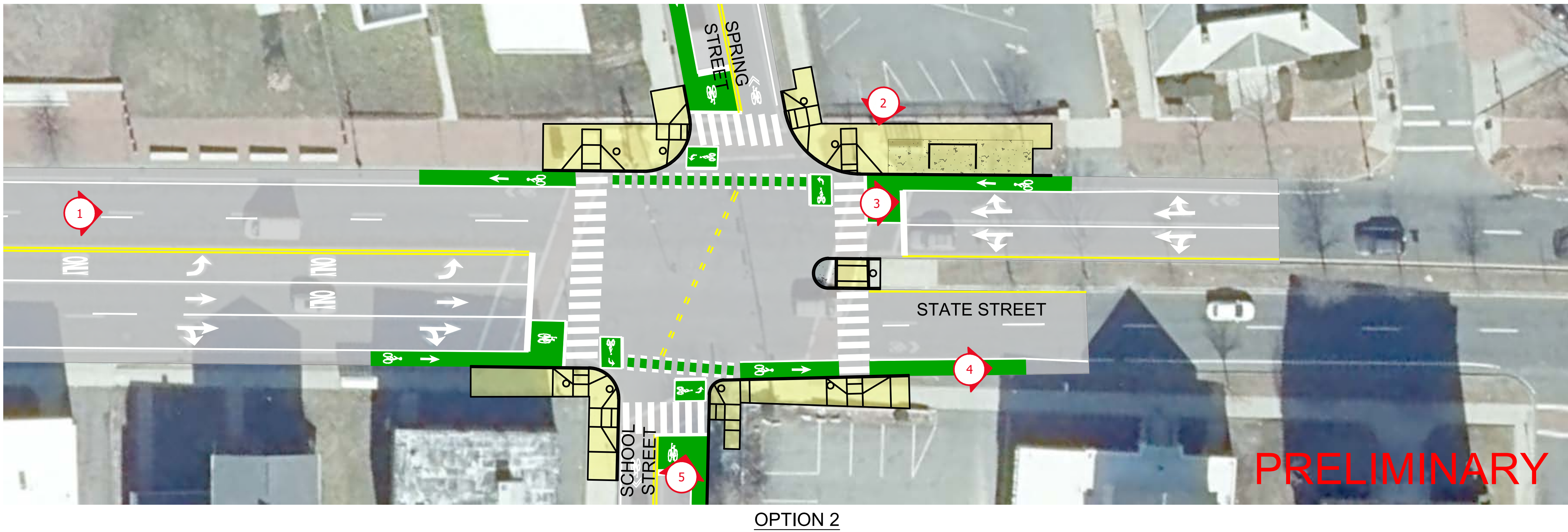
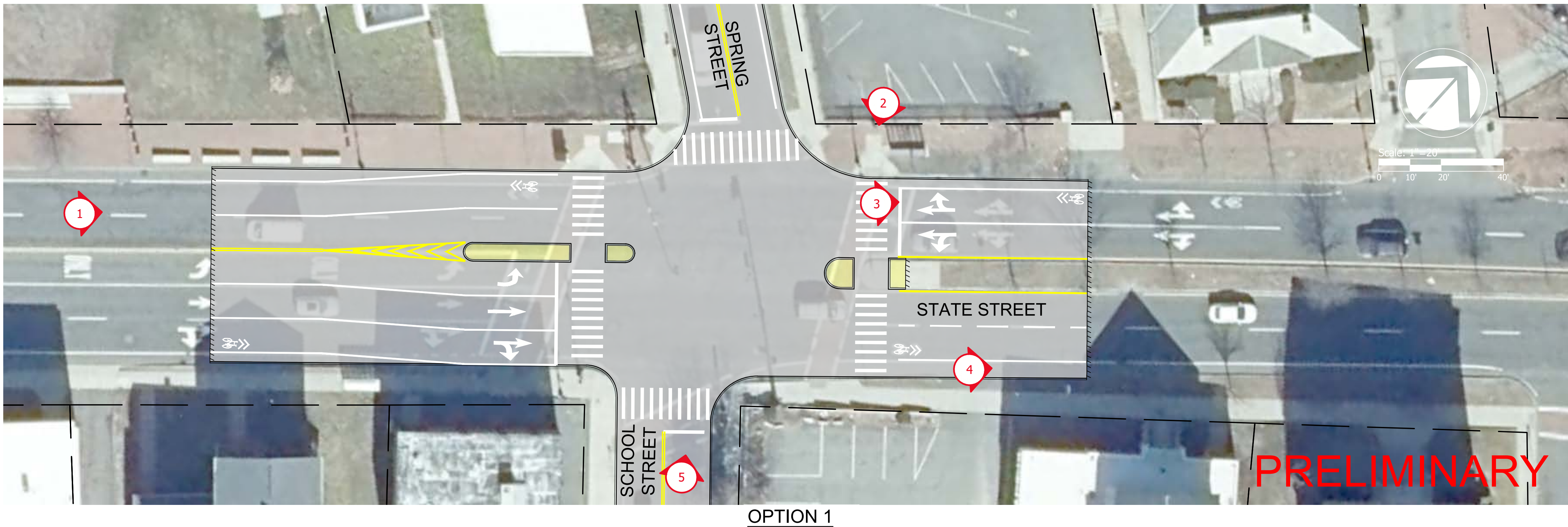


#### OBSERVATIONS:

1. CHANGE IN GRADE THROUGH INTERSECTION, WITH RETAINING WALLS AND BUS SHELTERS BLOCKING VIEWS.
2. CROSSWALKS ARE FADED AND CRACKING. EXISTING MEDIAN DOES NOT PROVIDE REFUGE.
3. BIKE BOX AND MARKINGS ARE FADED. BICYCLISTS RIDING IN SHOULDER INSTEAD OF SHARING THE ROADWAY.
4. NON-ACCESSIBLE BUS STOP ON STATE STREET (INBOUND).
5. DRIVERS ARE NOT ADHERING TO NO RIGHT ON RED RESTRICTIONS.
6. HIGH SPEEDS OF THROUGH TRAFFIC OBSERVED ON STATE STREET.
7. PROTECTED PEDESTRIAN PHASE FOR ALL CROSSINGS HAS LONG DELAY. PEDESTRIAN PHASE APPEARS TO BE TOO SHORT FOR CROSSINGS.
8. PUSH BUTTON IS NOT PRESENT ON STATE/SCHOOL CROSSING (SOUTH SIDE, OPPOSITE WALL)
9. THERE IS ONE SHARED PUSH BUTTON FOR STATE/SPRING.
10. SIGN CLUTTER BLOCKS LEFT LANE SIGN.

#### POTENTIAL IMPROVEMENTS:

1. REALIGN CROSSWALKS TO SHORTEN CROSSING DISTANCES, REPAIR SURFACE
2. CREATE REFUGE ISLAND OR BIKE LANES ON STATE STREET
3. INSTALL APS PUSHBUTTONS
4. ADD CONCURRENT PEDESTRIAN PHASE ACROSS SPRING STREET
5. ADD NO TURN ON RED ON APPROACHES AS NEEDED
6. SIGN CONSOLIDATION



DURING SCHOOL DISMISSAL, THE STATE STREET (NE) RIGHT LANE IS COMPLETELY BLOCKED WITH IDLE VEHICLES FROM 2:10-2:25. THIS MAKES U-TURN MOVEMENTS ON STATE STREET MORE DIFFICULT FOR SUVs, WHICH BACKS UP OTHER DIRECTION OF STATE STREET AS WELL.



### SPRINGFIELD SS4A

STATE ST & SCHOOL ST / SPRING ST

INTERSECTION NO. 1

1 STATE STREET (EB)

2 STATE STREET CROSSING

3 STATE STREET (WB)

4 STATE STREET (EB)

5 SCHOOL STREET (NB)

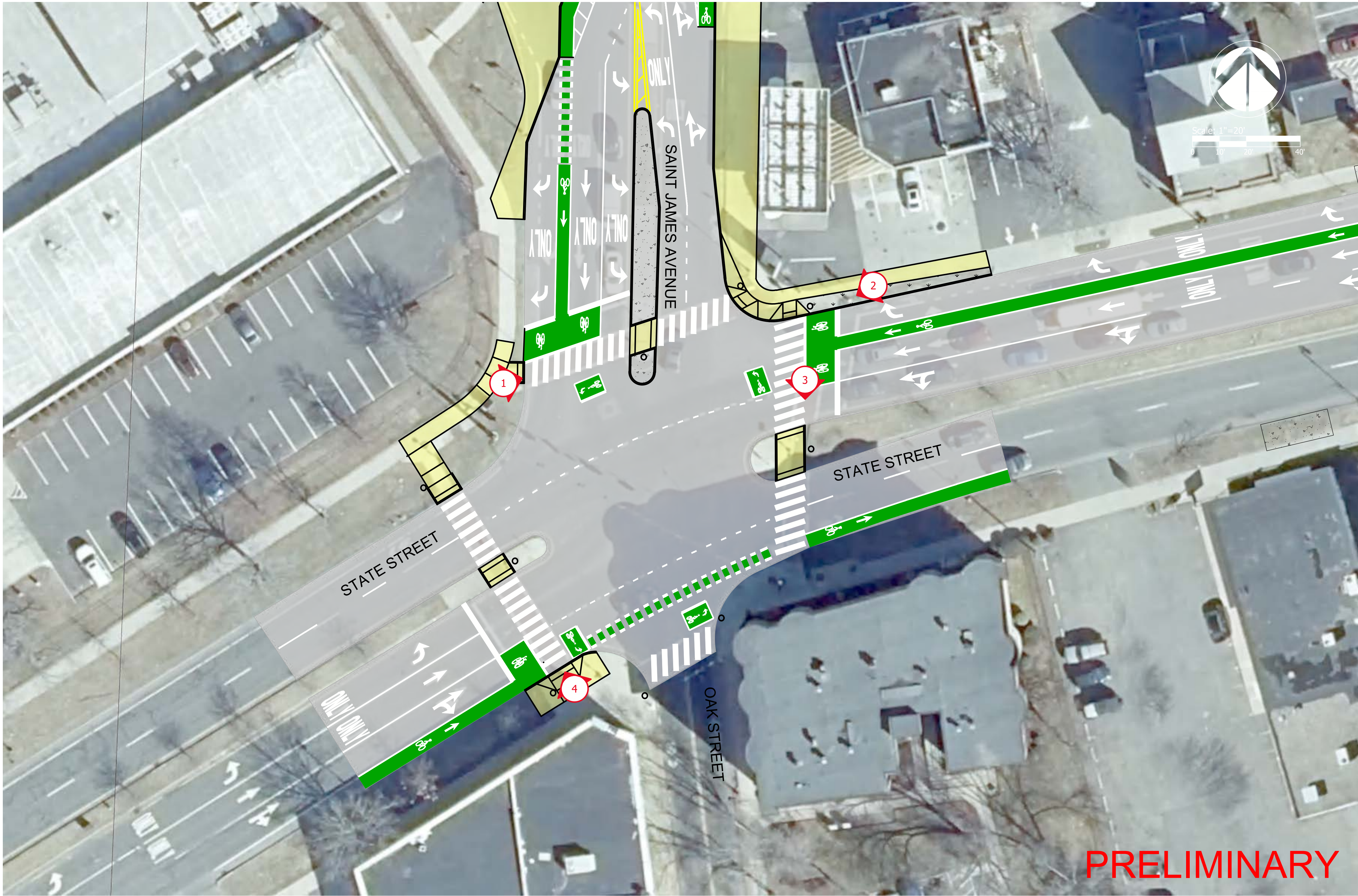


OBSERVATIONS:

1. EXCLUSIVE PEDESTRIAN PHASE, THOUGH LONG OVERALL CYCLE LENGTH AND SHORT CROSSING TIME.
2. BIKE LANE PRESENT ON STATE STREET (WB), WHICH CHANGES TO SHARE THE ROAD.
3. PAVEMENT MARKINGS ARE FADED.
4. CROSSWALKS EXIST, WITH SOME ASPHALT PATCHING AND MIXED STYLES. CROSSWALK SKEW INCREASES CROSSING DISTANCES.
5. VISIBILITY IS LIMITED AT OAK STREET BY BUILDINGS CLOSE TO ROAD.
6. QUEUING FOR LEFT TURNS ONTO MAGAZINE STREET FROM ST JAMES AVE SOMETIMES EXTEND TO STATE STREET INTERSECTION.
7. HEAVY VOLUME OF RIGHT TURNS ONTO ST JAMES AVE FROM STATE STREET OBSERVED. OVERLAPPING RIGHT TURNS HELP TRAFFIC FLOW.
8. HIGH SPEEDS OF THROUGH TRAFFIC OBSERVED ON STATE STREET.
9. SIGNAL HEAD ANGLING MAY BE CONFUSING IN THE DARK.
10. ST JAMES AVENUE AND OAK STREET ARE POORLY ALIGNED, REALIGNMENT MAY NOT BE FEASIBLE.
11. LARGE INTERSECTION HAS LARGE RADII AND HIGH SPEED TURNING MOVEMENTS.
12. MINIMAL DELINEATION BETWEEN BACK OF SIDEWALK AND GAS STATION.

POTENTIAL IMPROVEMENTS:

1. REALIGN STATE STREET CROSSWALKS
2. TIGHTEN CORNER RADII
3. INSTALL ACCESSIBLE MEDIAN REFUGE ISLAND
4. REDUCE LONG CYCLE LENGTHS
5. ADD CONCURRENT PEDESTRIAN CROSSING PHASE ACROSS OAK STREET AND SAINT JAMES AVENUE
6. SIGN CONSOLIDATION



1 ST JAMES AVE CROSSING



2 STATE STREET (WB)



3 STATE STREET CROSSING



4 STATE STREET CROSSING



SPRINGFIELD SS4A

STATE ST, ST JAMES AVE & OAK ST

INTERSECTION NO. 2



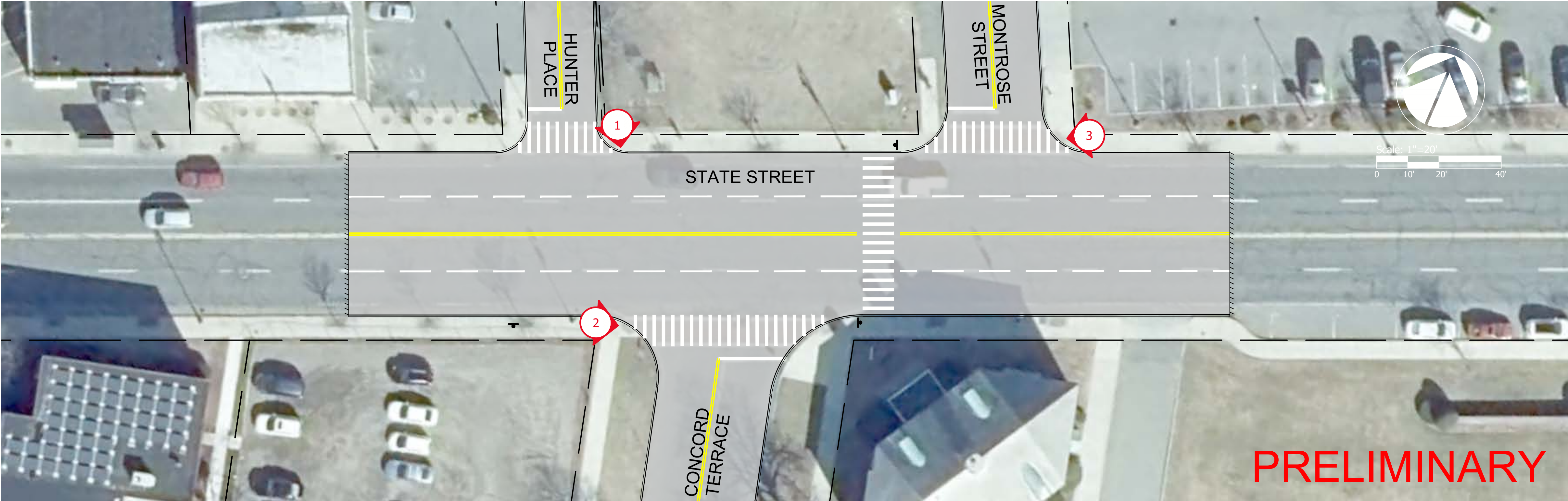


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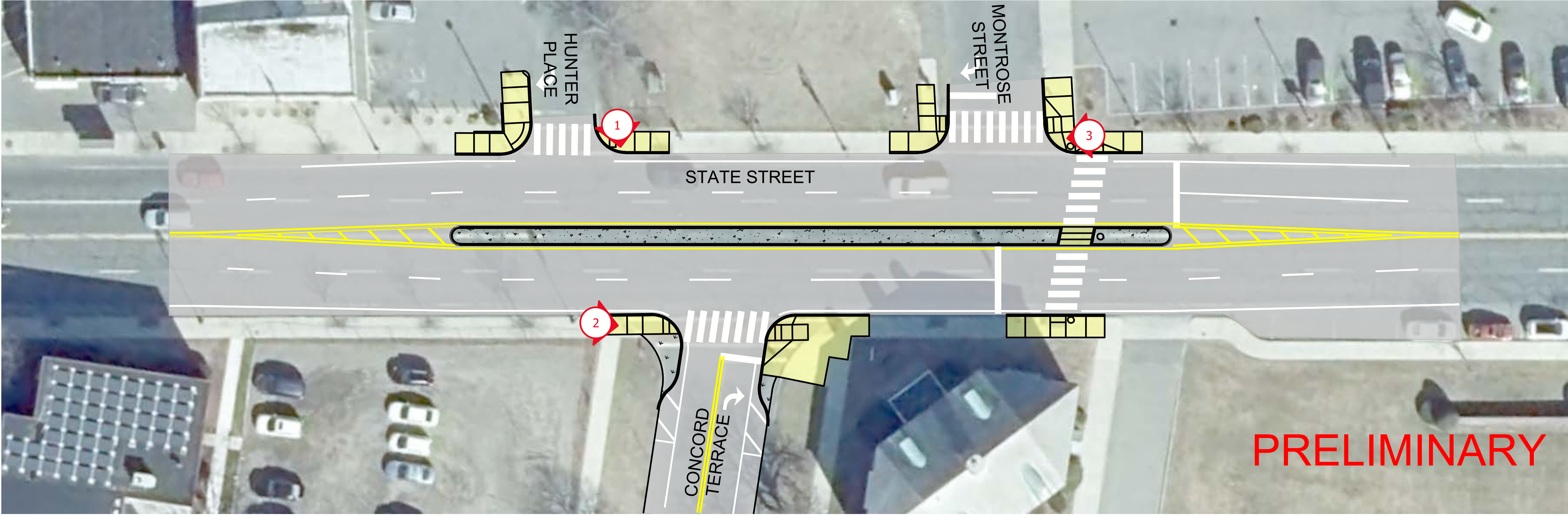
1. CROSSWALKS ARE FADED AND CRACKED. NO CROSSWALKS EXIST ACROSS STATE STREET DESPITE THE PRESENCE OF BUS STOPS AND APPARENT DESIRE LINES. THIS INTERSECTION IS LOCATED BETWEEN TWO SIGNALIZED INTERSECTIONS THAT HAVE PEDESTRIAN ACCOMMODATIONS.
2. PEDESTRIAN RAMPS DO NOT ALIGN WITH CROSSWALKS, ENCOURAGING STEP OUTS ONTO STATE ST.
3. NO BIKE LANES ARE PRESENT.
4. LEFTS FROM STATE STREET ONTO MONTROSE STREET BLOCK THE INTERSECTION WHEN VEHICLES ARE EXITING THE COMMERCIAL SITE.
5. HIGH VEHICLE SPEEDS OBSERVED ON STATE STREET.
6. PARKING NOT PROHIBITED ON MONTROSE AND HUNTER NEAR INTERSECTION.

POTENTIAL IMPROVEMENTS:

1. INSTALL HIGH-VIS CROSSWALKS
2. REDUCE LANE WIDTHS ON STATE STREET
3. ADD CROSSWALK ACROSS STATE STREET



OPTION 1



OPTION 2



SPRINGFIELD SS4A

STATE ST & CONCORD TERR /  
MONTROSE ST / HUNTER PL

INTERSECTION NO. 4

1 STATE STREET CROSSING

2 CONCORD TERRACE CROSSING

3 MONTROSE STREET CROSSING

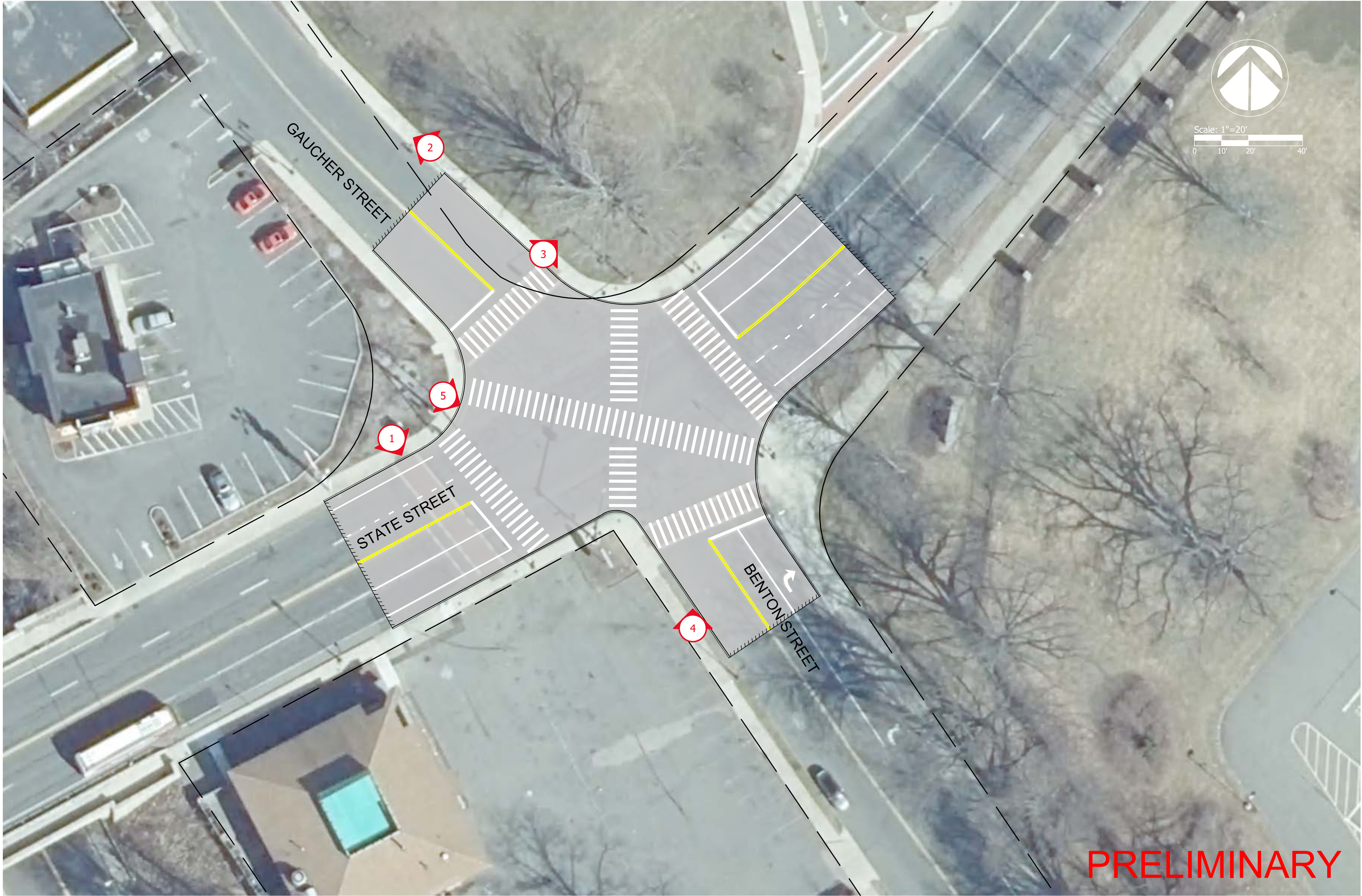


OBSERVATIONS:

1. STATE STREET CROSSWALK (SW) IS FURTHER AWAY FROM INTERSECTION AND VEHICLES PULL BEYOND CROSSWALK.
2. NO BIKE LANES ARE PRESENT, BICYCLISTS SHARE THE ROAD. SIGNS ARE PRESENT FOR SIGNAL REQUESTS.
3. MANY STUDENTS TEND TO CROSS DIAGONALLY THROUGH INTERSECTION DURING THE PROTECTED PEDESTRIAN PHASE OR JAYWALK FROM DUNKIN.
4. BOTH CORNERS OF GAUCHER HAVE SINGLE PUSH BUTTON FOR CROSSINGS.
5. DATED AND NON-COMPLIANT PEDESTRIAN EQUIPMENT.
6. HIGH SPEEDS OBSERVED ON STATE STREET.
7. NO BUS SHELTERS ARE PRESENT, DESPITE HIGH BUS USE.
8. FOOD TRUCKS IN "CLUB AQUARIUS" PARKING LOT LIMIT VISIBILITY.
9. A LEFT TURN ARROW FOR STATE STREET (SB) IS PRESENT WITH NO DEDICATED TURN LANE.
10. INTERSECTION IS LARGE, WITH SWEEPING RADII.
11. EXCLUSIVE RIGHT-TURN LANE AND RIGHT ON RED PERMITTED FROM BENTON.
12. DURING SCHOOL DISMISSAL, PARENTS PARK ON BOTH SIDES OF GAUCHER STREET, LIMITING VISIBILITY OF STUDENTS CROSSING

POTENTIAL IMPROVEMENTS:

1. MOVE STATE STREET CROSSWALK CLOSER TO INTERSECTION
2. ADD DIAGONAL CROSSING PAVEMENT MARKINGS
3. INSTALL APS PUSHBUTTONS AT ALL CORNERS, RELOCATE WHERE REQUIRED
4. ADD "NO TURN ON RED" RESTRICTIONS AS NEEDED
5. REDUCE CYCLE LENGTHS ON STATE STREET, WITH MORE FREQUENT PEDESTRIAN CYCLES
6. CONSIDER ADDITION OF BUS SHELTER AT STOPS ON STATE STREET



1 STATE STREET CROSSING



2 GAUCHER STREET SIDEWALK



3 GAUCHER STREET PUSH BUTTON



4 BUS STOP AND STUDENTS CROSSING



5 BENTON STREET VEHICLE QUEUE



SPRINGFIELD SS4A

GAUCHER ST / BENTON ST & STATE ST

INTERSECTION NO. 5

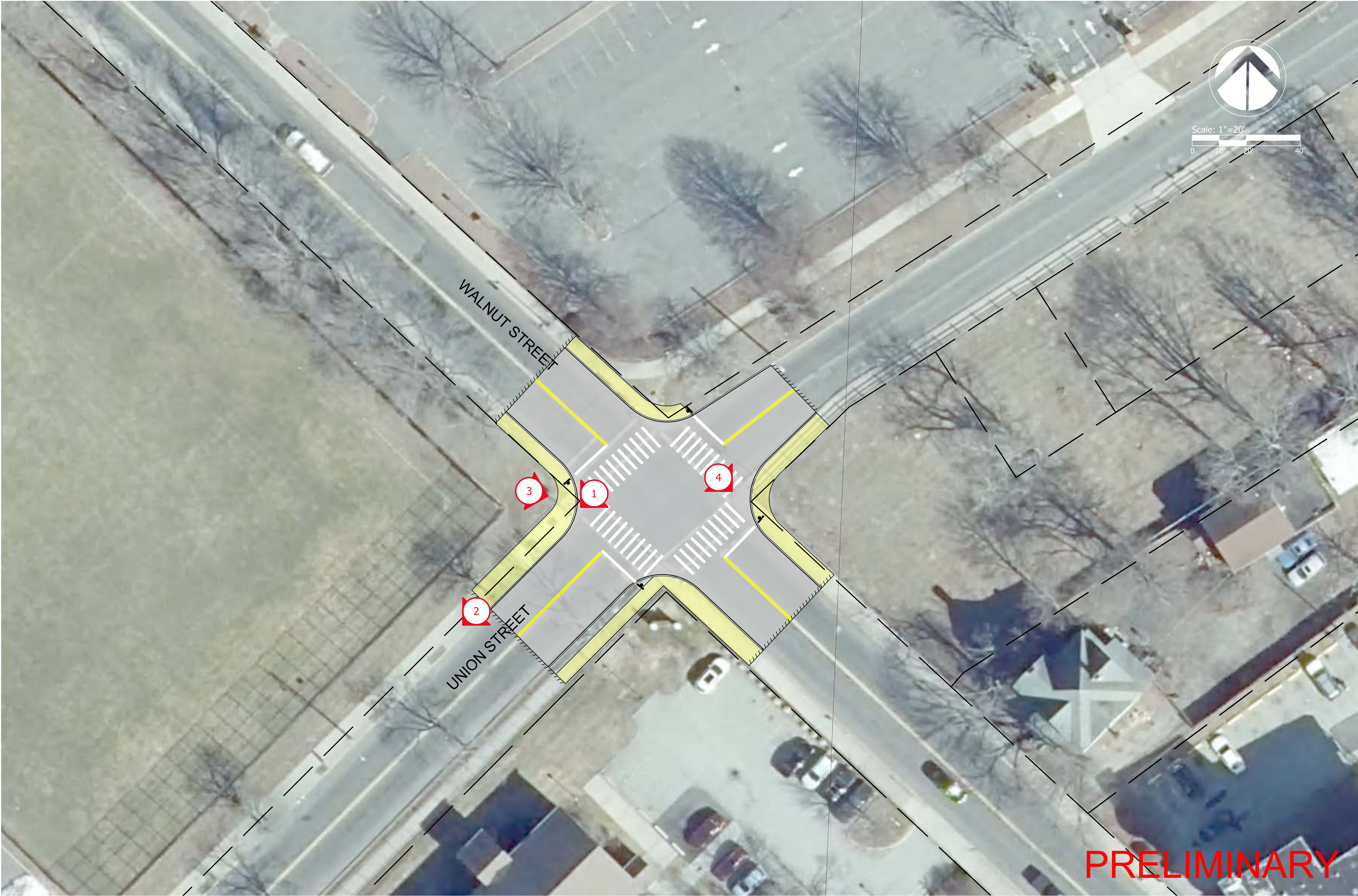


OBSERVATIONS:

- 1. NO PEDESTRIAN SIGNALS OR PUSHBUTTONS ARE PRESENT.
- 2. ADA RAMP AND CROSSWALKS ARE PRESENT. TRIP HAZARDS ARE PRESENT ON THE SIDEWALKS ON UNION STREET.
- 3. SIDEWALK WIDTHS ARE NARROW, WITH SIGNALS AND LIGHT POSTS IN THE SIDEWALK.
- 4. VEHICLES ARE SPEEDING ON THE WALNUT STREET APPROACHES TO CATCH THE LIGHT OR ARE RUNNING THE RED.
- 5. THERE ARE NO "NO TURN ON RED" RESTRICTIONS.
- 6. THIS INTERSECTION IS IN CLOSE PROXIMITY TO ADJACENT SIGNAL AT WALNUT/STATE, AND THAT QUEUE BACKS UP TO THIS INTERSECTION.
- 7. TIGHT RADII RESULT IN VEHICLES DRIVING OVER CURB AND STOPPING FAR BACK FROM STOP LINE TO ACCOMMODATE TURNING VEHICLES/BUSES.
- 8. THERE IS LIMITED LIGHTING AT THE INTERSECTION.
- 9. SIGNAL EQUIPMENT IS OUTDATED. MISSING SIGNAL VISORS.
- 10. CONTRADICTORY PARKING SIGNS EXIST ON UNION STREET.
- 11. BUS STOPS WERE OBSERVED ON WALNUT STREET.
- 12. DURING SCHOOL DISMISSAL, BUSES STOP ON UNION STREET, AND THE QUEUE EXTENDS THROUGH AND BLOCKS THE INTERSECTION.

POTENTIAL IMPROVEMENTS:

- 1. POTENTIAL CONVERSION TO ALL-WAY STOP INTERSECTION
- 2. INCREASE CURB RADIUS
- 3. INSTALL INTERSECTION LIGHTING
- 4. IF SIGNAL REMAINS - UPDATE SIGNAL EQUIPMENT AND ADD EXCLUSIVE PEDESTRIAN PHASE



1 UNION STREET TRAFFIC SIGNAL

2 UNION STREET VEHICLE QUEUE

3 WALNUT STREET VEHICLE QUEUE & TURN

4 WALNUT STREET SIDEWALK & RAMP



SPRINGFIELD SS4A

WALNUT ST & UNION ST

INTERSECTION NO. 6





OBSERVATIONS:

- 1. BIKE LANES ARE PRESENT ON DWIGHT STREET AND STATE STREET (WB) ONLY AT INTERSECTION. BIKE BOX STRIPING IS FADED.
- 2. CROSSWALKS ARE MIXED STYLES, FADED AND HAVE PATCHES. CROSSWALKS ARE WELL PLACED, CLOSE TO THE INTERSECTION.
- 3. EXCLUSIVE PEDESTRIAN SIGNAL PHASE, THOUGH LONG CYCLE TIME ENCOURAGES PEDESTRIANS NOT TO CALL OR WAIT FOR SIGNAL.
- 4. THERE IS A SHORT QUEUE LENGTH BETWEEN THE NEIGHBORING CHESTNUT INTERSECTION.
- 5. THERE IS POOR VISIBILITY ON THE DWIGHT STREET APPROACH AND FOR VEHICLES PULLING OUT OF THE PARKING LOT ON MAPLE STREET.
- 6. HIGH VEHICLE SPEEDS WERE OBSERVED FOR THROUGH TRAFFIC ON STATE STREET, MAKING THE USE OF THE BICYCLE LANES UNSAFE.
- 7. HIGH VEHICLE SPEEDS ALSO OBSERVED FOR TURNING MOVEMENTS ONTO MAPLE STREET.

POTENTIAL IMPROVEMENTS:

- 1. RELOCATE SOUTHERN CORNER PEDESTRIAN BUTTON
- 2. INSTALL HIGH-VIS CROSSWALKS AND REPAINT BIKE BOXES
- 3. INSTALL CAT TRACKS THROUGH INTERSECTION FOR TURNING VEHICLES FROM DWIGHT STREET TO STATE STREET
- 4. ADD "NO TURN ON RED" RESTRICTIONS AS NEEDED
- 5. ADD CONCURRENT PEDESTRIAN PHASE ACROSS DWIGHT STREET
- 6. REDUCE CYCLE LENGTHS, IN COORDINATION WITH CHESTNUT STREET
- 7. SIGN CONSOLIDATION



SPRINGFIELD SS4A

DWIGHT ST / MAPLE ST & STATE ST

INTERSECTION NO. 7

1 DWIGHT STREET SIGNAGE

2 STATE STREET CROSSING

3 STATE STREET VEHICLE QUEUE

4 MAPLE STREET CROSSING

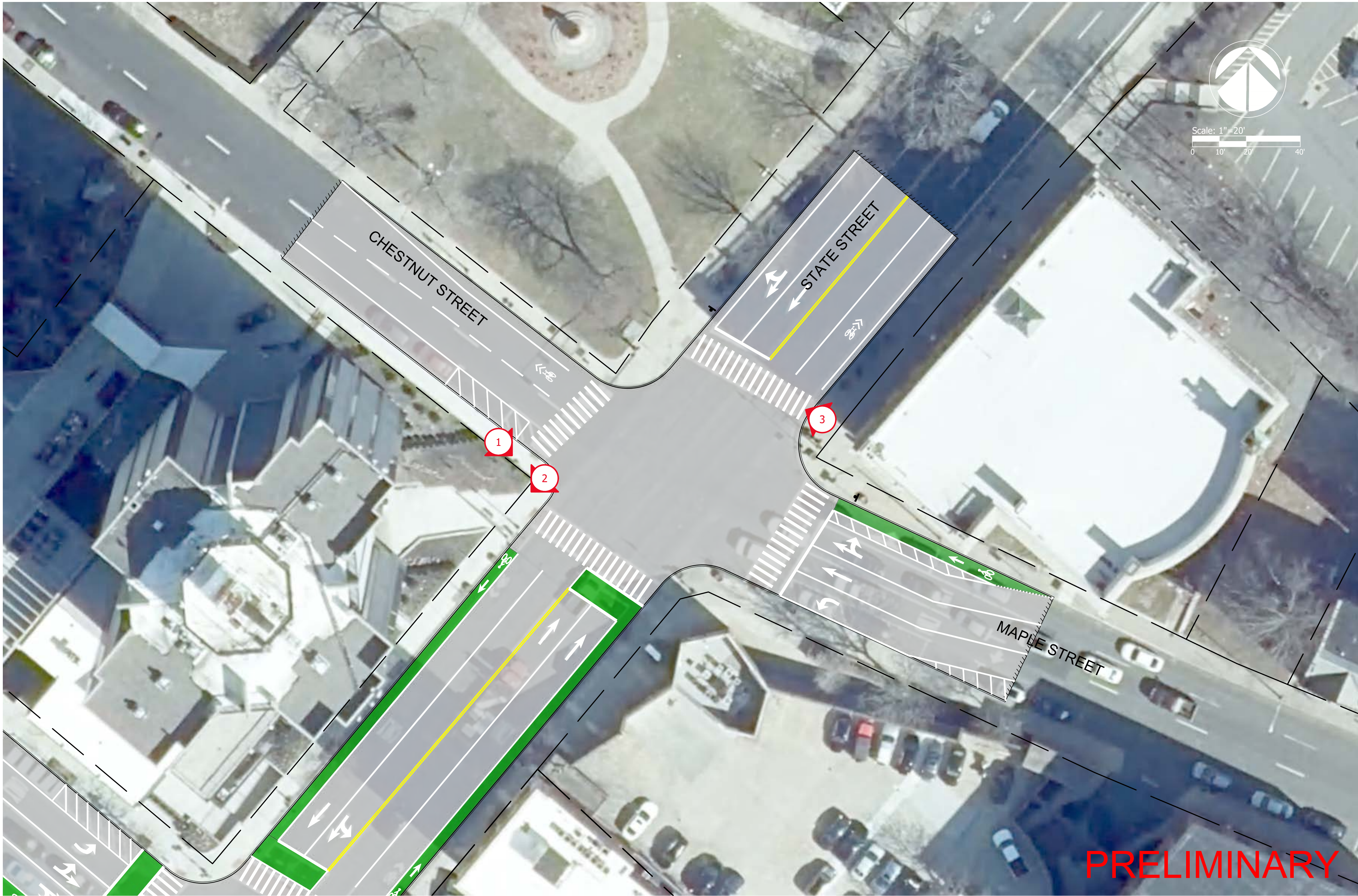


OBSERVATIONS:

1. CROSSWALKS ARE MIXED STYLES, FADED AND NOT HIGH-VISIBILITY.
2. THERE IS A PEDESTRIAN SIGNAL PHASE, WITH LONG CYCLE LENGTHS BETWEEN PEDESTRIAN PHASES.
3. THERE ARE NO BIKE LANES PRESENT, CYCLISTS SHARE THE ROAD. THE STATE STREET APPROACH HAS BICYCLE MARKINGS, BUT NO SIGNS.
4. TRAFFIC STOPPED AT DWIGHT STREET BACKS UP INTO INTERSECTION.
5. THERE ARE NO "NO TURN ON RED" RESTRICTIONS. MAPLEGATE BUILDING LIMITS VISIBILITY.
6. VEHICLES OBSERVED RUNNING RED LIGHT.
7. HIGH SPEEDS WERE OBSERVED FOR THROUGH TRAFFIC ON STATE STREET.
8. THERE IS MINIMAL INTERSECTION LIGHTING.
9. DUE TO THE HORIZONTAL AND VERTICAL CURVATURE OF MAPLE STREET, IT IS DIFFICULT TO PULL OUT OF THE ON-STREET PARKING.
10. LANES ON MAPLE STREET AND CHESTNUT STREET ARE NOT ALIGNED. VEHICLES PARK IN NO-PARKING AREA.

POTENTIAL IMPROVEMENTS:

1. RELOCATE NON-COMPLIANT PUSHBUTTON LOCATIONS
2. INSTALL HIGH-VIS CROSSWALKS
3. LANE ADJUSTMENTS TO ALIGN MAPLE STREET AND CHESTNUT STREET LANES
4. REMOVE PARKING SPACES ON MAPLE STREET CLOSE TO INTERSECTION
5. ADD INTERSECTION LIGHTING
6. ADD "NO TURN ON RED" RESTRICTIONS AS NEEDED
7. ADD LEFT TURN FROM STATE STREET TO CHESTNUT STREET
8. RUN CONCURRENT PEDESTRIAN PHASE ACROSS MAPLE STREET
9. REDUCE CYCLE LENGTHS, IN COORDINATION WITH DWIGHT STREET



1 CHESTNUT STREET ADA RAMP

2 STATE STREET (WB)

3 STATE STREET CROSSING



SPRINGFIELD SS4A

STATE ST & CHESTNUT ST, /  
MAPLE ST

INTERSECTION NO. 8



OBSERVATIONS:

- CROSSWALKS ARE FADED AND CRACKING, MARKINGS ARE NOT HIGH-VIS.
- CLEAR DESIRE LINE YET NO CROSSWALK ACROSS STATE STREET (EAST).
- THERE IS A PEDESTRIAN SIGNAL PHASE, THOUGH LONG DELAYS.
- PEDESTRIAN EQUIPMENT IS DATED AND NON-COMPLIANT.
- GAS STATION ADDS FIFTH APPROACH, COMPLICATES SIGNAL MOVEMENTS.
- NO "NO TURN ON RED" SIGN POSTED FOR CORTLAND STREET TRAFFIC, DESPITE LIMITED VISIBILITY.
- "NO TURN ON RED" FROM DRESDEN SEEMS UNWARRANTED. AMBIGUITY ABOUT NUMBER OF LANES ON DRESDEN.
- NO BIKE LANES ARE PRESENT, BUT DATED SIGNS REMAIN.
- HIGH SPEEDS WERE OBSERVED FOR THROUGH TRAFFIC ON STATE STREET.
- THERE ARE REDUNDANT PARKING RESTRICTION SIGNS.
- THERE IS POOR DELINEATION BETWEEN THE GAS STATION DRIVEWAY APRON, ACCESSIBLE RAMP, AND THE BACK OF SIDEWALK.

POTENTIAL IMPROVEMENTS:

- INSTALL HIGH-VIS PAVEMENT MARKINGS, DELINEATING TWO LANES ON DRESDEN STREET OR TAPER THE APPROACH TO SINGLE LANE
- ADD SECOND PEDESTRIAN CROSSWALK ACROSS STATE STREET EAST OF DRESDEN STREET
- INSTALL APS PUSHBUTTONS AND RELOCATE NON-COMPLIANT PUSHBUTTON LOCATIONS
- ADD "NO TURN ON RED" RESTRICTIONS AS NEEDED
- ADD CONCURRENT PEDESTRIAN PHASE ACROSS DRESDEN STREET AND CORTLAND STREET

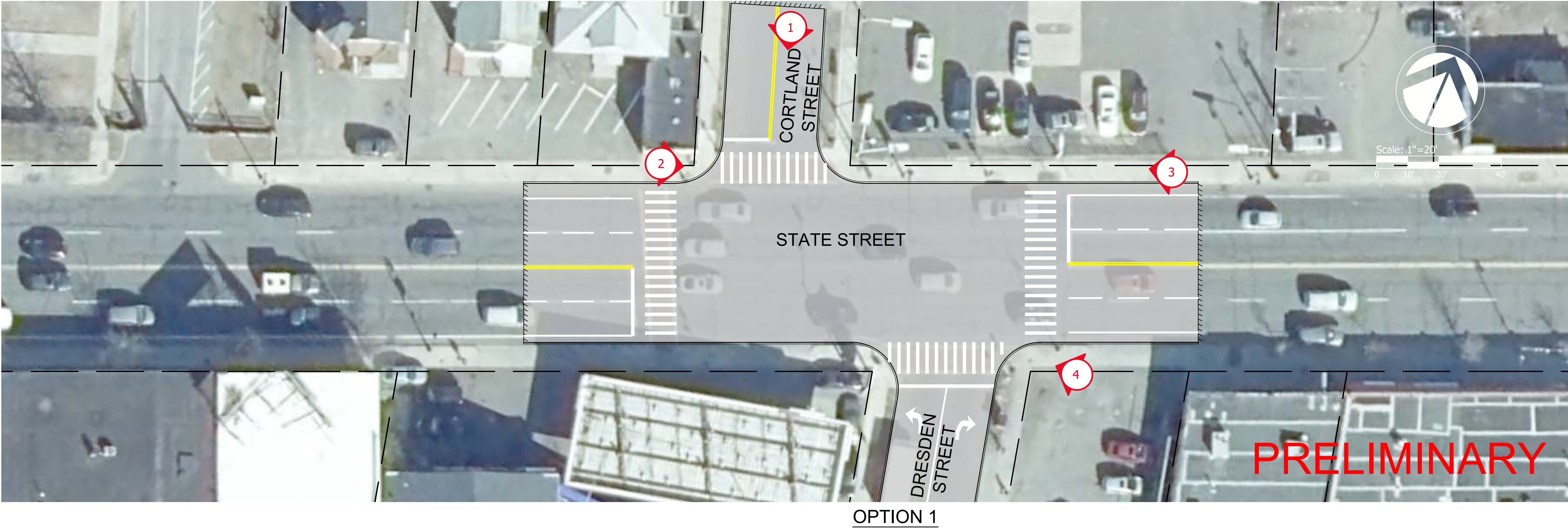


1 CORTLAND STREET (SB)

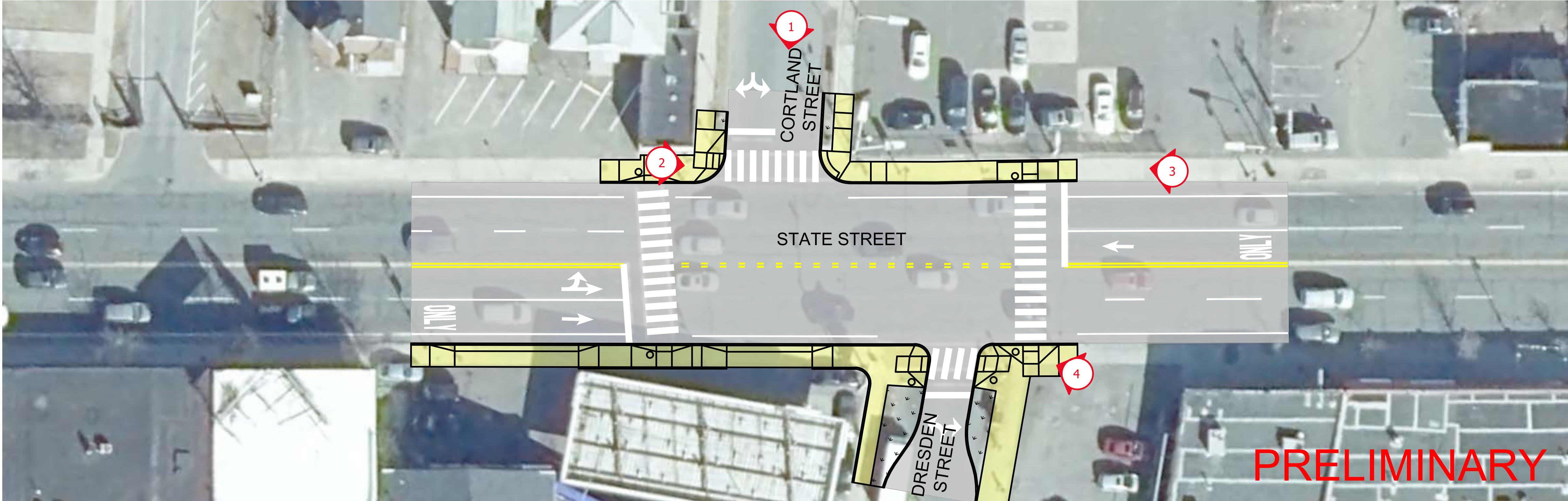
2 CORTLAND STREET PUSH BUTTON

3 STATE STREET FADED SIGN

4 DRESDEN STREET CROSSING



OPTION 1



OPTION 2



SPRINGFIELD SS4A

DRESDEN ST, / CORTLAND ST  
& STATE ST

INTERSECTION NO. 9





OBSERVATIONS:

1. PEDESTRIAN EQUIPMENT, INCLUDING COUNTDOWN TIMERS, PUSHBUTTONS AND SIGNS, ARE DATED AND NON-COMPLIANT AND SOME ARE NOT WORKING.
2. THERE ARE LONG CYCLE LENGTHS DELAYING THE PEDESTRIAN CYCLE.
3. THE MAIN STREET CROSSWALK (SOUTH) IS SETBACK LIMITING VISIBILITY.
4. BICYCLISTS SHARE THE ROAD, WITH SUCH PAVEMENT MARKINGS PRESENT, THOUGH FADED AND CLOSE TO PARKED VEHICLE DOORS.
5. VEHICLES TURNING INTO DUNKIN PARKING LOT SLOW TRAFFIC ON MAIN STREET. THE DRIVEWAY FROM CENTRAL STREET IS CURRENTLY CLOSED.
6. SIGHT DISTANCE IS LIMITED BY BUILDINGS CLOSE TO ROADWAY AND VEGETATION.
7. SOME "NO TURN ON RED" RESTRICTIONS SEEM UNWARRANTED. NOT ALL SIGNS VISIBLE.
8. LEFT-TURNS FROM MAIN TO CENTRAL ENCROACH IN ONCOMING LANE.
9. A SCHOOL BUS STOP WAS OBSERVED (THOUGH NOT POSTED) BETWEEN FREMONT STREET AND LORING STREET CAUSING VEHICLE BACKUP.

POTENTIAL IMPROVEMENTS:

1. REPAIR PEDESTRIAN EQUIPMENT, INSTALL APS PUSHBUTTONS, UPGRADE SIGNALS TO INCLUDE COUNTDOWN TIMERS
2. REPAINT BIKE LANE PAVEMENT MARKINGS IN LANE CENTERS
3. ADJUST "NO TURN ON RED" RESTRICTIONS AS NEEDED



PRELIMINARY



SPRINGFIELD SS4A

MAIN ST & FREMONT ST /  
CENTRAL ST

INTERSECTION NO. 10

1 MAIN STREET ADA RAMP & CATCH BASIN

2 FREMONT STREET (EB)

3 CENTRAL STREET PUSH BUTTON

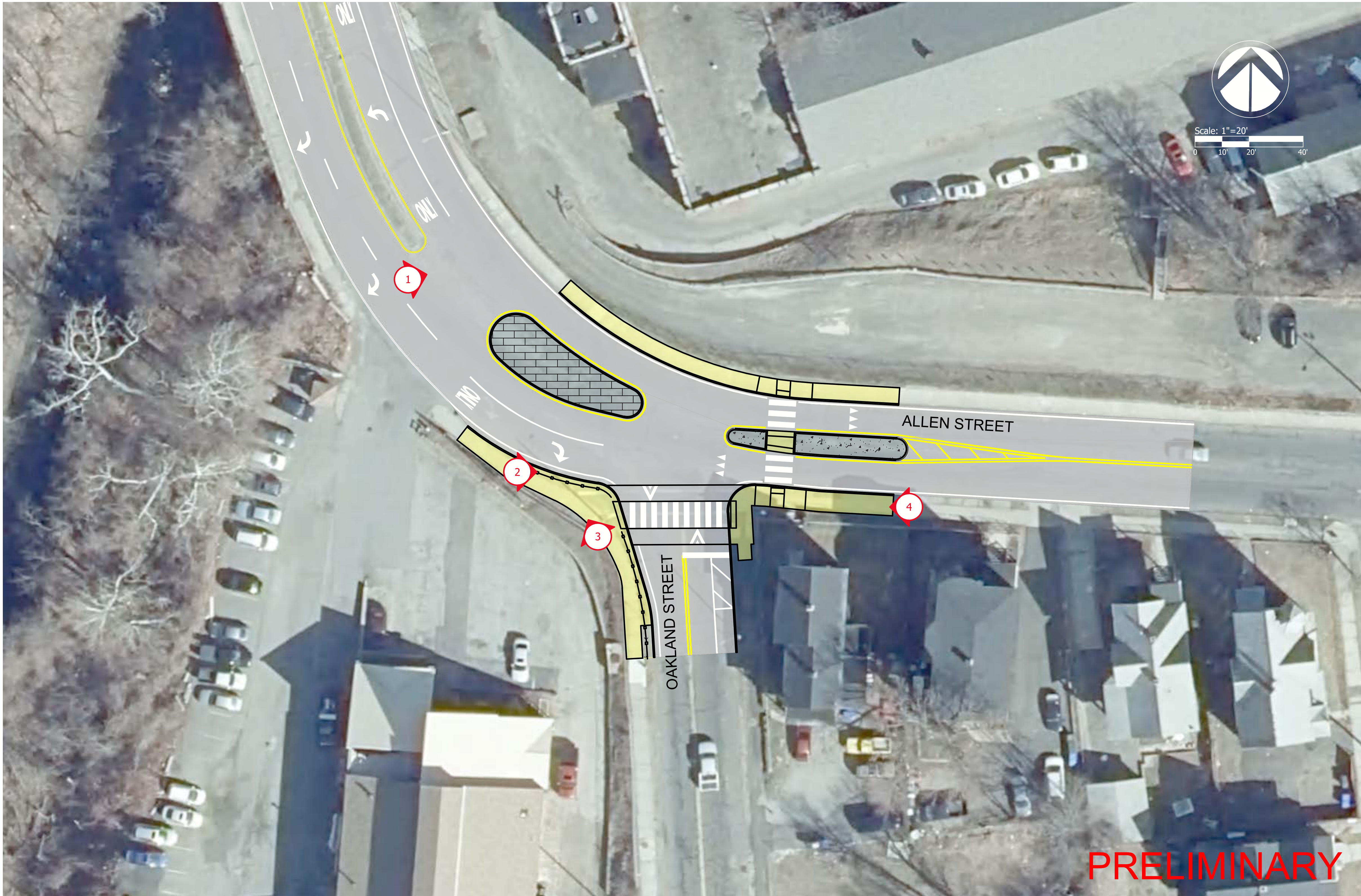


OBSERVATIONS:

1. THERE ARE NO BICYCLE ACCOMMODATIONS.
2. THERE IS NO MARKED CROSSING FOR ALLEN STREET; ADJACENT INTERSECTIONS HAVE CROSSWALKS ACROSS ALLEN STREET.
3. LANE DELINEATION, INCLUDING LANE LINES AND CENTERLINES, ARE MISSING CREATING AMBIGUITY. STRIPING USED TO BE PRESENT.
4. OAKLAND STREET HAS LIMITED VISIBILITY DUE TO GRADE CHANGES AND A RETAINING WALL. VEHICLES RESORT TO PULLING PAST STOP LINE.
5. GUARDRAIL ON OAKLAND STREET HAS BEEN DOWNED. ISLAND APPEARS TO HAVE BEEN MOUNTED SEVERAL TIMES.
6. INTERSECTION LIGHTING EXISTS ONLY ON ONE SIDE OF CROSSWALK.
7. VERY HIGH SPEEDS WERE OBSERVED ON ALLEN STREET, ESPECIALLY RIGHT TURNS ONTO OAKLAND STREET, WHICH HAS A LARGE RADIUS.
8. LARGE TRUCKS WERE OBSERVED MAKING LEFT TURNS INTO THE COMMERCIAL DRIVEWAY WEST OF THE INTERSECTION.

POTENTIAL IMPROVEMENTS:

1. INSTALL CURB EXTENSION TO TIGHTEN RADII
2. INSTALL HIGH-VIS PAVEMENT MARKINGS, EXTENDING AND ADDING LANE DELINEATION PAVEMENT MARKINGS, AND EXTENDING MEDIAN
3. ADD OBJECT MARKER TO MEDIAN
4. POTENTIAL RAISED CROSSWALK ON OAKLAND STREET
5. POTENTIAL CROSSWALK WITH REFUGE ISLAND ACROSS ALLEN STREET
6. MOVE LANE DELINEATION SIGN FROM UTILITY POLE TO ITS OWN POST



SPRINGFIELD SS4A

ALLEN ST & OAKLAND ST

INTERSECTION NO. 11

1 PAVEMENT MARKINGS FROM GOOGLE EARTH HISTORY (2010)

2 ALLEN STREET (EB)

3 OAKLAND STREET ADA RAMP

4 ALLEN STREET (WB)



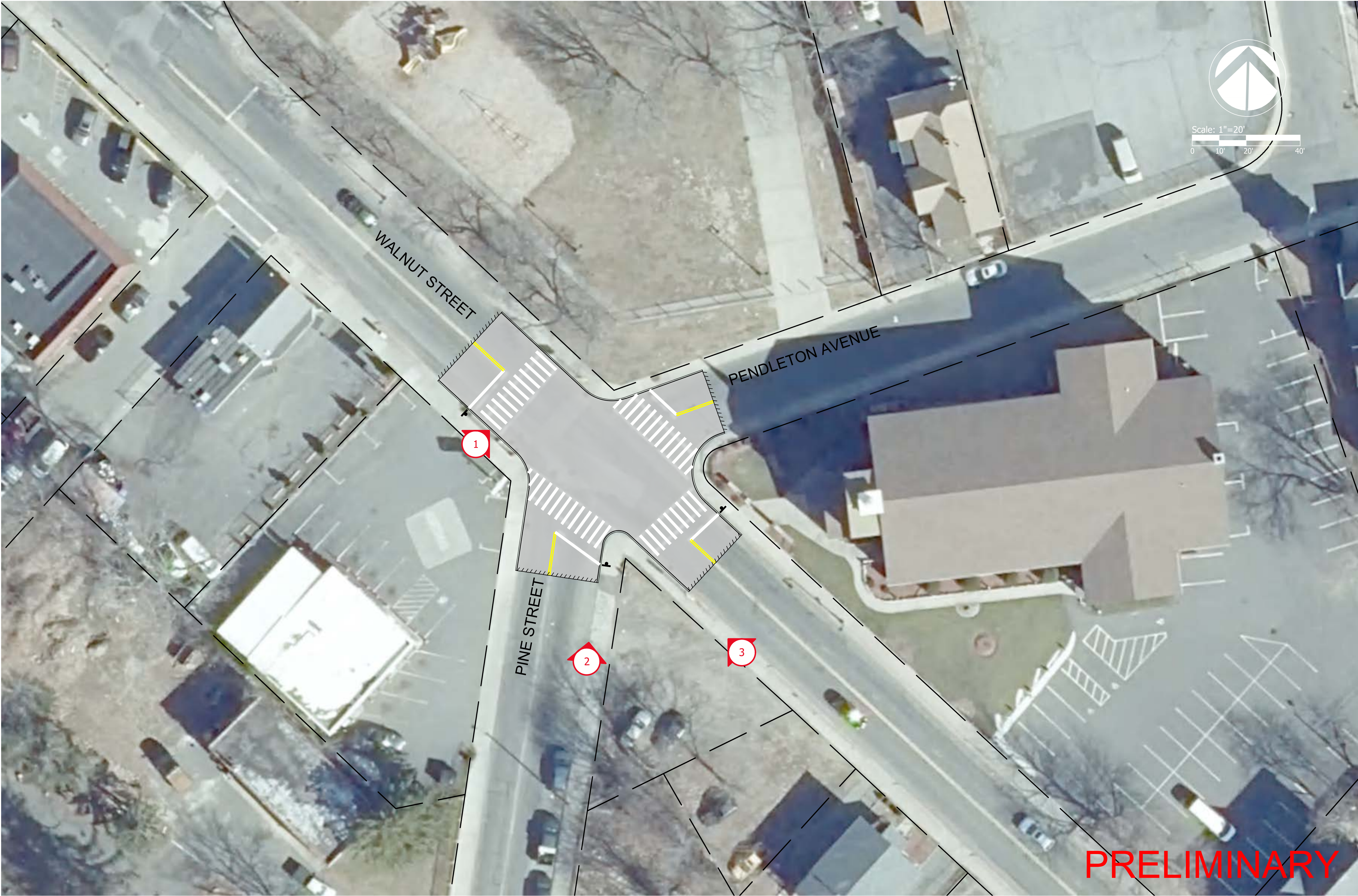


OBSERVATIONS:

- 1. THERE ARE NO PEDESTRIAN SIGNALS, AND NO DWPS AT RAMPS. CROSSWALKS ARE FADED, AND OF DIFFERENT STYLES.
- 2. THERE IS ONLY ONE TRAFFIC SIGNAL HEAD FOR VEHICLES APPROACHING FROM PINE STREET AND PENDLETON AVE. ALL EXISTING SIGNALS GROUND MOUNTED.
- 3. TRAFFIC OBSERVED FROM PINE AND PENDLETON IS MAINLY TURNING ONTO WALNUT, WITH CARS STOPPING PAST STOP BAR.
- 4. BRICK WALL IN FRONT OF THE CHURCH LIMITS VISIBILITY FOR TURNING MOVEMENTS.
- 5. ALL APPROACHES ARE SINGLE LANE WITH NO BICYCLE ACCOMMODATIONS.
- 6. THERE ARE NO "NO TURN ON RED" RESTRICTIONS.
- 7. HIGH SPEEDS WERE OBSERVED FOR THROUGH TRAFFIC ON WALNUT.
- 8. ON-STREET PARKING WAS OBSERVED ON PINE STREET WITH NO RESTRICTION AT INTERSECTION.
- 9. DIFFICULT PULLING OUT OF PARKING LOT INTO PINE STREET QUEUE.
- 10. THERE IS INADEQUATE SITE LIGHTING.

POTENTIAL IMPROVEMENTS:

- 1. PROPOSED ALL-WAY STOP CONVERSION
- 2. POTENTIAL RAISED CROSSWALK AND INTERSECTION
- 3. INSTALL ADA COMPLIANT RAMPS AND HIGH-VIS CROSSWALKS
- 4. INSTALL INTERSECTION LIGHTING
- 5. CREATE DELINEATION BETWEEN SIDEWALK AND PARKING LOT



1 WALNUT STREET CROSSING



2 PINE STREET (NB)



3 WALNUT STREET (WB)



SPRINGFIELD SS4A

PENDLETON AVE / PINE ST &  
WALNUT ST

INTERSECTION NO. 12

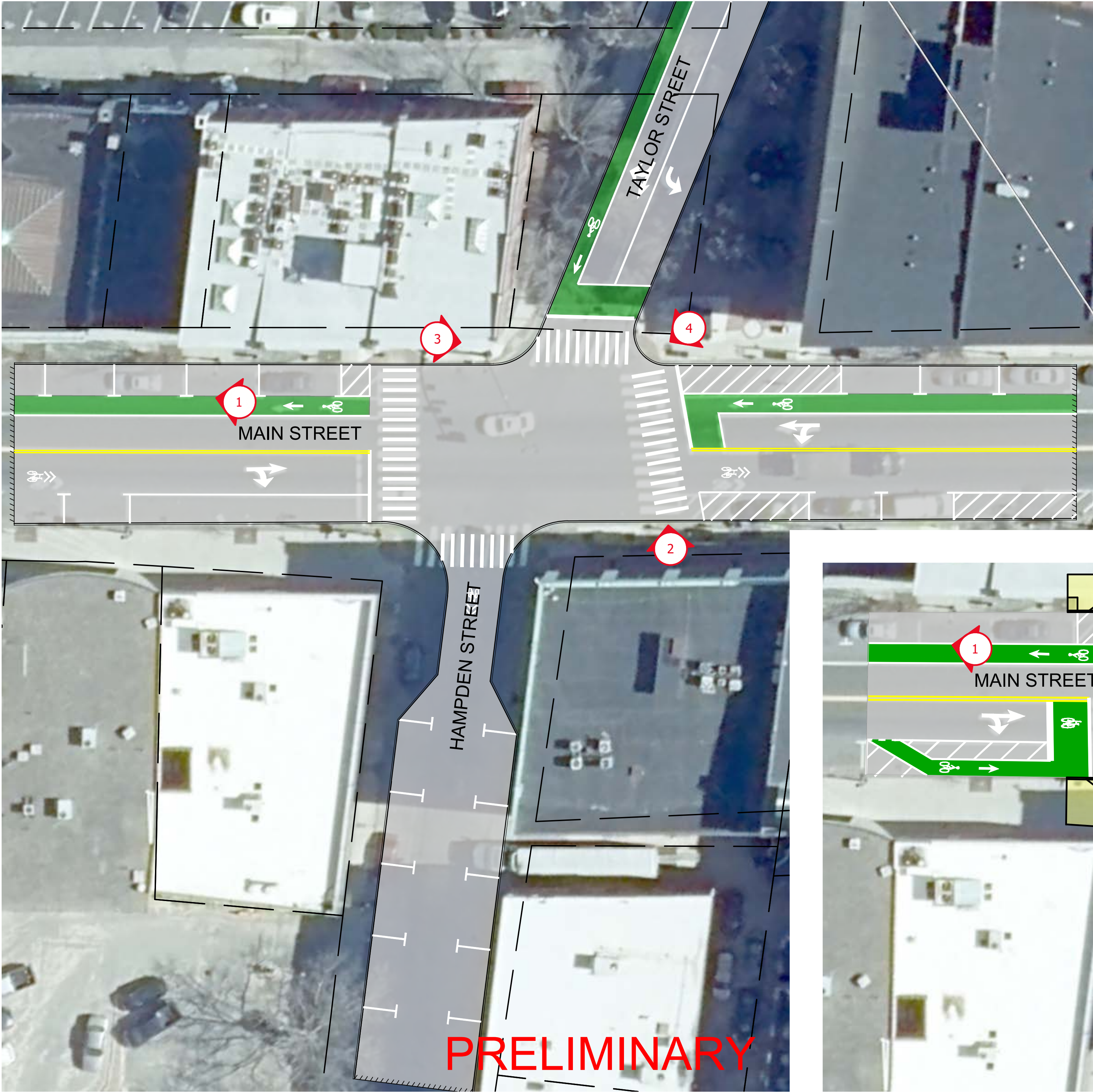


OBSERVATIONS:

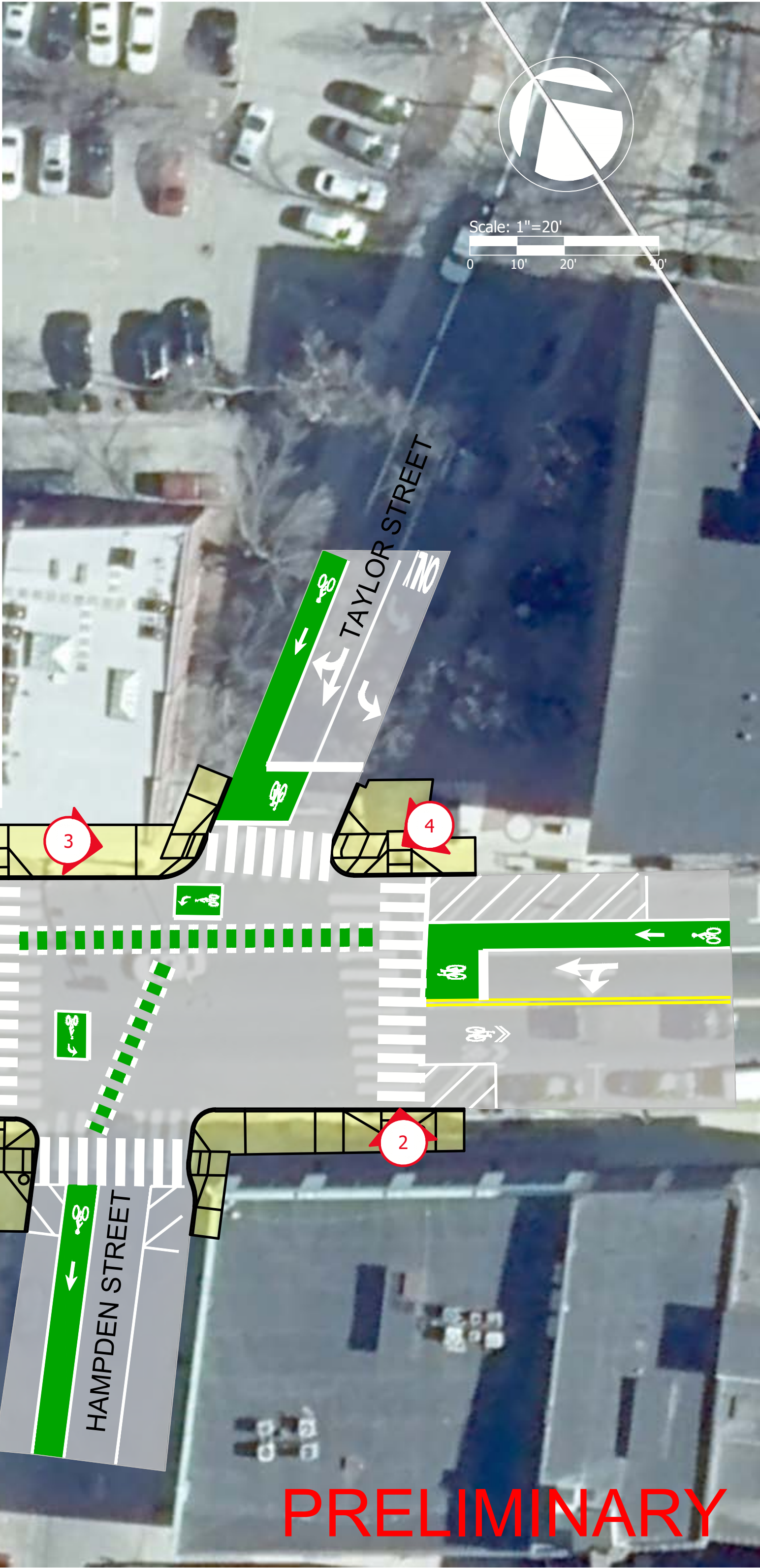
- SOME PEDESTRIAN RAMPS ARE APEX RAMPS (SERVE 2 CROSSWALKS).
- THERE IS A BIKE LANE ON NW MAIN STREET, SHARED LANE IN SE.
- ADJACENT SIGNAL TRAFFIC (BRIDGE) QUEUES THROUGH INTERSECTION.
- THERE ARE "NO TURN ON RED" RESTRICTIONS ON TAYLOR STREET.
- PEDESTRIAN EQUIPMENT IS GENERALLY WELL PLACED, THOUGH SOME IS NOT FUNCTIONING AND THERE IS EXCESSIVE DELAY TO CROSS MAIN.
- THERE ARE SHORT CONCURRENT PEDESTRIAN CROSSINGS ON THE SIDE STREETS IN ADDITION TO THE EXCLUSIVE PED PHASE.
- SIGNS AND MARKINGS IN GOOD CONDITION, EXCEPT FADED BIKE BOX.

POTENTIAL IMPROVEMENTS:

- INSTALL CURB EXTENSION OR BIKE LANE ON HAMPDEN STREET WITH ON-STREET PARKING PAVEMENT MARKINGS
- INSTALL ADA COMPLIANT RAMPS
- INSTALL NEW BICYCLE SIGNS
- ELONGATE CONCURRENT PEDESTRIAN WALK PHASE ACROSS TAYLOR STREET AND HAMPDEN STREET
- FIX MALFUNCTIONING PUSHBUTTON ON NORTH CORNER TO CROSS MAIN STREET
- FIX MALFUNCTIONING COUNTDOWN TIMERS
- REPLACE GREEN ARROW ON WESTBOUND MAIN STREET WITH GREEN BALL



OPTION 1



OPTION 2



1 MAIN STREET (WB)



2 MAIN STREET CROSSING



3 MAIN STREET (EB)



4 TAYLOR STREET RAMP



SPRINGFIELD SS4A

MAIN ST & TAYLOR ST /  
HAMPDEN ST  
INTERSECTION NO. 13



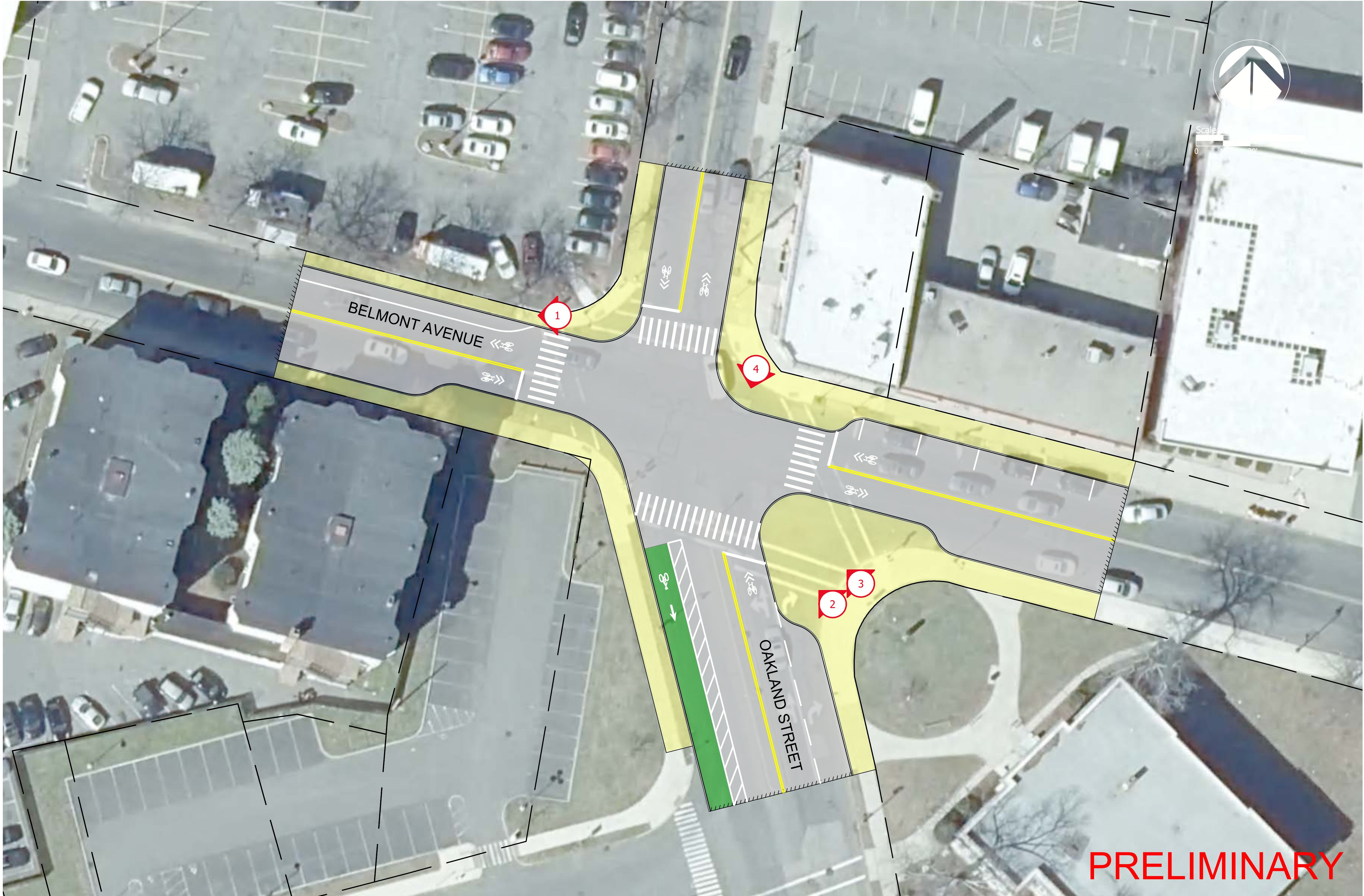


OBSERVATIONS:

- 1. THERE IS A DEDICATED PEDESTRIAN PHASE, BUT NO COUNTDOWN TIMERS.
- 2. THERE IS A MEDIAN ON OAKLAND STREET, BUT THE REFUGE ISLAND IS NOT ADA COMPLIANT, AND THERE IS NO PUSH BUTTON ON THE REFUGE ISLAND.
- 3. CROSSWALKS ARE FADED AND SKEWED, INCREASING CROSSING LENGTHS.
- 4. SIDEWALK LEADING TO THE EXISTING BUS STOP IS BROKEN, OF INCONSISTENT MATERIAL, AND NON-COMPLIANT.
- 5. THERE ARE NO BICYCLE ACCOMMODATIONS.
- 6. BELMONT AVENUE HAS LIMITED VISIBILITY DUE TO BUILDING IN NE CORNER.
- 7. THROUGH MOVEMENT VEHICLES WERE OBSERVED TO GO AROUND THOSE WAITING TO MAKE A LEFT TURN, THOUGH THERE IS ONLY ONE LANE.
- 8. OAKLAND STREET HAS A RIGHT TURN ONLY LANE BUT NO TURN SIGNAL.
- 9. STUDENT DROP-OFF AND PICK-UP BLOCKS LANES AND NO PARKING AREAS.
- 10. A CROSSING GUARD IS PRESENT. STUDENTS TAKE LONGER TO CROSS THAN PEDESTRIAN PHASE ALLOWS.
- 11. SCHOOL BUSES FOR OTHERS SCHOOLS STOP AT INTERSECTION CAUSING BACKUP.

POTENTIAL IMPROVEMENTS:

- 1. TIGHTEN CORNER RADII AND ADD CURB EXTENSION, REDUCING CROSSING DISTANCES
- 2. NARROW EXISTING LANES AND REMOVE RIGHT-TURN LANE
- 3. INSTALL BUS PULL-OFF AREAS
- 4. INSTALL HIGH-VIS CROSSWALKS AND ADA RAMPS
- 5. INSTALL NEW EQUIPMENT WITH RETROREFLECTIVE BACKPLATES AND PEDESTRIAN COUNTDOWN TIMERS



PRELIMINARY



1 PEDESTRIAN SIGNAL



2 INTERSECTION BUS STOP [SEE NOTE 15]



3 BELMONT AVENUE VEHICLE PASSING



4 OAKLAND STREET REFUGE ISLAND [SEE NOTE 3]



SPRINGFIELD SS4A

BELMONT AVE & OAKLAND ST

INTERSECTION NO. 14

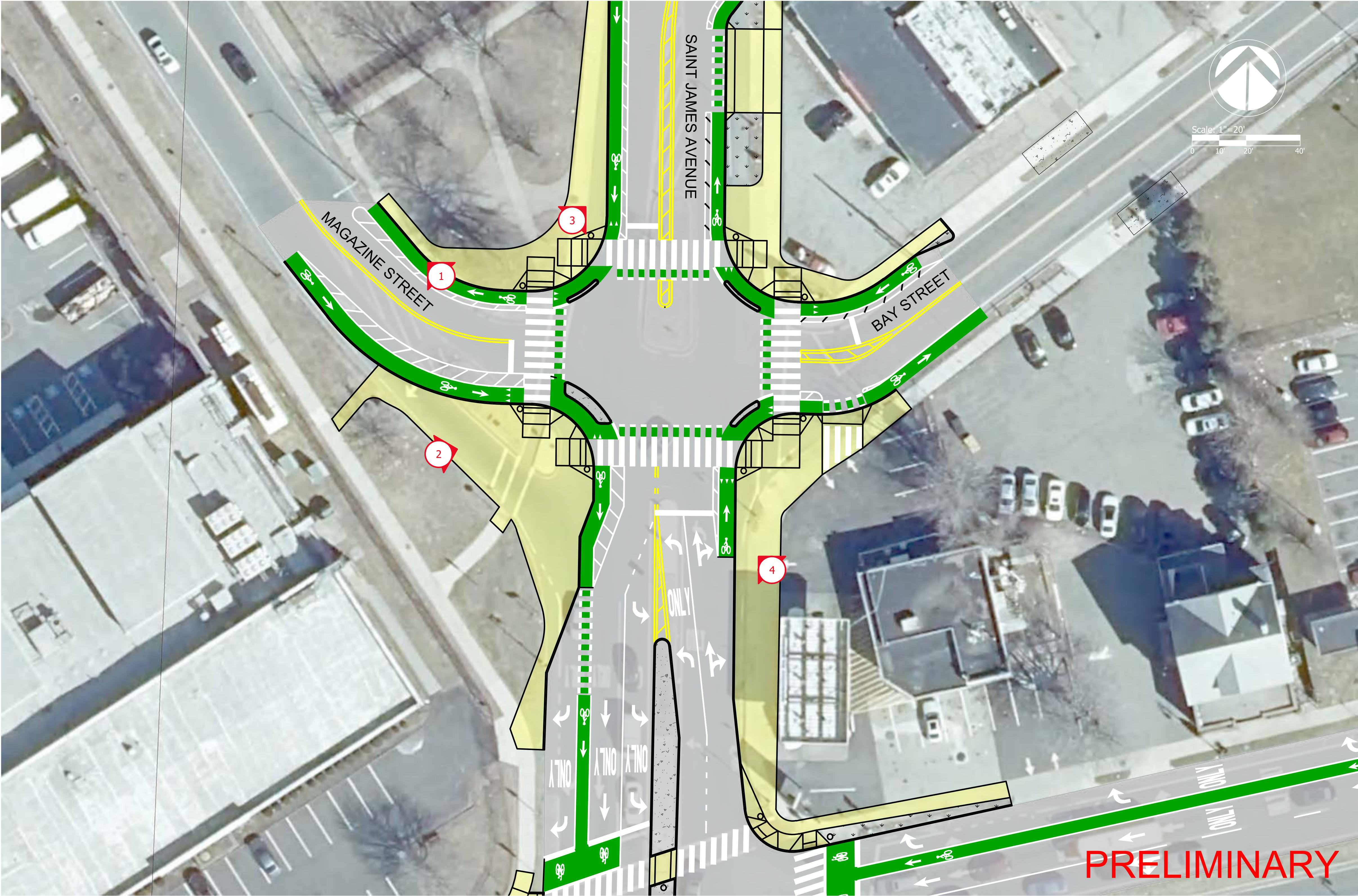


OBSERVATIONS:

- 1. PEDESTRIANS CROSS ST JAMES AVE, THOUGH NO PEDESTRIAN CROSSWALKS EXIST. THE NEAREST CROSSING IS AT STATE STREET.
- 2. THE SIGN ON THE MAGAZINE STREET MEDIAN LIMITS VISIBILITY OF VEHICLES APPROACHING FROM BAY STREET.
- 3. TWO PUBLIC BUS ROUTES WERE OBSERVED MAKING LEFT TURNS FROM ST JAMES AVE ONTO MAGAZINE ST AND FROM BAY ST ONTO ST JAMES AVE. THE BUS STOP ON BAY STREET DOES NOT APPEAR TO MEET ADA.
- 4. LEFT-TURN FROM ST JAMES TO STATE BACKS UP. TURNS FROM MAGAZINE ST AND BAY ST ENTERING THIS QUEUE FREQUENTLY BLOCK TRAFFIC ON ST JAMES AVE.
- 5. CARS FROM BAY STREET HAVE LIMITED VISIBILITY, AND PULL INTO THE INTERSECTION, BLOCKING ST JAMES AVE.
- 6. VEHICLES SEEM FOCUSED ON OTHER VEHICLES, NOT PEDESTRIANS. PEDESTRIAN CROSSINGS ARE UNPROTECTED.
- 7. THE HORIZONTAL CURVE ON ST JAMES AVE DOES NOT APPEAR TO IMPACT INTERSECTION SAFETY OR OPERATIONS.
- 8. THE HIGHEST VOLUME TURN MOVEMENTS (MAGAZINE TO/FROM ST JAMES AVE) HAVE SHALLOW ANGLES AND ARE TAKEN AT HIGH SPEEDS.
- 9. GAS STATION DRIVEWAY EXITS INTO INTERSECTION BEYOND STOP LINE.

POTENTIAL IMPROVEMENTS:

- 1. TIGHTEN CORNER RADII AND SQUARE INTERSECTION
- 2. INSTALL CROSSWALKS ACROSS SAINT JAMES AVENUE
- 3. INSTALL HIGH-VIS CROSSWALKS AND DWPS TO MEDIAN ISLAND
- 4. CONSIDER CHANGE TO INTERSECTION CONTROL INCLUDING SIGNAL



1 MAGAZINE STREET (NB)



2 MAGAZINE STREET REFUGE ISLAND



3 SAINT JAMES AVENUE PEDESTRIANS CROSSING



4 SAINT JAMES AVENUE (NB)



SPRINGFIELD SS4A

SAINT JAMES AVE & MAGAZINE ST /  
BAY ST

INTERSECTION NO. 15