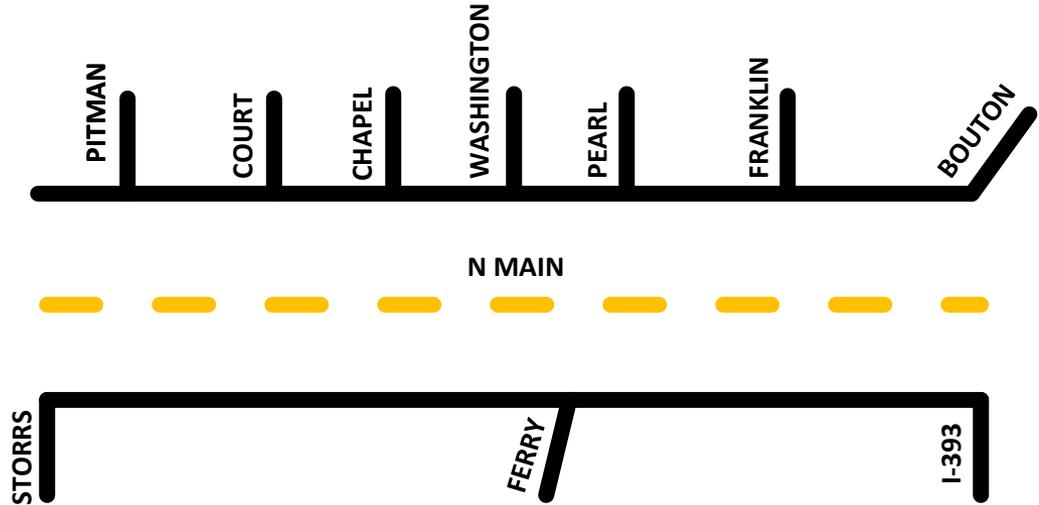
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**N. MAIN STREET
CROSSWALK IMPROVEMENTS**

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BUS STOP RELOCATIONS



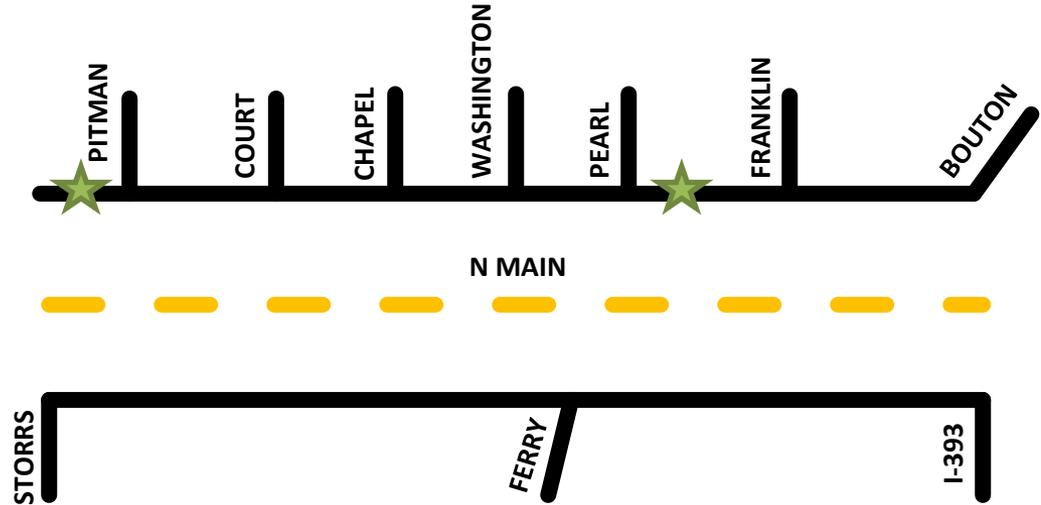
- ✓ Combine two existing southbound bus stops into one centralized/ADA compliant stop
- ✓ Relocate northbound bus stop further to the south
- ✓ Looking at 4 location options for each side (NB/SB)
- ✓ Potential locations for bus shelters are shown in 



BUS STOP RELOCATIONS



★ Existing bus stop



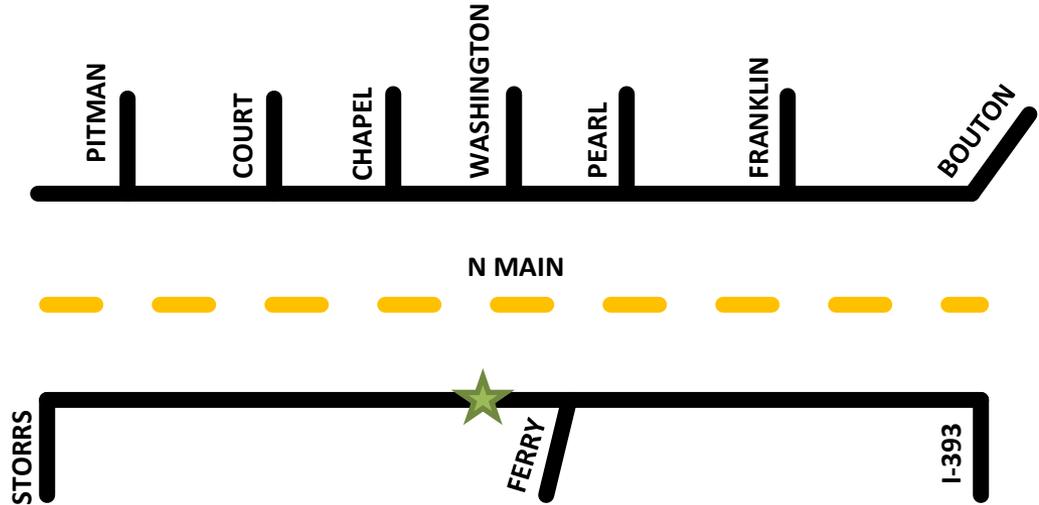
- **Combine two existing southbound bus stops into one centralized/ADA compliant stop**
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BUS STOP RELOCATIONS



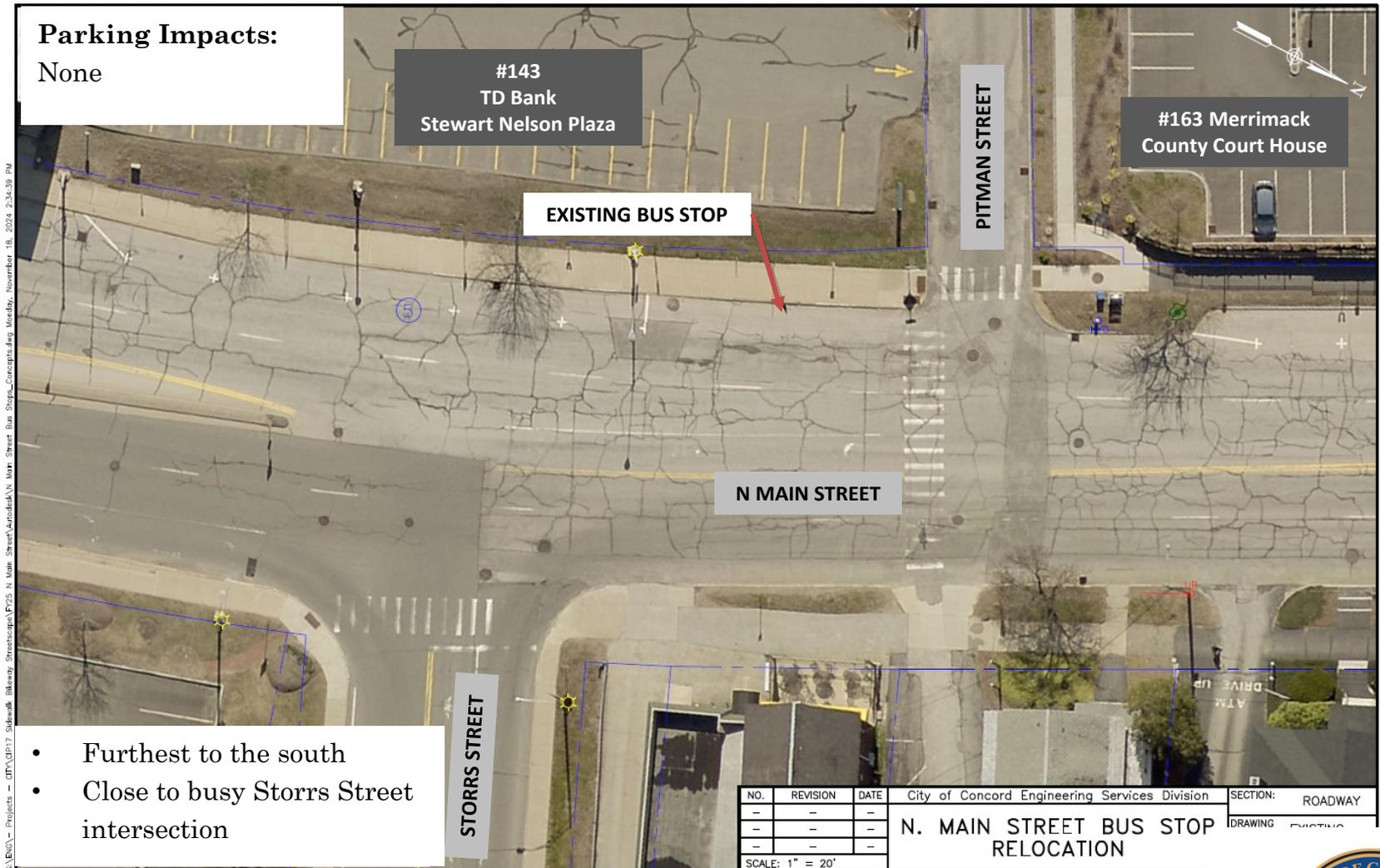
★ Existing bus stop



- Combine two existing southbound bus stops into one centralized/ADA compliant stop
- Relocate northbound bus stop further to the south
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- Potential locations for bus shelters are shown in 



BUS STOP CONCEPTS – EXISTING



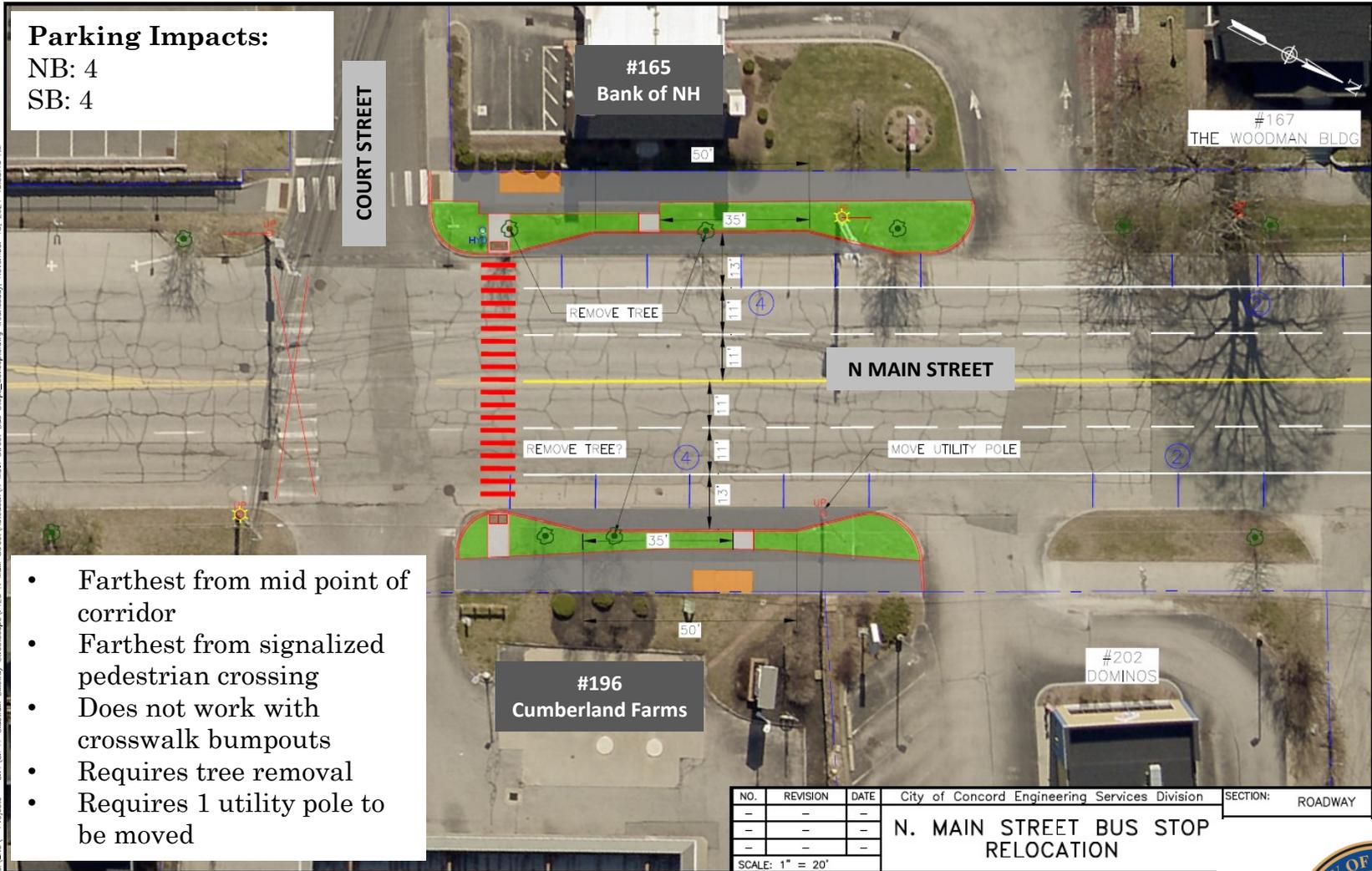
BUS STOP CONCEPTS – OPTION 1

Parking Impacts:

NB: 4

SB: 4

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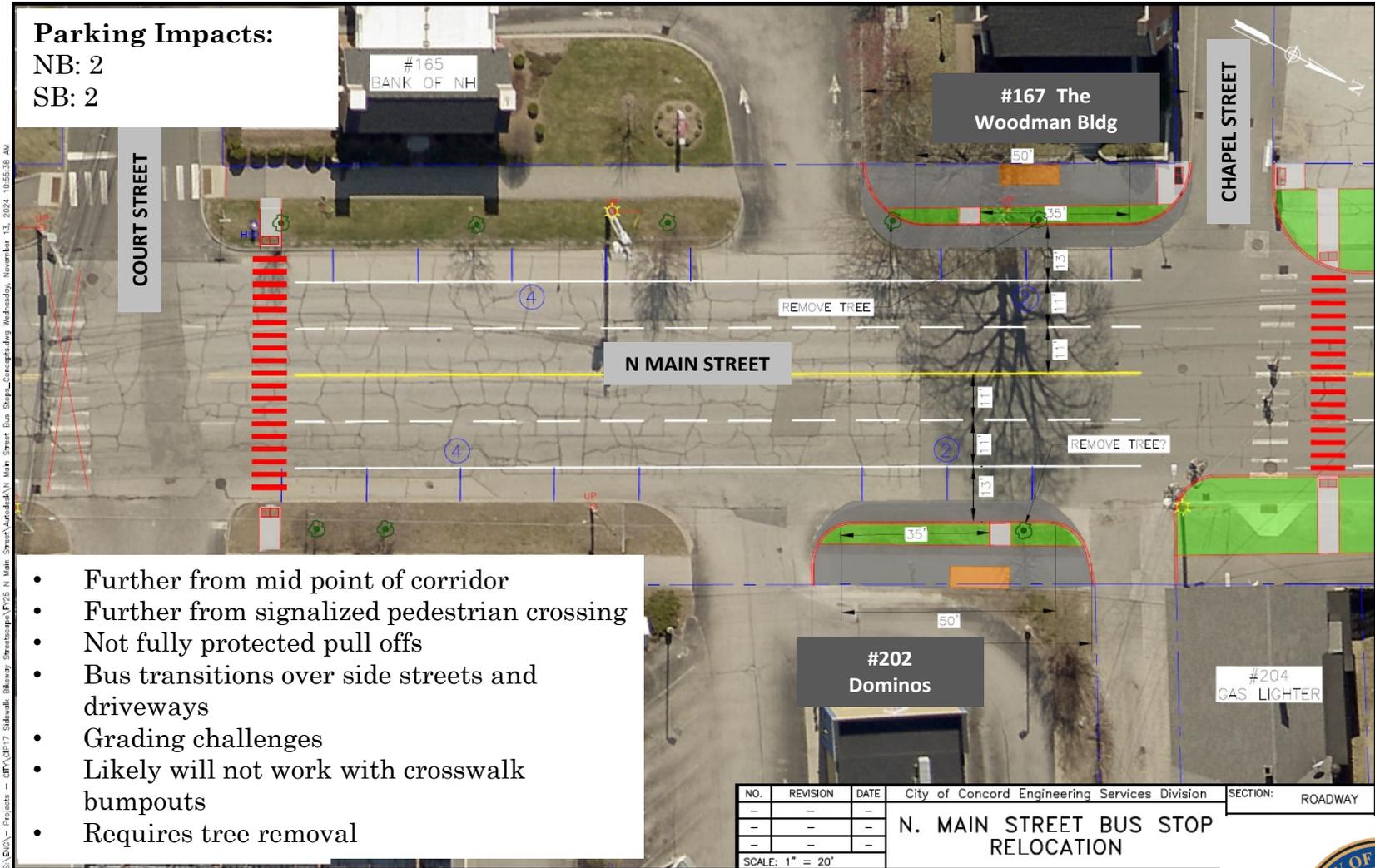
- Farthest from mid point of corridor
- Farthest from signaled pedestrian crossing
- Does not work with crosswalk bumpouts
- Requires tree removal
- Requires 1 utility pole to be moved

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SCALE: 1" = 20'



BUS STOP CONCEPTS – OPTION 2

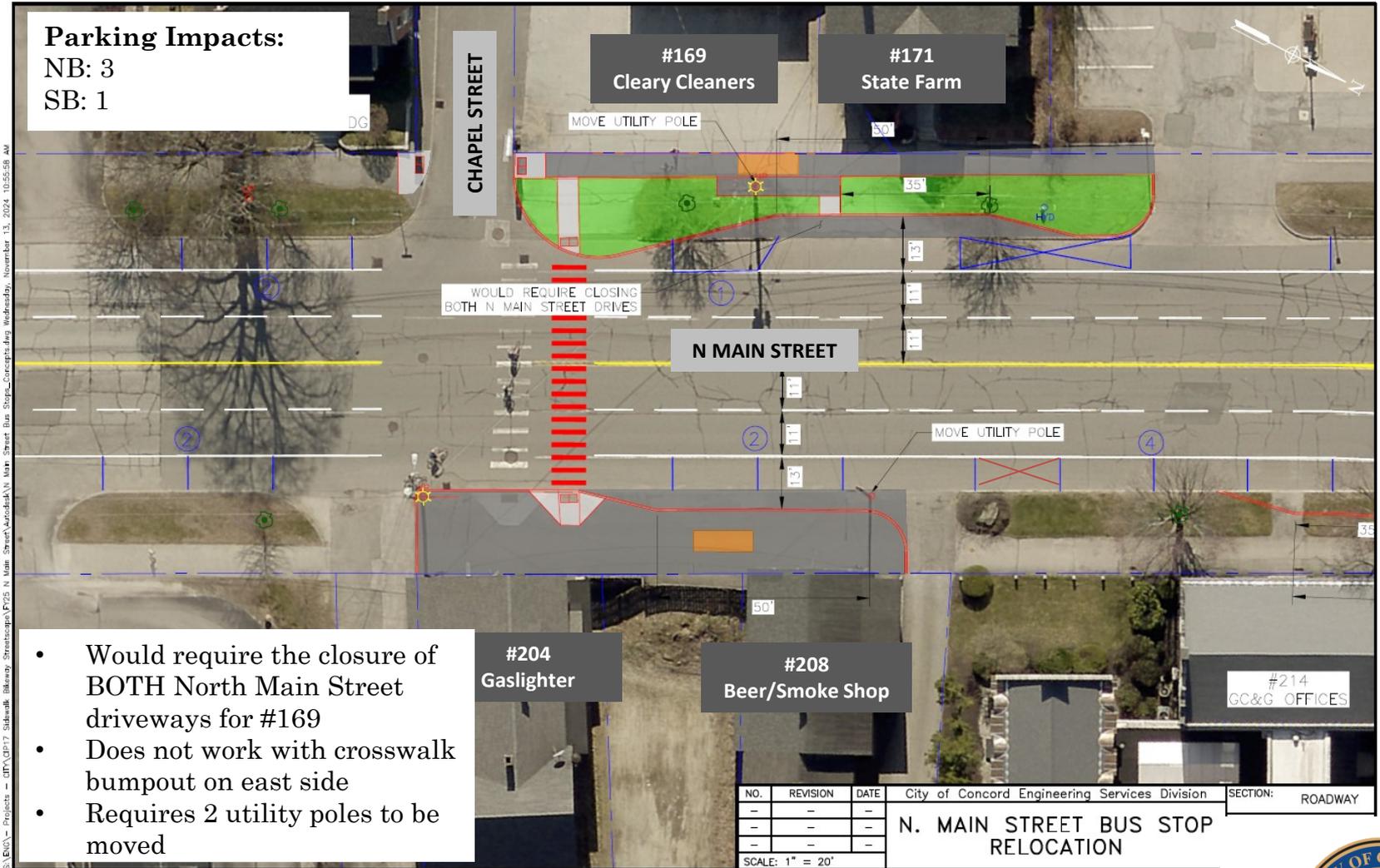


- Further from mid point of corridor
- Further from signalized pedestrian crossing
- Not fully protected pull offs
- Bus transitions over side streets and driveways
- Grading challenges
- Likely will not work with crosswalk bumpouts
- Requires tree removal

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BUS STOP CONCEPTS – OPTION 3

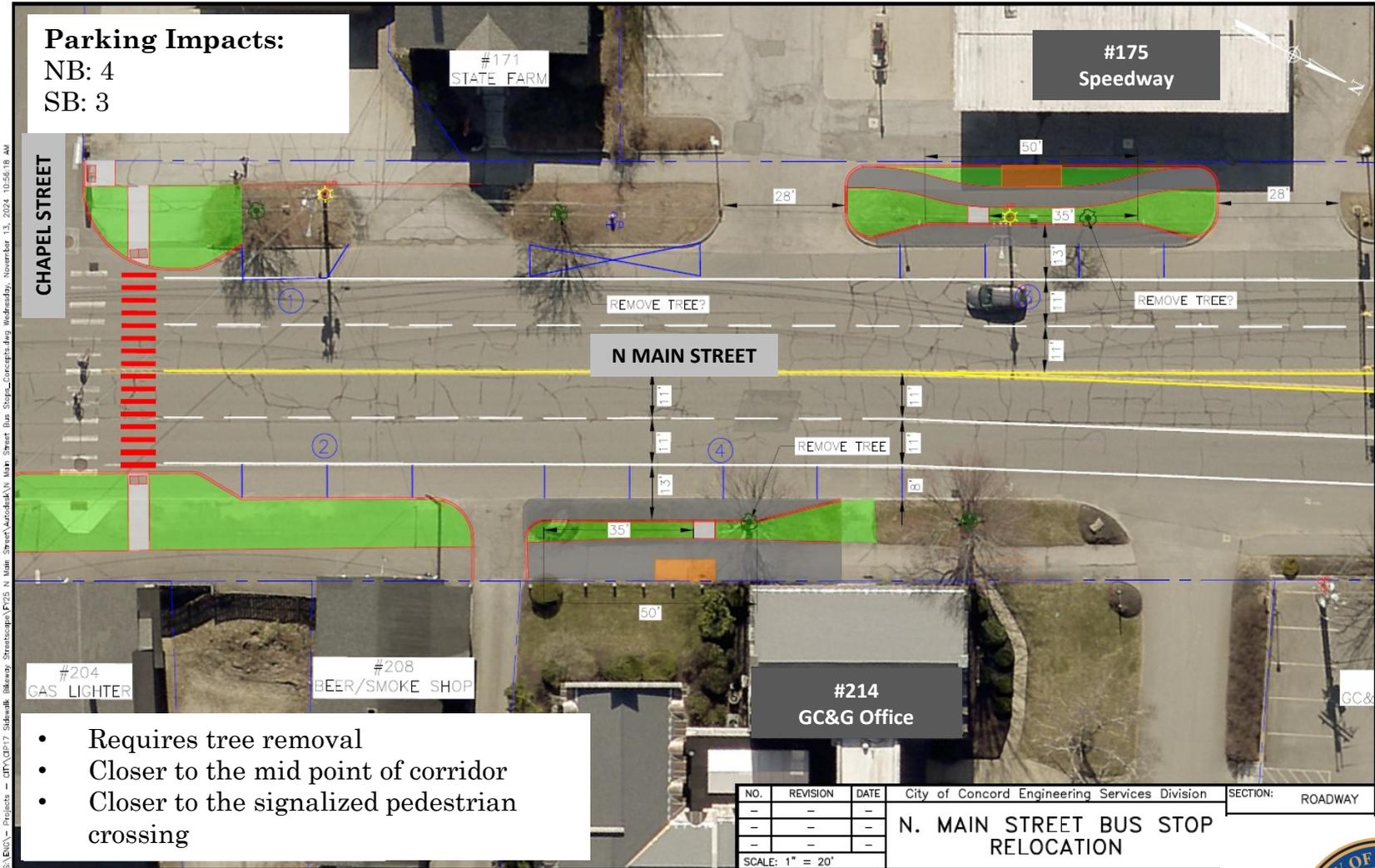


- Would require the closure of BOTH North Main Street driveways for #169
- Does not work with crosswalk bumpout on east side
- Requires 2 utility poles to be moved



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BUS STOP CONCEPTS – OPTION 4



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Parking Impacts:
NB: 4
SB: 3

- Requires tree removal
- Closer to the mid point of corridor
- Closer to the signalized pedestrian crossing

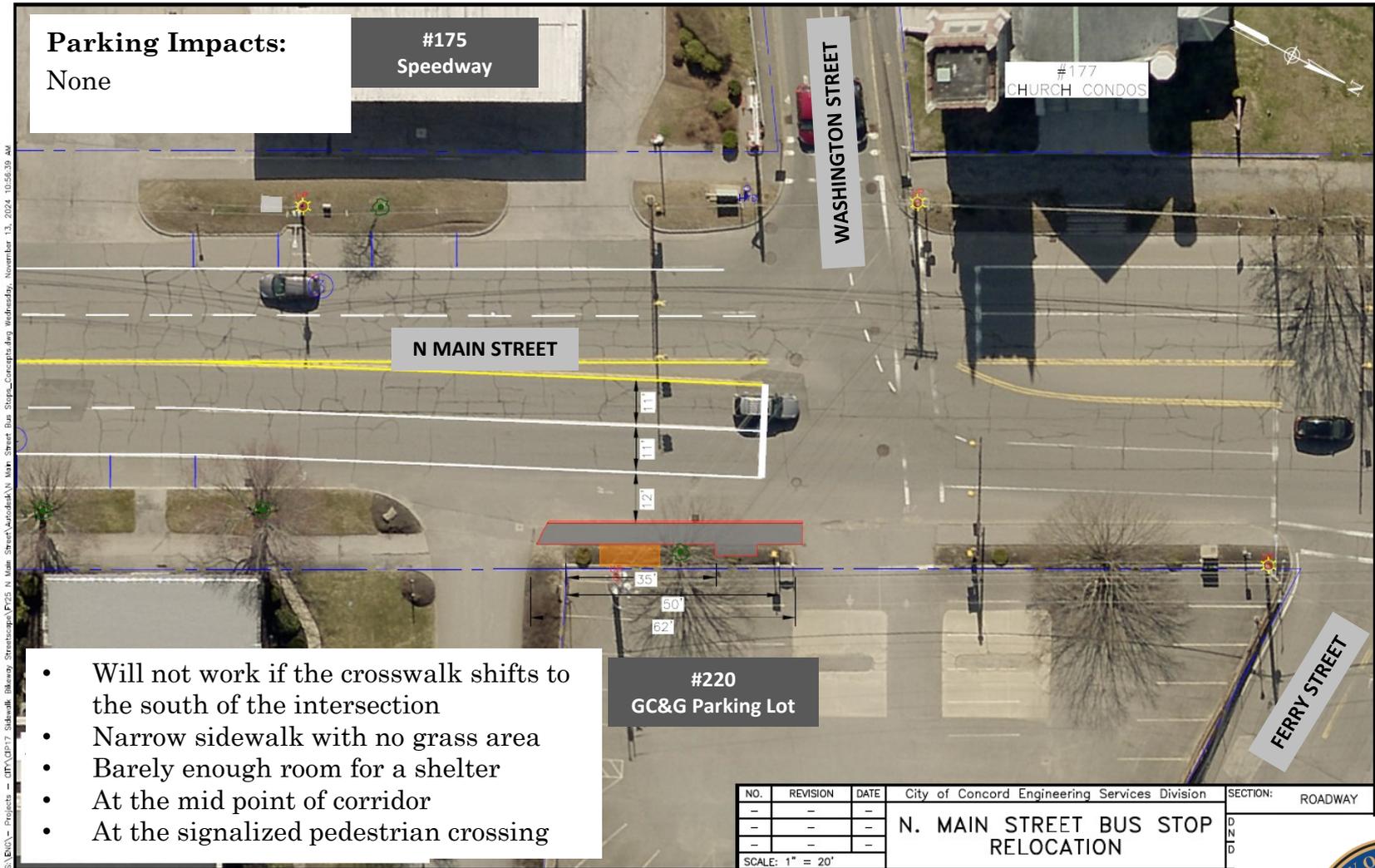
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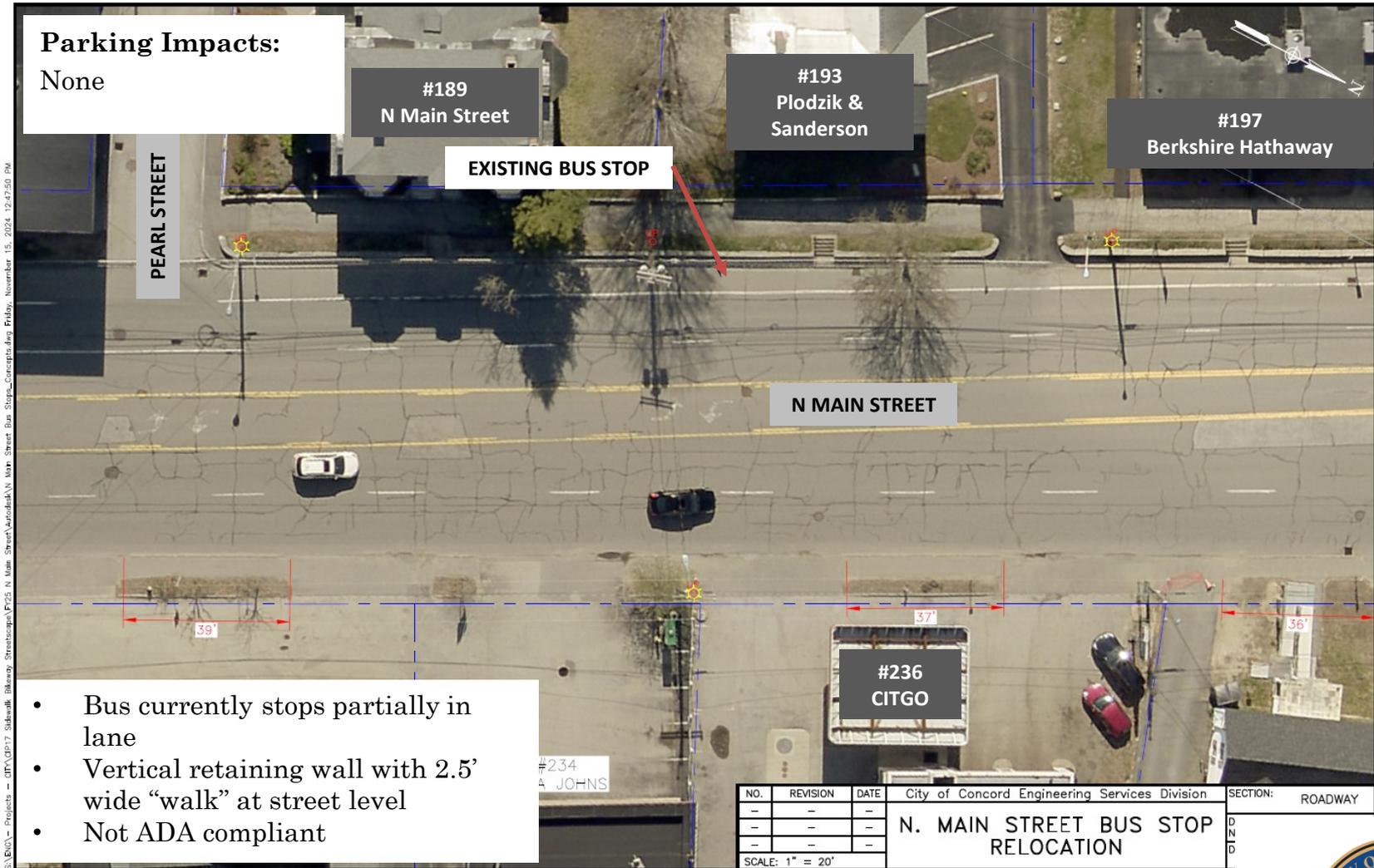
City of Concord Engineering Services Division
SECTION: ROADWAY
N. MAIN STREET BUS STOP RELOCATION



BUS STOP CONCEPTS – EXISTING



BUS STOP CONCEPTS – EXISTING



WHAT'S NEXT?

- The design process will continue
- Future Meeting or City Council Report
- Construction will tentatively be scheduled with the paving program in Spring/Summer 2026.
- Check the City's website and subscribe to the City's Manager's newsletter for more up-to-date information



THANK YOU

Any questions or comments can be directed to:

Karen Hill

City of Concord
Transportation Engineer
khill@concordnh.gov
(603) 225-8578

For more information and project updates, visit:

concordnh.gov

