

THOUSAND ISLANDS PARKWAY WEST / HIGHWAY 401 INTERCHANGE - LONG LIST ALTERNATIVES



ALTERNATIVE 1 - MAINTAIN EXISTING CONFIGURATION WITH EXISTING HIGHWAY 401 ALIGNMENT

DESCRIPTION

- Maintain existing Highway 401 alignment and interchange configuration
- Slight realignment of westbound flyover on-ramp to facilitate bridge replacement.

ADVANTAGES

- Maintains existing interchange configuration (simplified construction staging)
- Lowest impacts to natural environment
- Lowest construction cost

DISADVANTAGES

- Undesirable left-side merge from Thousand Islands Parkway to Highway 401 westbound
- Potential weaving concern along Highway 401 westbound between Thousand Islands Parkway and County Road 32



ALTERNATIVE 2A - WESTBOUND FLYOVER ON-RAMP AND MAINTAIN HIGHWAY 401 EASTBOUND LANES

DESCRIPTION

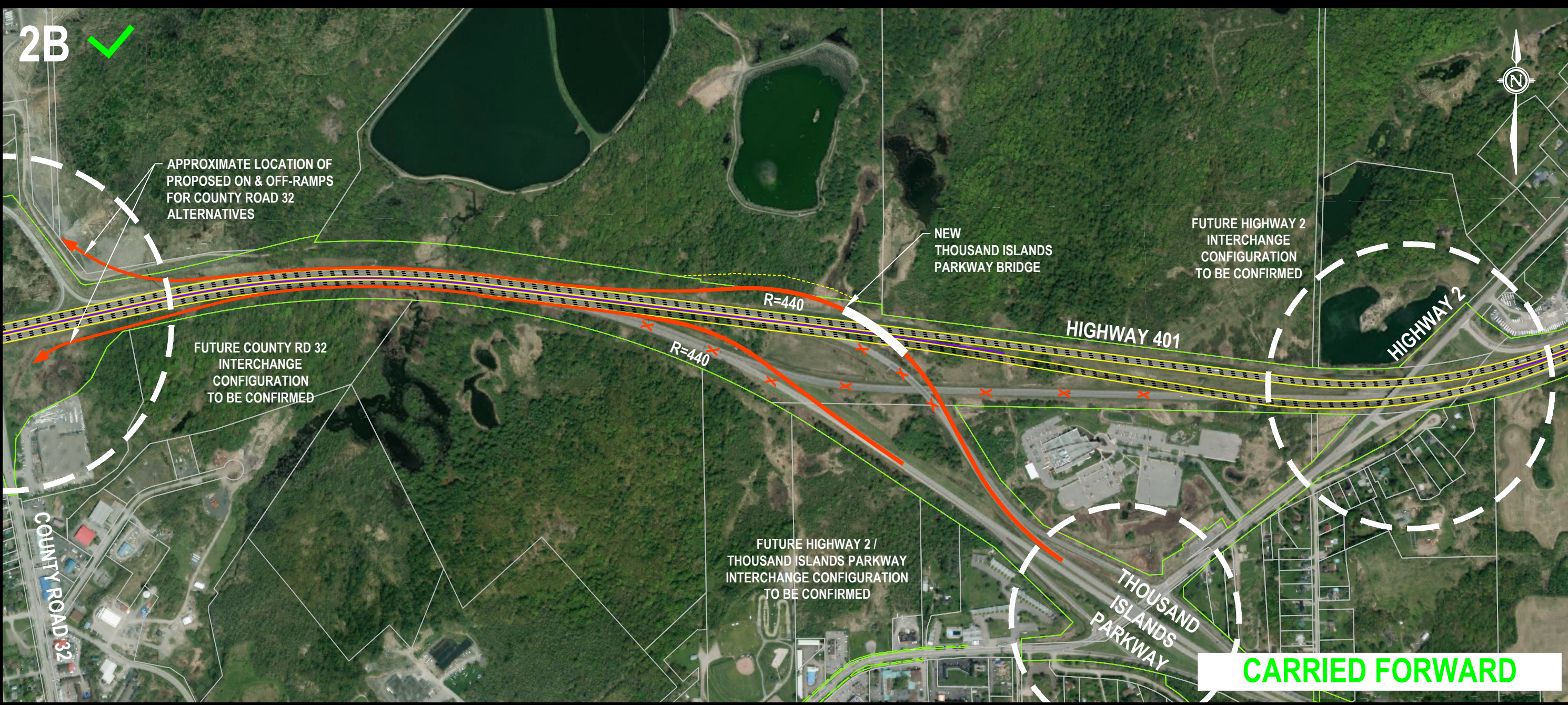
- Realign westbound ramp to Highway 401 to standard right-lane merge
- Replace existing structure with two separate ramp structures over the eastbound and westbound Highway 401 lanes.

ADVANTAGES

- Right-side merge for Thousand Islands Parkway to Highway 401 westbound movement
- Lower impact to natural environment than other alternatives
- Lower construction staging complexity and construction cost

DISADVANTAGES

- Two separate structures required to span Highway 401 eastbound and westbound lanes - increased long-term maintenance costs
- Potential weaving concern along Highway 401 westbound between Thousand Islands Parkway and County Road 32



ALTERNATIVE 2B - WESTBOUND FLYOVER ON-RAMP AND REALIGN HIGHWAY 401 EASTBOUND LANES

DESCRIPTION

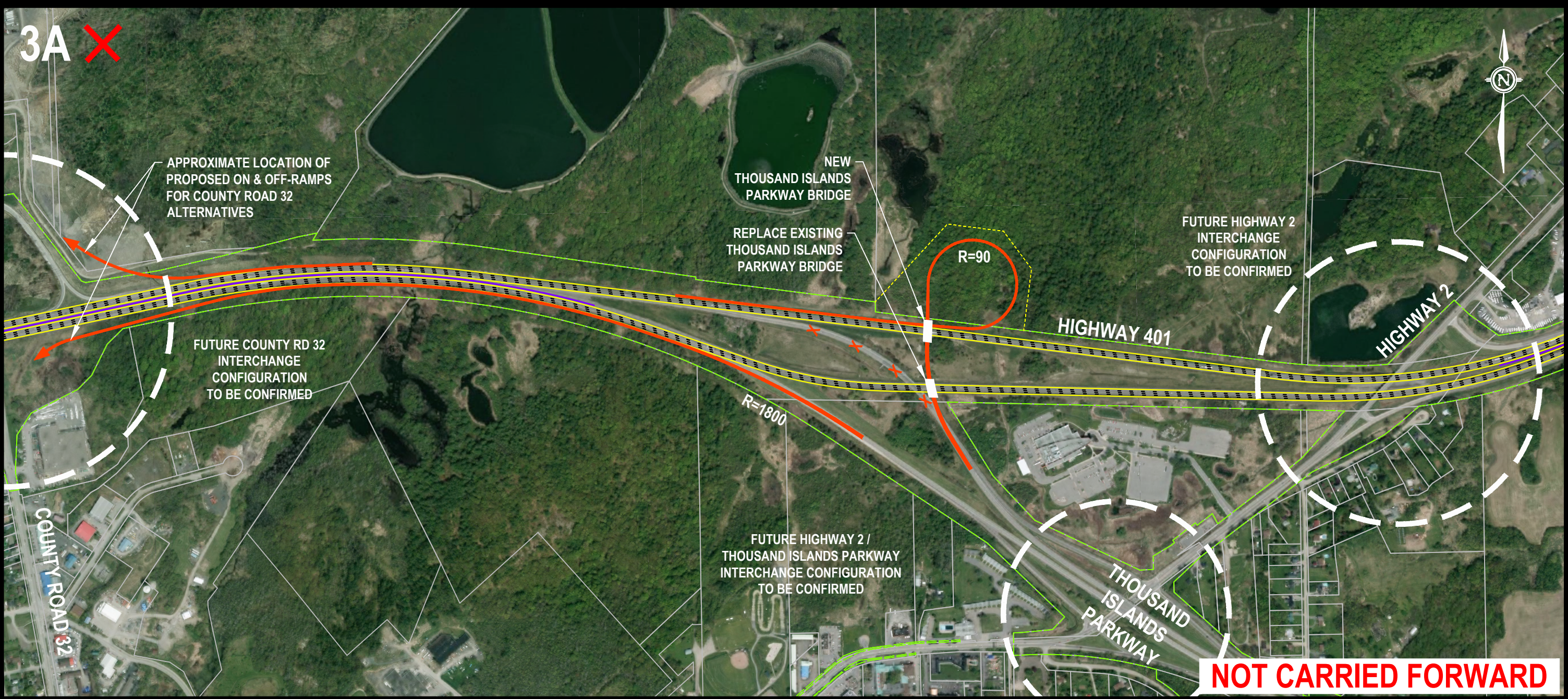
- Realign Highway 401 eastbound lanes to the north
- Realign westbound ramp to Highway 401 to standard right side merge
- Replace existing structure with single structure over eastbound and westbound Highway 401

ADVANTAGES

- Right-side merge for Thousand Islands Parkway to Highway 401 westbound movement
- Lower impact to natural environment than other alternatives
- Lower construction staging complexity and long-term maintenance cost with single structure

DISADVANTAGES

- Larger structure required to span both Highway 401 eastbound and westbound lanes
- Potential weaving concern along Highway 401 westbound between Thousand Islands Parkway and County Road 32
- Higher construction cost relative to Alternatives 1, 2A and 3A



ALTERNATIVE 3A - WESTBOUND LOOP ON-RAMP WITH EXISTING HIGHWAY 401 ALIGNMENT

DESCRIPTION

- New westbound loop ramp from Thousand Islands Parkway to westbound Highway 401
- Replace existing structure with two separate ramp structures over the eastbound and westbound Highway 401 lanes.

ADVANTAGES

- Right-side merge for Thousand Islands Parkway to Highway 401 westbound movement
- Improved weaving distance along Highway 401 between Thousand Islands Parkway and County Road 32
- Lower construction staging complexity and construction cost

DISADVANTAGES

- Higher impact to natural environment than other partial interchange alternatives
- Two separate structures required to span Highway 401 eastbound and westbound lanes - increased long-term maintenance costs



ALTERNATIVE 3B - WESTBOUND LOOP ON-RAMP AND REALIGN HIGHWAY 401 EASTBOUND LANES

DESCRIPTION

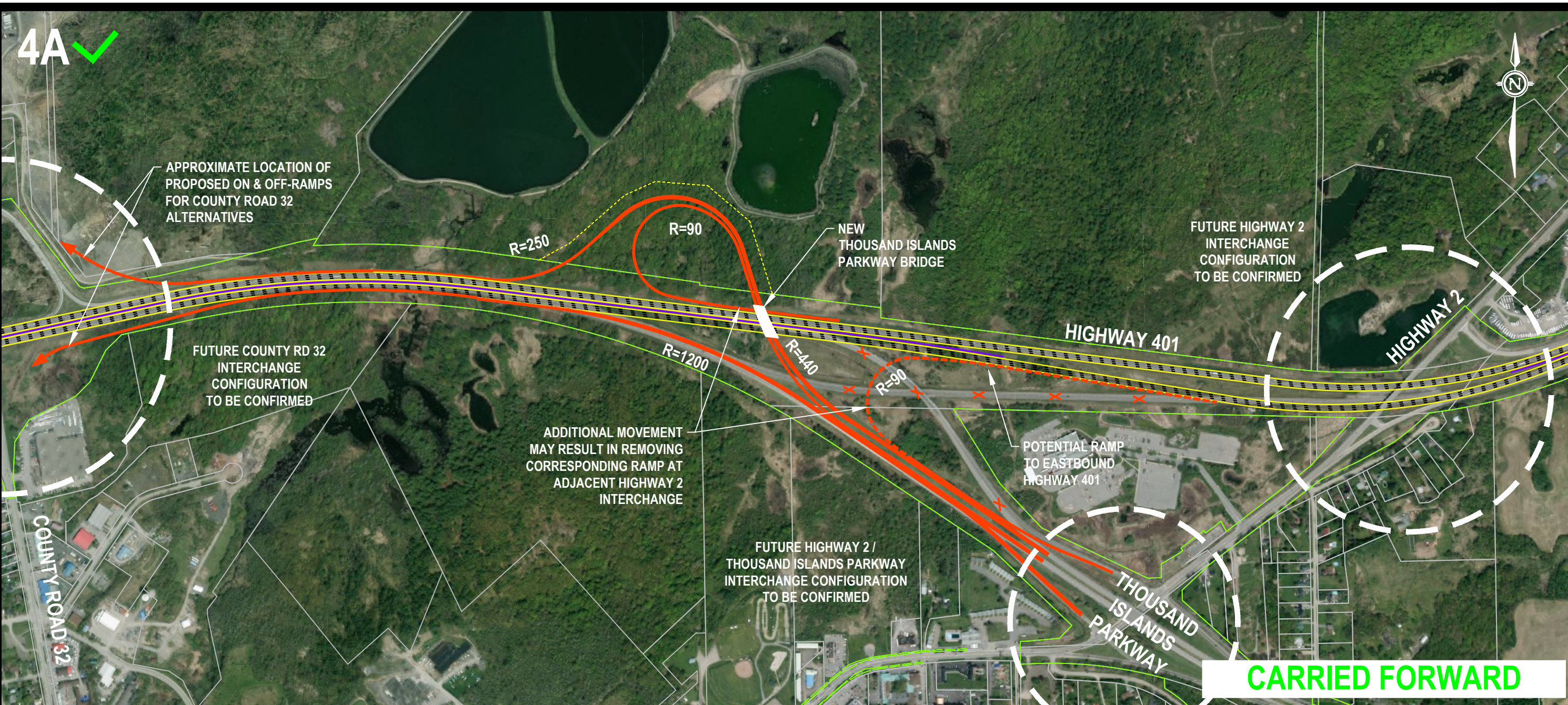
- Realign Highway 401 eastbound lanes to the north
- New westbound loop ramp from Thousand Islands Parkway to westbound Highway 401
- Replace existing structure with two separate ramp structures over the eastbound and westbound Highway 401 lanes.

ADVANTAGES

- Right-side merge for Thousand Islands Parkway to Highway 401 westbound movement
- Improved weaving distance along Highway 401 between Thousand Islands Parkway and County Road 32
- Lower construction staging complexity and long-term maintenance cost with single structure

DISADVANTAGES

- Higher impact to natural environment than other partial interchange alternatives
- Higher construction cost relative to Alternatives 1, 2A and 3A



ALTERNATIVE 4A - FULL MOVEMENT INTERCHANGE WITH TRUMPET B (90m RADIUS) AND REALIGN HIGHWAY 401 EASTBOUND LANES

DESCRIPTION

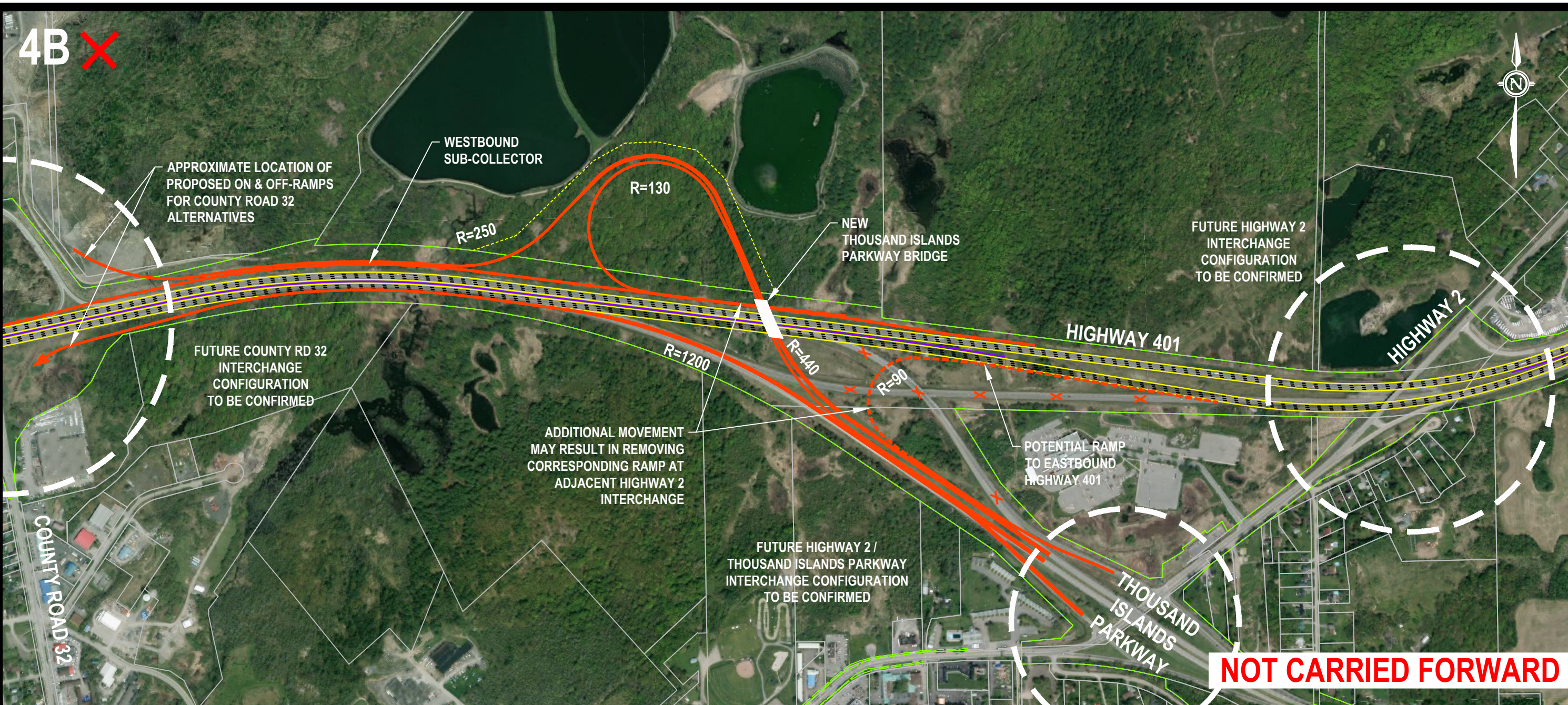
- Realign Highway 401 eastbound lanes to the north
- Full-movement interchange with a "Trumpet-B" configuration (B-loop off-ramp from Highway 401 with 90 m Radius)

ADVANTAGES

- Full interchange movements provided
- Lower long-term maintenance cost with single structure
- Lower impacts to natural environment than Alternative 4B (greater than other alternatives)

DISADVANTAGES

- Less desirable B-loop off-ramp meeting minimum design standard only for movement from higher-speed (Highway 401 westbound to Thousand Islands Parkway eastbound)
- Potential weaving concerns along Highway 401 between Thousand Islands Parkway and County Road 32
- More complex construction staging and moderate-high construction cost



ALTERNATIVE 4B - FULL MOVEMENT INTERCHANGE WITH TRUMPET B (130m RADIUS), WESTBOUND SUB-COLLECTOR AND REALIGN HIGHWAY 401 EASTBOUND LANES

DESCRIPTION

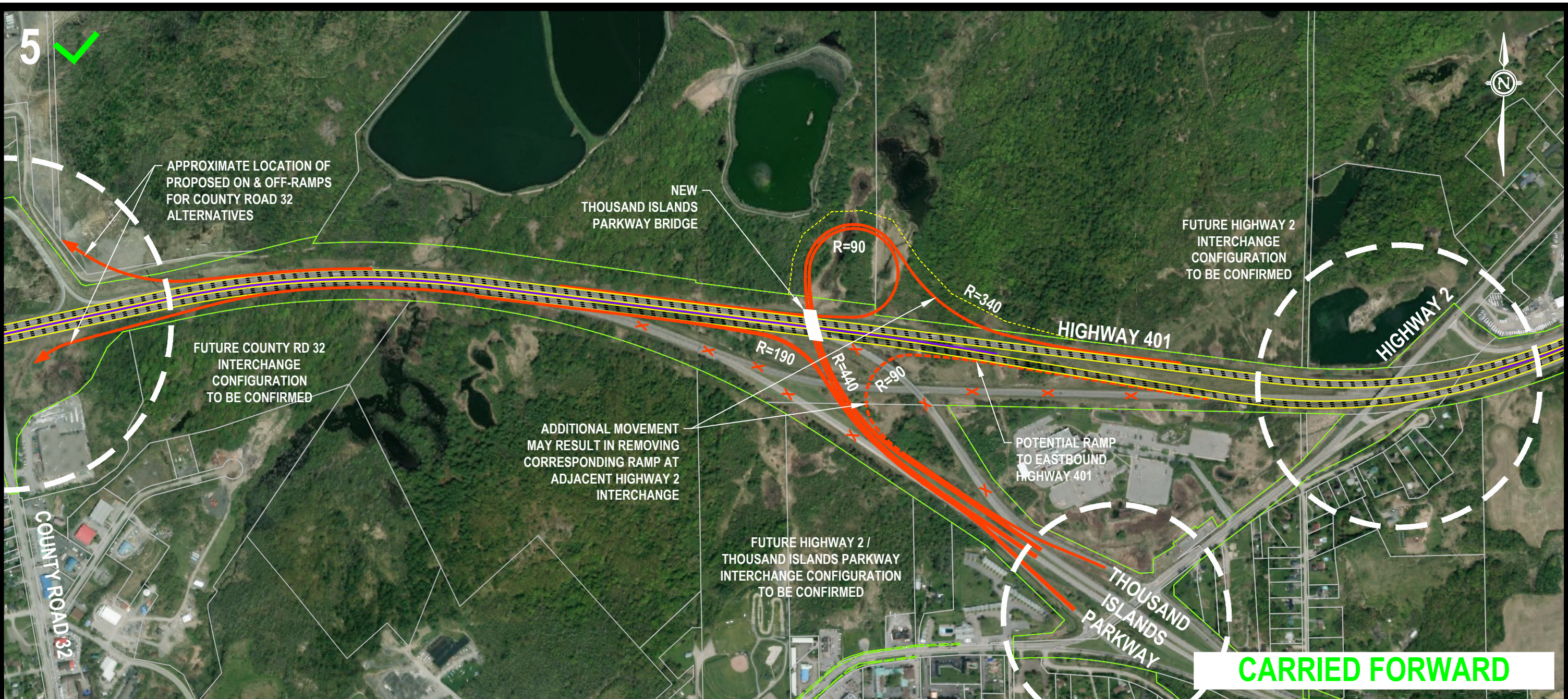
- Realign Highway 401 eastbound lanes to the north
- Full-movement interchange in a "Trumpet-B" configuration (B-loop off-ramp from Highway 401 with 130 m Radius).
- New westbound sub-collector system between Thousand Islands Parkway and County Road 32

ADVANTAGES

- Full interchange movements provided
- Lower long-term maintenance cost with single structure
- Sub-collector system may alleviate some weaving concerns along westbound Highway 401 associated with larger loop ramp radius

DISADVANTAGES

- Less desirable B-loop off-ramp meeting desirable design standard for movement from higher-speed (Highway 401 westbound to Thousand Islands Parkway eastbound)
- Potential weaving concern along Highway 401 eastbound between Thousand Islands Parkway and County Road 32
- Slightly greater impacts to natural and cultural environments relative to Alternative 4A
- Sub-collector system may introduce potential driver confusion with additional signage
- More complex construction staging and highest construction cost



ALTERNATIVE 5 - FULL MOVEMENT INTERCHANGE WITH TRUMPET A AND REALIGN HIGHWAY 401 EASTBOUND LANES

DESCRIPTION

- Realign Highway 401 eastbound lanes to the north
- Full movement interchange with a "Trumpet-A" interchange configuration (B-loop ramp from Thousand Islands Parkway to Highway 401 westbound).

ADVANTAGES

- Full interchange movements provided
- Directional ramp provided for movement from higher-speed freeway (Highway 401 westbound to Thousand Islands Parkway eastbound)
- Improved weaving distance along Highway 401 between Thousand Islands Parkway and County Road 32
- Lower impacts to natural and cultural environments than other full-movement interchange alternatives (4A and 4B)
- Lower long-term maintenance cost with single structure

DISADVANTAGES

- Less desirable B-loop ramp provided for Thousand Islands Parkway to Highway 401 westbound
- More complex construction staging and Moderate-High construction cost relative to other alternatives

LEGEND	
	EXISTING MTO RIGHT-OF-WAY
	EXISTING PROPERTY LINES
	THOUSAND ISLANDS PARKWAY WEST ALTERNATIVE
	PROPOSED BRIDGE
	PROPOSED PROPERTY REQUIREMENT
	REMOVAL