



Public Works Commission

Wednesday, November 20, 2024, 6:30 PM, To Attend in Person - 645 Pine St. Main Conference Room OR REMOTELY via ZOOM

6:30 pm, Main Conference Room, 645 Pine St OR Remotely via ZOOM:

Please click the link below to join the webinar:

<https://us02web.zoom.us/j/83495330508>

Or Telephone: Dial US: 301-715-8592 Webinar ID: 834 9533 0508

Channel 17 also often livestreams this on their YouTube channel and airs it over the air at a later date.

Note that comments on YouTube are not monitored.

1. Call to Order

2. Agenda - 5 Minutes

2.1. Motion to amend/adopt agenda

3. Public Forum - 3 Minutes per Person Time Limit - 10 Minutes

4. Consent Agenda - 5 Minutes

4.1. Approval of Draft Minutes of 10-16-24

4.2. 537 South Willard Street ADA Addition

4.3. 511 South Union Street ADA Reallocation

4.4. Champlain Parkway Traffic Regulations

Subject	4.5. Approval of Consent Agenda
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Meeting	November 20, 2024 - DPW Commission Agenda - Wednesday, November 20, 2024, 6:30 PM, To Attend in Person - 645 Pine St. Main Conference Room OR REMOTELY via ZOOM
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Category	4. Consent Agenda - 5 Minutes
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Department	Public Works Department
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Type Action (Consent)

Recommended Action Motion to Approve Consent Agenda

5. Potential WR Rate Impact/Affordability Item - 20 Minutes

Subject **5.1. Information, M. Moir & C. Spencer**

Meeting November 20, 2024 - DPW Commission Agenda - Wednesday, November 20, 2024, 6:30 PM, To Attend in Person - 645 Pine St. Main Conference Room OR REMOTELY via ZOOM

Category 5. Potential WR Rate Impact/Affordability Item - 20 Minutes

Department Public Works Department

Type Information

Recommended Action None

6. Winooski Bridge/Intersection - 30 Minutes

Subject **6.1. Information, L. Wheelock & M. Suender**

Meeting November 20, 2024 - DPW Commission Agenda - Wednesday, November 20, 2024, 6:30 PM, To Attend in Person - 645 Pine St. Main Conference Room OR REMOTELY via ZOOM

Category 6. Winooski Bridge/Intersection - 30 Minutes

Department Public Works Department

Type Information

Recommended Action None

7. Tactical Transportation Initiative Recap - 20 Minutes

Subject **7.1. Information, J. Ursaki & P. Peterson**

Meeting November 20, 2024 - DPW Commission Agenda - Wednesday, November 20, 2024, 6:30 PM, To Attend in Person - 645 Pine St. Main Conference Room OR REMOTELY via ZOOM

Category 7. Tactical Transportation Initiative Recap - 20 Minutes

Department Public Works Department

Type Information

Recommended Action None

8. Simplifying the Traffic Regulation Process - 15 Minutes

Subject **8.1. Information, L. Wheelock & P. Peterson**

Meeting	November 20, 2024 - DPW Commission Agenda - Wednesday, November 20, 2024, 6:30 PM, To Attend in Person - 645 Pine St. Main Conference Room OR REMOTELY via ZOOM
Category	8. Simplifying the Traffic Regulation Process - 15 Minutes
Department	Public Works Department
Type	Information
Recommended Action	None

9. Director's Report - 10 Minutes

Subject	9.1. Communication, C. Spencer
Meeting	November 20, 2024 - DPW Commission Agenda - Wednesday, November 20, 2024, 6:30 PM, To Attend in Person - 645 Pine St. Main Conference Room OR REMOTELY via ZOOM
Category	9. Director's Report - 10 Minutes
Department	Public Works Department
Type	Discussion

10. Commissioner Items

11. Adjournment & Next Meeting Date - December 18, 2024

Subject	11.1. Motion to adjourn
Meeting	November 20, 2024 - DPW Commission Agenda - Wednesday, November 20, 2024, 6:30 PM, To Attend in Person - 645 Pine St. Main Conference Room OR REMOTELY via ZOOM
Category	11. Adjournment & Next Meeting Date - December 18, 2024
Department	Council and Board
Type	Action
Recommended Action	Motion to Adjourn

DEPARTMENT OF PUBLIC WORKS
645 PINE STREET
BURLINGTON, VERMONT 05401
COMMISSION MEETING OCTOBER 16, 2024

DRAFT MINUTES

For video of the meeting, please visit Town Meeting TV's YouTube Channel:

<https://www.youtube.com/watch?v=k0r9VW6DgXY&t=978s>

Commissioners Present: Vice Chair Fox, Chair Damiani, Commissioner Davis (Zoom 6:46 pm & in person 7:20 pm), Commissioner Munteanu (via zoom) Commissioner Barr

Commissioner Absent: Commissioner Sears & Commissioner O'Neill-Vivanco

ITEM 1 – CALL TO ORDER

Chair Damiani called the meeting to order at 6:32 p.m.

ITEM 2 – AGENDA

Commissioner Barr made a motion to accept the agenda as presented.

Commissioner Fox seconded.

Unanimous approval

ITEM 3 – PUBLIC FORUM

Jason VanDriesche (in person)– Ward 5 – Two issues – 1. Speed tables – Still waiting for them on Locust and Caroline St. Speed tables on Pine St not doing their job. Requesting a thorough evaluation on speed tables on Pine St on the speed of vehicles – what is the speed before and after. Does it slow traffic to 15-20 mph? Requesting Department to revise design standard for speed table that actually works. 2. Burlington goals as a city. Traffic is quite bad. Feels we need a mission that is aligned with how we want the city to grow. Balance the needs of all of the users of the streets, make things better for walking and biking. Cars being a part of the alternative transportation.

Jak Tiano (in person)– Positive feedback and Support for changes to parking fees. Critical how transportation plays into the pieces.

Sharon Bushor (Via Zoom)–Excited about changes for parking fees but would like the start date to be January 6, 2025 after the holidays for people that are visiting Burlington and not make the cost a deterrent . We need to accommodate and encourage people to come downtown and not make it less enticing. Doesn't use parking structures anymore as she doesn't feel safe.

Evan Gould (Via Zoom)—Resident of Ward 5 – Supports increase in parking prices downtown. Would like to see demand based parking pricing. A lot of people more expensive, not a lot of people less expensive.

Kelly Devine (Via Zoom)— Executive Director of the Burlington Business Association – Supports pricing changes but would also like the fee changes to start January 6, 2025. Demand pricing is not the problem, we don't have enough people coming down to park. Supportive of Holiday fun rate. 85% parking occupancy is where we need to be.

Owen Robinson (Via Zoom)— Resident on Grove St – Grateful for trying to calm traffic. This type of speed bump causes big crashing sound. Wakes him up a lot. Requesting that it is moved across from Schmanska Park. Feels this type of bump is for streets with less traffic.

Clayton Dystia (Via Zoom)— In Support of Parking Rate increase. In support of Second Evan's comment about exploring demand based parking pricing.

Barbara Headrick – (Via Email) -

ITEM 4 – CONSENT AGENNDA

- 4.1 Approval of Draft Minutes 9-18-24
- 4.2 Gosse Court Crosswalk Parking Removal
- 4.3 Sears Lane Stop Sign
- 4.4 Adams Court ADA Parking Space Relocation

Commissioner Barr made a motion to adopt the consent agenda as presented.

Commissioner Munteanu seconded.

Unanimous approval

ITEM 5 – DOWNTOWN ON-STREET RATE CHANGES

Director Spencer & Assistant Director Esperti of Parking Services discussed downtown on-street parking rates and the need for the rates to be adjusted to accommodate for inflation and keep the Traffic and Parking facilities Funds financially sustainable and prepare for improvements in the future. This would be a better option than adding enforcement on Sundays. The City has been talking to Business owners so they can promote on their website a different option - Suggesting .99 cents an hour in the core zone (5803) only for every day except Sunday during the holiday season Thanksgiving to New Years. Due to the cost of batteries and not being able to get parts we will be phasing out the smart meters and using more Kiosks in the downtown core. We will also be proposing to offer new businesses 50% off for the first six months for parking in the downtown garage.

Commissioner Munteanu – Fully supports all upcoming changes. Feels rate increases is totally fair. Open to delaying rate change until after January 6, 2025.

Commissioner Barr – Supports both changes. Strongly encourages the city to wait until after January 6, 2025 to make changes. Asked how to reserve a parking space with the meters removed.

Vice Chair Fox – Signs on Cherry St for Pilot project – Any illustrative data? Right direction aesthetically. Are the revenues from the proposed rate increases enough to work on the debt – do you feel good about it? Knows it's a hard change but it supports crossing guards and cross walk striping for the safety of kids walking to school and that is really important. Supports changes and downtown businesses.

Assistant Parking Services Director Esperti – there were lots of little signs we will be adding big signs that say pay here and arrows to be simpler. There will be a large chunk to contribute to debt.

Chair Damiani – Echo's Vice Chair Fox. Interested in learning more about how the cost of demand parking. Pilot on the waterfront for seasonal visitor's research. Supports rate change.

Director Spencer – If we hit the 550,000 revenue then demand is relatively stable if not there are other forces at play. City place opening phase one will help. We are making an inflation adjustment from what we had in 2014.

Commissioner Munteanu made a motion to approve the two different ordinance changes – one relating to the on street parking rates and the other giving the director the authority to implement event pricing for up to one month and to delay as much as possible the implementation of the on-street rate changes to January 6, 2025.

Commissioner Bar seconded
Unanimous approval

Direcator Spencer introduced New Engineer Christina Cangiolosi

ITEM 6 – DPW PUBLIC ENGAGEMENT PLAN UPDATE

Public Information Manager Goulding – talked about the background of the programs that are used to alert and service the public, See Click Fix, Social Media (Facebook, Instagram, Twitter), VT Alert, and Front Porch Forum. Looking to find a way to reach residents with multiple different languages to communicate important information and news to the residents of Burlington in a timely fashion. We have 20 languages that we can arrange for translation. We are trying to use a universal symbol with a QR Code so residents will know when important information is available. Questions were asked on how the platforms are working and how can we improve to reach residents on life safety issues more effectively without causing alert fatigue. How would we alert the public if the cell network was down? Citywide Engagement Public handbook created by the Mayor's Office and hoping to be ready by February 2025. Looking for Commissioners feedback on the timeline.

Public Forum – Email from Barbara Headrick:

Please, would you consider the following comments regarding in DPW's updated Public Engagement Process?

1. I don't see "reducing pollution" and improving our environment mentioned as priorities even though the PEP mentions prioritizing safety. In terms of priorities, reducing pollution is right up there with safety. Ideally, DPW's decision-making and PEP engagement processes would focus on identifying how to achieve a win-win for safety and reducing pollution. Because of past history with other DPW policies and programs, I'd also like the PEP to explicitly state as a guideline that reducing pollution is more important than earning more city revenues - for example those earned from parking fees and parking enforcement fines. I mention this because in the past I've seen DPW recommend policies that prioritized revenue generation over reducing pollution. When that happened, it took masses of people showing up at DPW meetings to get DPW to reverse course on its agenda on using streets near the institutions for public parking. Hundreds of people had to show up to get DPW to listen and reverse course. For example, in 2012?, when DPW was proposing revisions to the city's resident parking permit program, one of DPW's suggested ideas was to fill our streets to 80% capacity with parked cars, with each driver paying the city a parking permit fee. Clearly, this (terrible and strongly defeated) proposal prioritized earning revenues for the city rather than reducing pollution. It would have made all the streets near UVM and UVMMC into parking lots for the institution's out of town commuters. Hopefully, this example shows why it's important for the PEP to mention reducing pollution as a top priority right along with safety when DPW is evaluating and making proposals and subsequently pitching those ideas to the public during the PEP process.

2. I hope you agree that having an effective PEP process depends to a very large extent on having well thought out and appealing project proposals and sound policy recommendations. Because of the comment in your report about a streetscape project and not putting too much weight on public voices if they represent only three houses on a street, I'm concerned that that PEP is being designed to favor giving more weight to pre-formed concepts that DPW and the institutions want to achieve rather than what impacted city residents want. When there is this "win-lose" type of situation, that means DPW (and the institutions) need to go back to the drawing board and identify alternative project designs and/or policies so the proposed concept becomes a win-win. A PEP will be ineffective if it is not a win-win. Neighborhoods surrounding the institutions need to actively protected from the negative spillover effects of the institutions, and DPW plays a leading role in proving this protection. For example, UVM should look to provide the bike paths it wants on its campus instead of taking over nearby city sidewalks. And it shouldn't be increasing commuter traffic on nearby streets when the responsible thing to do is to set up non stop commuter bus service from remote towns to campus. Too often I've seen UVM try to get the city to adopt policies and infrastructure projects to help UVM shift its parking demand and commuter traffic from on campus to nearby neighborhoods. Please stop supporting UVM ideas that let it harm nearby residents. All three institutions, and especially UVM need to reverse the adverse impacts caused to date and doing so would also reduce pollution.

In this context, I'm hoping the following information will prompt DPW to suggest course corrections to current and upcoming transportation operations at GMT and the institutions. If course corrections are not made, I fear that DPW will be suggesting roadscape projects and parking policies that serve the institutions well but harm local residents. This is relevant to the PEP because your report For example, I believe it would be irresponsible for DPW to propose projects that will harm local residents (increased

pollution, reduced safety, more traffic, lower quality of life) in order to make it easier for out of town commuters, or on campus students, to park on-street. Similarly, it would be bad policy (prioritizing cars and buses over active transportation) to push bicycles off street and onto sidewalks converted into multi use paths in order to facilitate more commuter and bus traffic. Hopefully, the following information will be internalized into DPW's thinking so to protect locals despite DPW being under pressure from the institutions to do what they want in terms of infrastructure and policy changes.

- All of the buses operating in Burlington pollute. Often, the buses are net polluters - meaning there is no environmental benefit from their operation. GMT buses pollute. UVM's shuttles pollute. Champlain College's shuttles pollute. UVMMC buses pollute. Bicycling and walking don't pollute. According to a UVM published report, city residents who drive SOV within the city don't cause that much pollution. But more than 80% of our transportation pollution is generated by out of town commuters who drive multiple miles into Burlington and back home, on a daily basis, all year, for multiple years. GMT's prioritization of local routes vs out of town commuter routes is a misallocation of their fleet. Champlain College's use of a collector parking lot on Pine Street for out of town commuters fails to reduce pollution because most of the pollution is created when each commuter drives multiple miles into our city. UVM's use of shuttles to drive students short distances across campus is replacing and discouraging pollution-free active transportation. (The students can't use cars to cross campus because of parking regs on campus.) UVM's plan to create commuter collector lots on campus, and then bus commuters the short distance across campus, is also environmentally irresponsible because those SOV commuters are driving multiple miles into the city before reaching a campus parking lot. Ideally, GMT, UVM, Champlain College and UVMMC buses would collectively be reassigned from use on short local routes to instead provide transportation from each surrounding town's park and ride lots to Burlington. The most effective ways we can reduce pollution is to reduce the number of commuters driving SOV into Burlington (make parking unaffordable and unavailable), provide (employer specific?) direct non-stop commuter buses from each town's park and ride lot to Burlington, and encourage walking and bicycling inside the city by significantly reducing the number of cars allowed to be parked curbside (outside of the core downtown district) and by building our infrastructure so bicycles ride in the street and only pedestrians use city sidewalks.

Improving our environment is more than just reducing air and water pollution. It also includes also making our city a nicer place to live by:

- protecting and creating wide green belts and lining streets on both sides with trees, - reducing noise pollution created by traffic (buses, trucks, cars)
- Reducing traffic volumes (local buses that pass by frequently create a lot of noise and pollution and the buses that replace active transportation don't reduce traffic volumes or pollution)
- Reducing traffic speeds - not just downtown
- Using digital ticketing to encourage drivers to stop for stop signs and red lights

Thank you for considering these comments.

Barbara

Commissioner Barr – Uses several platforms. Finds exhausting to use all. SCF & VT Alert he gets a lot of information from. Thinks everything has been an improvement.

Commissioner Munteanu – Pleased to learn that the City is interested in perusing a comprehensive plan for communication.

Commissioner Davis – SCF – was acknowledged but didn't know that issue was fixed. Reported parking issue and was sent response to call. Process confusing. A lot of categories – either more general or more choices. Thoughts on closure of ticket – if it's overwhelming have positive feedback where the customer can speak to a human to get more information. Doesn't use social media at all.

Vice Chair Fox – Social media – not active on it but does see on timeline. Likes VT Alert. SCF – generally experience has been positive. Being really clear as a general practice on who makes the final decisions on projects.

Chair Damiani – So many different points of engagement –thinking about some sort of chat feature? Make sure we are engaging with visitors for notifications and the colleges.

ITEM 7 - DIRECTOR'S REPORT

Director Spencer spoke about Capital needs for Water, Wastewater, & StormWater - share plan - In November - 1st round with NPA outreach, developing rate payer impact information, what the significant investment mean for rate payers, and scheduling council work session. We understand that is on our higher end for public engagement. Tours are happening.

ITEM 8 – COMMISSIONER ITEMS

Commissioner Barr– Grateful to revisit the Water Treatment plant. Resolution to make the City better. Speed bumps – speeding up after bump will it help to move them further down? Parking chicanes – curious on if anyone from DPW has seen how they are working? When there is a lot of traffic drivers stay in their lane but when traffic is slow they drive faster down the middle of the street. Feels we need to do a little more.

Commissioner Davis –.Asked how VT Alert works? It's a lot of responsibility for staff doing it as in an emergency people are not always available. Recycling Totes – likes using them. Massive improvement but frustrating that only homeowner can buy. Doesn't fully understand what Tiff's we have and the payoff schedule.

ITEM 9 – ADJOURNMENT & NEXT MEETING DATE – NOVEMBER 20, 2024

Commissioner Barr made a motion to adjourn

Vice Chair Fox seconded

Unanimous approval

Meeting adjourned at 8:54 p.m.



Memo

Date: November 20th, 2024

To: Public Works Commission

From: Christina Cangioli, Associate Public Works Engineer

CC: Phillip Peterson P.E., Senior Transportation Planner

Subject: 537 South Willard Street Accessibility (ADA) Parking Change

Staff recommends the DPW Commission add (see Attachment-1):
7A Accessible spaces designated.

No person shall park any vehicle at any time in the following location, except automobiles displaying special handicapped license plates issued pursuant to [18](#) V.S.A. § [1325](#), or any amendment or renumbering thereof:

(81) On the west side of South Willard Street, in the first space south of the driveway at 533 South Willard Street.

Purpose & Need:

The purpose is to provide an accessible (ADA) parking space in front of 537 South Willard St and enhance overall accessibility for individuals with disabilities in the community. There is a need for this ADA parking space to address the accessibility requirements of residents in the area, ensuring equitable access and convenience for individuals with disabilities in their daily activities. This space aligns with recommendations by the Public Rights-of-Way Accessibility Guidelines (PROWAG).

Project Checklist:

	N/A	Yes	No	Reference
Aligns with MUTCD standards and/or established City Policy?		x		Public Rights-of-Way Accessibility Guidelines (PROWAG)
Aligns with City plans?	x			

Followed Engagement Plan?	Public		x		These Traffic Regulation changes are defined as an INVOLVE project in the Public Engagement Plan (PEP).
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Summary and Conclusion:

Following a resident's request for an accessible parking space at 537 South Willard Street, DPW Staff conducted a site visit to assess whether this was feasible and reasonable. The site visit confirmed the validity of the request, and the proposed ADA parking space aligns with the recommendations of the PROWAG. Although the requester has a driveway, the steep terrain makes this request for a space reasonable (see Attachment-2). In light of the thorough evaluation by DPW Staff, it is recommended that the Commission approves the establishment of the ADA parking space at 537 South Willard Street. The attached traffic regulation amendment (see Attachment-1) outlines the specifics of this proposal, ensuring a responsive and inclusive approach to meeting the accessibility needs of residents. The proactive measures taken by the DPW support the commitment to enhancing accessibility in the community, promoting a more equitable environment for all.

Public Engagement:

In preparation for the 11/20/24 DPW Commission Meeting, Staff distributed flyers to residents on South Willard Street, near the parking space. Staff received no public input in regards to this project.

Attachments:

1. Traffic Regulation Amendment
2. Site Map

Site Map:



Location of ADA spot to be added in
front of 537 South Willard Street

CITY OF BURLINGTON

In the Year Two Thousand Twenty-four

A Regulation in Relation to

Rules and Regulations of the Traffic
Commission—

7A Accessible spaces designated.

Sponsor(s): Public Works Commission

Action: Approved

Date:

11/20/2024

Attestation of Adoption:

It is hereby Ordained by the Public Works Commission of the City of Burlington as follows:

That Appendix C, Rule and Regulations of the Traffic Commission, 7A Accessible spaces designated of the Code of Ordinances of the City of Burlington is hereby amended as follows:

7A Accessible spaces designated.

.....
No person shall park any vehicle at any time in the following location, except automobiles displaying special handicapped license plates issued pursuant to 18 V.S.A. § 1325, or any amendment or renumbering thereof:

(1)-(80) As written.

(81) ~~Reserved.~~ On the west side of South Willard Street, in the first space south of the driveway at 533 South Willard Street.

(82)-(173) As written.

** Material stricken out deleted.

*** Material underlined added.

BCO Appx.C, Section 7A
11/20/2024

CITY OF BURLINGTON

In the Year Two Thousand Twenty-four

A Regulation in Relation to

Rules and Regulations of the Traffic
Commission—
7A Accessible spaces designated.

Sponsor(s): Public Works Commission

Action: Approved

Date: 11/20/2024

Attestation of Adoption:

Phillip Peterson, PE

Senior Transportation Planner, Technical Services

Published: _____

Effective: _____

It is hereby Ordained by the
Public Works Commission of the
City of Burlington as follows:

That Appendix C, Rule and Regulations of the Traffic Commission, 7A Accessible spaces
designated of the Code of Ordinances of the City of Burlington is hereby amended as follows:

7A Accessible spaces designated.

*No person shall park any vehicle at any time in the following location, except automobiles
displaying special handicapped license plates issued pursuant to 18 V.S.A. § 1325, or any
amendment or renumbering thereof:*

(1)-(80) As written.

(81) ~~Reserved.~~ On the west side of South Willard Street, in the first space south of the driveway
at 533 South Willard Street.

(82)-(173) As written.

** Material stricken out deleted.

*** Material underlined added.

BCO Appx.C, Section 7A
11/20/2024



Memo

Date: November 20th, 2024

To: Public Works Commission

From: Christina Cangioli, Associate Public Works Engineer

CC: Phillip Peterson P.E., Senior Transportation Planner

Subject: 511 South Union Street Accessibility (ADA) Parking Change

Staff recommends the DPW Commission remove (see Attachment^[PP1]-1):
7A Accessible spaces designated.

No person shall park any vehicle at any time in the following location, except automobiles displaying special handicapped license plates issued pursuant to [18](#) V.S.A. § [1325](#), or any amendment or renumbering thereof:

(115) ~~The space in front of 511 South Union Street Reserved.~~

Purpose & Need:

The purpose of this request is to reallocate an accessible (ADA) space as public parking because it is no longer in use by residents. This request will provide a regular unrestricted parking space for residents of South Union Street.

Project Checklist:

	N/A	Yes	No	Reference
Aligns with MUTCD standards and/or established City Policy?	X			
Aligns with City plans?	X			
Followed Public Engagement Plan?		X		These Traffic Regulation changes are defined as an INVOLVE project in the Public Engagement Plan (PEP).

Summary and Conclusion:

Staff received a request from the resident of 511 South Union Street to remove the ADA space in front of the home, which is no longer being utilized by other residents (see Attachment-2). Reallocating the space to public parking will allow more parking for local residents. Although the ADA space is occasionally used by a visitor, DPW staff could not identify any local residents who needed the space. This is a balance of needs, as the ADA space goes unoccupied most of the time, suggesting this parking resource should be reallocated for general use. In light of the thorough evaluation by DPW Staff, it is recommended that the Commission approves the reallocation of the ADA parking space at 511 South Union Street. The attached traffic regulation amendment (see Attachment-1) outlines the specifics of this proposal.

Public Engagement:

In preparation for the 11/20/2024 DPW Commission Meeting, Staff distributed flyers to residents on South Union Street, near the ADA parking space at 511 South Union Street. Staff spoke directly to four (4) residents of South Union Street who are in favor of reallocating the ADA spot to regular unrestricted parking, noting the spot remains empty a majority of the time. Staff spoke directly to one (1) visitor of 525-527 South Union Street who noted he occasionally visits his daughter (who is a resident) and will park in the ADA spot if no other spot is available^[PP2].

Attachments:

1. Traffic Regulation Amendment
2. Site Map

Site Map:



Location of ADA spot to be reallocated
in front of 511 South Union Street

CITY OF BURLINGTON

In the Year Two Thousand Twenty-four

A Regulation in Relation to

Rules and Regulations of the Traffic
Commission—
7A Accessible spaces designated.

Sponsor(s): Public Works Commission

Action: Approved

Date: 11/20/2024

Attestation of Adoption:

Phillip Peterson, PE

Senior Transportation Planner, Technical Services

Published: _____

Effective: _____

It is hereby Ordained by the
Public Works Commission of the
City of Burlington as follows:

That Appendix C, Rule and Regulations of the Traffic Commission, 7A Accessible spaces
designated of the Code of Ordinances of the City of Burlington is hereby amended as follows:

7A Accessible spaces designated.

*No person shall park any vehicle at any time in the following location, except automobiles
displaying special handicapped license plates issued pursuant to 18 V.S.A. § 1325, or any
amendment or renumbering thereof:*

(1)-(114) As written.

(115) ~~The space in front of 511 South Union Street Reserved.~~

(116)-(173) As written.

** Material stricken out deleted.

*** Material underlined added.

BCO Appx.C, Section 7A
11/20/2024



Memorandum

Date: November 20th, 2024
To: Public Works Commission
From: Calvin Wuthrich, Engineering Intern
CC: Phillip Peterson P.E., Senior Transportation Planner
Corey Mims P.E., Senior Public Works Engineer
Subject: Champlain Parkway Traffic Regulations

Staff recommends the DPW Commission approve the changes to City ordinances laid out in Attachment-1 and Attachment-2.

Final language of the amended regulations is subject to the review and approval of the City Attorney's Office.

Purpose & Need:

The purpose of these regulation changes is to approve the traffic changes that have been implemented in the Initial Construction phase of the Champlain Parkway project. These changes include the installation of traffic signals, adjustments to stop signs, designation of no parking zones, establishment of an ADA-compliant space, creation of time-limited parking areas, and regulation of turns on red signals, all aimed at improving traffic flow, safety, and accessibility for all users.

Project Checklist:

	N/A	Yes	No	Reference
Aligns with MUTCD standards and/or established City Policy?		X		MUTCD, ADA
Aligns with City plans?	X			
Followed Public Engagement Plan?		X		

Background:

As part of our work the Initial Construction phase of the Champlain Parkway project, DPW staff seek to add permanent amendments to City ordinances that align with the design changes completed within the project scope. These changes are laid out in Attachment-1.

Attachment-2 contains proposed changes to City ordinances that do not match current signage along these roadways. These are not changes proposed as part of the Initial Construction phase of the project; rather, they represent corrections to existing ordinances that are located within the scope of this project phase. Ultimately these changes aim to update the legal language and requirements to reflect the current, actual signage and traffic control measures already in place along the roads the Champlain Parkway project has worked on. This step ensures that the City traffic regulations align with what drivers, pedestrians, and other road users experience in real life, addressing any mismatches or outdated regulations.

Changes being requested include:

1. Addition of traffic signals at the intersections of Champlain Parkway with Home Avenue, Flynn Avenue, Sears Lane, and Lakeside Avenue.
2. Addition of stop signs at the Pine Street – Pine Place and Flynn Avenue – Briggs Street intersections.
3. Changes to existing no parking areas and time-limited parking areas.
4. Movement of one ADA parking space on Flynn Avenue.
5. Designation of intersections and directions where No Turn on Red is in effect.
6. Correction of existing ordinances (or lack thereof) that do not reflect current signage. Such changes are included in Attachment 2.

Implementation (see Attachment-3):

Changes to signage, street markings, and traffic signals have been implemented through implementation of the Champlain Parkway Initial Construction phase. Changes to City ordinances (see Attachment 1) serve to reflect these changes.

Here's a summary of the proposed changes to each section:

Attachment-1 Traffic Regulation Adjustments:

Traffic-Control Light Locations

- **Champlain Parkway and Home Avenue**
- **Champlain Parkway and Flynn Avenue**
- **Champlain Parkway and Sears Lane**
- **Champlain Parkway and Lakeside Avenue**

A new traffic signal has been installed at each intersection to manage increasing traffic demands and enhance safety for all road users, including drivers, cyclists, and pedestrians. These signals are designed to improve traffic flow, reduce potential conflicts, and provide safer crossing opportunities at busy intersections.

Stop Sign Locations

- **Pine Street and Pine Place:** A stop sign at the corner of Pine Street and Pine Place, causing traffic on Pine Place to stop.
- **Flynn Avenue and Briggs Street:** A stop sign is proposed at the intersection of Flynn Avenue and Briggs Street, causing traffic on Briggs Street to stop.
- **Ferguson Avenue and Briggs Street:** Given that Ferguson is now a cul-de-sac, we are proposing to remove the regulation with a stop condition at the intersection of Briggs Street and Ferguson Avenue causing westbound traffic on Ferguson Avenue to stop.

Each of the proposed stop sign locations has been evaluated and determined to meet the Manual on Uniform Traffic Control Devices (MUTCD) warrants. These warrants ensure that stop signs are justified based on criteria such as traffic volume, pedestrian activity, and intersection safety, aligning with best practices for traffic control and safety improvements.

No Parking Areas

- **Briggs Street and Cul-de-sac:** No parking was approved in 2023 on either side of Briggs Street; now we need to include the cul-de-sac on Briggs Street, to maintain emergency service access.
- **Lyman Avenue Cul-de-sac:** A no-parking zone is proposed here to maintain emergency service access.
- **Champlain Parkway & Pine Street (Various Sections):** The no-parking areas along the Champlain Parkway are strategically designated to improve safety and maintain clear sightlines for drivers, pedestrians, and cyclists. By restricting parking, these areas ensure unobstructed emergency access, enhance visibility at intersections, and reduce potential hazards in this busy corridor. Preventing parked vehicles from blocking critical areas helps streamline traffic flow, particularly in merging zones and near intersections, where clear lanes are essential for safe and efficient travel.

Accessible Spaces Designated

- **Flynn Avenue:** Accessible parking is designated at the first space west of the easternmost driveway to 208 Flynn Avenue, ensuring accommodations for individuals with disabilities.

Two-Hour Parking

- **Flynn Avenue (West of 208 Flynn Avenue):** A two-hour parking restriction is proposed for this section to ensure turnover and availability of parking.
- **Pine Street (South of Howard Street):** A new two-hour parking zone is proposed for this section of Pine Street, encouraging short-term parking and enhancing local access.

One-Hour Parking

- **Pine Street (Various sections):** New one-hour parking restrictions are proposed on the east side of Pine Street, including near the parking lot of 412 Pine Street. These changes aim to increase turnover and provide better parking access.
- **Lakeside Avenue:** A new one-hour parking restriction is proposed to improve the availability of parking and manage traffic flow.

The designated two-hour and one-hour parking restrictions align with existing, approved parking policies in this area. These time limits are consistent with the current parking management strategy, which aims to balance the needs of residents, visitors, and local businesses by encouraging regular turnover. The new parking zones follow previously established guidelines to support accessibility, reduce congestion, and ensure that short-term parking remains available for those visiting or conducting business in the area.

Prohibition of Turns on Red Signal

- **Lakeside Avenue and Champlain Parkway**
- **Sears Lane and Champlain Parkway**
- **Flynn Avenue and Champlain Parkway**

The proposed "No Turn on Red" restrictions aim to enhance safety and improve traffic flow by reducing potential conflicts at key intersections. These restrictions help prevent accidents by ensuring that drivers have a clear view of oncoming traffic and pedestrians before proceeding. By restricting right turns on red in areas with high pedestrian activity or limited sightlines, these measures support safer crossings for pedestrians and create more orderly movement for all road users, ultimately leading to a smoother, more predictable traffic flow.

These changes aim to improve traffic flow, safety, and parking management across several key intersections and roadways in Burlington. The updates focus on enhancing the overall traffic system while ensuring accessibility and better coordination with the infrastructure being developed.

Attachment-2 Traffic Regulation Adjustments:

No Parking Areas

- **Pine Street (West Side, Various Locations)**
No Parking signage is currently present on the entire west side of Pine Street between Main Street and Home Avenue. However, No Parking traffic regulations currently do not exist between Kilburn Street and Lakeside Avenue and between Sears Lane and Flynn Avenue. Prohibition of parking in these areas is intended to

reinforce existing signage. Additionally, there are multiple redundancies in existing No Parking ordinances for this area, for which corrections are reflected in the proposed changes.

- **Pine Street (East Side, South of Kilburn Street)**

No signage has been present on the east side of Pine Street south of Kilburn Street for over ten years, yet a no parking ordinance remains for this area. Removing this ordinance will put City regulations in accordance with current signage.

- **Home Avenue (West of Foster Street)**

No Parking This Side of Street signage is present on the south side of Home Avenue for its entire extent west of Pine Street. However, no ordinance exists for No Parking west of Foster Street. Prohibiting parking in this area will align City ordinances with existing signage.

- **Lakeside Avenue**

No Parking This Side of Street signage is present on the south side of Lakeside Avenue between Conger Avenue and Champlain Parkway. Current ordinances state that No Parking areas only exist between Conger Avenue and the driveway to 115 Lakeside Avenue. This proposed ordinance change includes the 260-foot distance between 115 Lakeside Avenue and Champlain Parkway as a No Parking area, in order to reinforce existing signage.

Potential Future Changes:

The Final Construction contract of the Champlain Parkway project will also bring forward proposed changes to City ordinances. These changes are expected to be proposed in 2026, prior to completion of the Final Construction contract.

Engagement and Collaboration

DPW staff has been dedicated to engaging the broader community, property owners, businesses, leaders, and other key stakeholders in the South End and across the City in the changes made as part of the Champlain Parkway project. Changes to ordinances reflect design decisions that have been subject to public input and approval as part of the broader Champlain Parkway engagement process.

Through the design, permitting, and construction stages of the Champlain Parkway project, there has been extensive public outreach efforts with numerous stakeholders. For more information on public outreach and the other components of the project, visit www.champlainparkway.com.

Attachments:

1. Regulation Change Form (Champlain Parkway Initial Construction Contract Changes).
2. Regulation Change Form (Corrections to Errors in Existing Ordinances).
3. Site Plan.

Attachment 1:

CITY OF BURLINGTON

In the Year Two Thousand Twenty-four

A Regulation in Relation to

Rules and Regulations of the Traffic
Commission—

- 2; Traffic-control light locations.
- 3; Stop sign locations.
- 7; No parking areas.
- 7A; Accessible spaces designated.
- 10; Two-hour parking.
- 11; One-hour parking.
- 20; Prohibition of turns on red signal.

Sponsor(s): Public Works Commission

Action: Approval

Date: 11/20/2024

Attestation of Adoption:

Phillip Peterson, PE

Senior Transportation Planner, Technical Services

Published: _____

Effective: _____

It is hereby Ordained by the Public Works Commission of the City of Burlington as follows:

That Appendix C, Rule and Regulations of the Traffic Commission, 2 Traffic-control light locations., 3 Stop sign locations., 7 No parking areas., 7A Accessible spaces designated., 10 Two-hour parking., 11 One-hour parking., 20 Prohibition of turns on red signal., of the Code of Ordinances of the City of Burlington is hereby amended as follows:

2 Traffic-control light locations.

(a) Traffic-control light signals are hereby established at the following locations:

(1) – (66) As written.

(67) ~~Reserved.~~ Champlain Parkway and Home Avenue.

(68) – (70) As written.

(71) ~~Reserved.~~ Champlain Parkway and Flynn Avenue.

(72) – (73) As written.

(74) ~~Reserved.~~ Champlain Parkway and Sears Lane.

(75) – (76) As written.

(77) Champlain Parkway and Lakeside Avenue.

3 Stop Sign Locations

Stop signs are authorized at the following locations:

(1) – (166) As written.

(167) ~~Reserved.~~ At the corner of Pine Street and Pine Place, causing traffic on Pine Place to stop.

(168) – (183) As written.

(184) ~~Reserved.~~ At the intersection of Flynn Avenue and Briggs Street, causing traffic on Briggs Street to stop.

(185) – (311) As written.

(312) ~~At the intersection of Briggs Street and Ferguson Avenue causing westbound traffic on Ferguson Avenue to stop.~~ Reserved.

(313) – (319) As written.

7 No Parking Areas

No person shall park any vehicle at any time in the following locations:

(1) – (14) As written.

(15) On either side of Briggs Street, as well as the Briggs Street cul-de-sac.

(16) – (21) As written.

(22) ~~On the east side of Pine Street for a distance of 100 feet south of Howard Street.~~ Reserved.

(23) – (132) As written.

(133) ~~Reserved.~~ On the Lyman Avenue cul-de-sac.

(134) – (148) As written.

(149) ~~Reserved.~~ On the south side of Locust Street beginning one hundred five (75) feet east of Pine Street and extending eastward fifty (80) feet.

(150) – (273) As written.

(274) ~~Reserved.~~ On the east side of Pine Street starting sixty-two (62) feet south of the parking lot on the north side of 412 Pine Street and extending south twenty-eight (28) feet.

(275) – (286) As written.

(287) ~~Reserved.~~ On either side of Champlain Parkway.

(288) – (359) As written.

(360) ~~Reserved.~~ On the Ferguson Avenue cul-de-sac.

(361) ~~Reserved.~~ On the north side of Lakeside Avenue, between the westernmost driveway to 128 Lakeside Avenue and the easternmost driveway to 128 Lakeside Avenue.

(362) – (506) As written.

(507) ~~On the east side of Pine Street extending fifty (50) feet south of Pine Place.~~ Reserved.

(508) – (538) As written.

(539) ~~On the north side of Flynn Avenue from the railroad tracks, starting one hundred twelve (112) feet west of the easternmost driveway to 208 Flynn Avenue and~~ extending west to the westernmost terminus of Flynn Avenue.

(540) – (590) As written.

7A Accessible spaces designated.

No person shall park any vehicle at any time in the following locations, except automobiles displaying special handicapped license plates issued pursuant to 18 V.S.A. § 1325, or any amendment or renumbering thereof:

(1) - (76) As written.

(77) ~~On the north side of Flynn Avenue, in the first space east of the train tracks.~~ Reserved.

(78) – (80) As written.

(81) ~~Reserved.~~ On the north side of Flynn Avenue, in the first space west of the easternmost driveway to 208 Flynn Avenue.

(82) – (173) As written.

10 Two-hour parking.

No person shall park a vehicle for a period longer than two (2) hours between the hours of 8:00 a.m. and 6:00 p.m., Sundays and holidays excepted, in the following locations:

(1) As written.

(2) ~~Reserved.~~ On the north side of Flynn Avenue starting forty-five (45) feet west of the easternmost driveway to 208 Flynn Avenue and extending sixty (60) feet west.

(3) – (17) As written.

(18) ~~On the east side of Pine Street starting one hundred five (105) feet south of Howard Street extending one hundred forty seven (147) feet south. Reserved.~~

(19) – (20) As written.

11 One-hour parking.

(a) No person shall park a vehicle for a period longer than one (1) hour between the hours of 8:00 a.m. and 6:00 p.m., Sundays and holidays excepted, in the following locations:

(1) – (10) As written.

(11) On the east side of Pine Street starting 20 feet south of the parking lot on the North side of 412 Pine Street and extending ~~112 feet~~ south forty-two (42) feet.

(12) ~~Reserved.~~ On the east side of Pine Street starting ninety (90) feet south of the parking lot on the North side of 412 Pine Street and extending south forty-two (42) feet.

(13) As written.

(b) – (e) As written.

~~(f) No person shall park a vehicle for a period longer than one (1) hour between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday, holidays excepted, in the following locations:~~

~~(1) On the north side of Lakeside Avenue, beginning twenty (20) feet east of the westernmost driveway to 128 Lakeside Avenue and continuing east for sixty (60) feet.~~

20 Prohibition of turns on red signal.

Notwithstanding any general authorization otherwise contained in the statutes of the State of Vermont, the ordinances of the City of Burlington or the regulations of the board of traffic commissioners, it shall be unlawful at the following intersections within the City of Burlington for an operator of a motor vehicle to make a right-hand turn against a traffic signal which is indicating red:

(a) At all times at the following locations:

(1) – (9) As written.

(10) ~~Reserved.~~ Lakeside Avenue and Champlain Parkway, eastbound.

(11) ~~Reserved.~~ The westernmost driveway to 645 Pine St and Lakeside Avenue, westbound.

(12) – (47) As written.

(48) Lakeside Avenue and Champlain Parkway, northbound.

- (49) The westernmost driveway to 645 Pine St and Lakeside Avenue, southbound.
 - (50) Lakeside Avenue and Pine Street, eastbound.
 - (51) Lakeside Avenue and Pine Street, southbound.
- (b) At times when an illuminated sign indicating "No Turn On Red" is displayed to drivers at the following locations:
- (1) – (11) As written.
 - (12) Sears Lane and Champlain Parkway, eastbound.
 - (13) Sears Lane and Champlain Parkway, westbound.
 - (14) Sears Lane and Champlain Parkway, northbound.
 - (15) Sears Lane and Champlain Parkway, southbound.
 - (16) Flynn Avenue and Champlain Parkway, eastbound.
 - (17) Flynn Avenue and Champlain Parkway, westbound.
 - (18) Flynn Avenue and Champlain Parkway, northbound.
 - (19) Flynn Avenue and Champlain Parkway, southbound.
 - (20) Home Avenue and Champlain Parkway, eastbound.
 - (21) Home Avenue and Champlain Parkway, westbound.

** Material stricken out deleted.

*** Material underlined added.

/hm: BCO Appx.C, Section 2, 3, 7, 7A, 10, 11, & 20
11/20/24

Attachment 2:

CITY OF BURLINGTON

In the Year Two Thousand Twenty-four

A Regulation in Relation to

Rules and Regulations of the Traffic
Commission—

7; No parking areas.

Sponsor(s): Public Works Commission

Action: Approval

Date: 11/20/2024

Attestation of Adoption:

Phillip Peterson, PE

Senior Transportation Planner, Technical Services

Published: _____

Effective: _____

It is hereby Ordained by the Public Works Commission of the City of Burlington
as follows:

That Appendix C, Rule and Regulations of the Traffic Commission, 2 Traffic-control light
locations., 3 Stop sign locations., 7 No parking areas., 7A Accessible spaces designated., 10
Two-hour parking., 11 One-hour parking., 20 Prohibition of turns on red signal., of the Code of
Ordinances of the City of Burlington is hereby amended as follows:

7 No Parking Areas

No person shall park any vehicle at any time in the following locations:

(1) – (8) As written.

(9) ~~Reserved.~~ On the south side of Home Avenue west of Foster Street.

(10) – (118) As written.

(119) ~~On the west side of Pine Street for 40 feet south of Maple Street, and on~~ On the east side
of Pine Street for 40 feet south of Maple Street.

(120) – (210) As written.

(211) On the west side of Pine Street between Flynn Avenue and Ferguson Avenue.

(212) – (220) As written.

(221) On the east ~~or west~~ side of Pine Street from Flynn Avenue to ~~Ferguson Avenue and on~~
~~the east side of Pine Street between Ferguson Avenue and Lyman Avenue.~~

(222) – (258) As written.

(259) ~~Reserved.~~ On the west side of Pine Street from Kilburn Street to Lakeside Avenue.

(260) – (269) As written.

(270) On either side of Pine Street, from Sears Lane to Lakeside Avenue.

(271) – (370) As written.

(371) On the west side of Pine Street from Maple Street to Kilburn Street.

(372) – (451) As written.

(452) ~~On the east side of Pine Street from Kilburn Street extending fifty (50) feet south of the entrance of 316 Pine Street.~~ Reserved.

(453) – (543) As written.

(544) On the west side of Pine Street between Ferguson Avenue and Home Avenue.

(545) – (550) As written.

(551) ~~Reserved.~~ On the west side of Pine Street from Sears Lane to Flynn Avenue.

(552) – (565) As written.

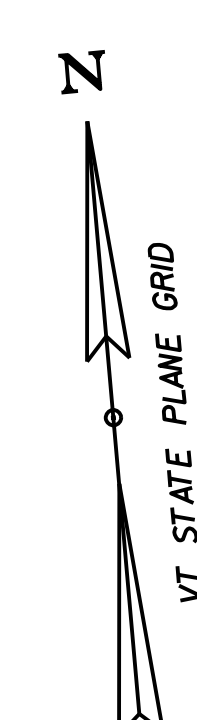
(566) On the south side of Lakeside Avenue beginning at Conger Avenue and extending east to ~~the driveway for 115 Lakeside Avenue.~~ Champlain Parkway.

(567) – (590) As written.

** Material stricken out deleted.

*** Material underlined added.

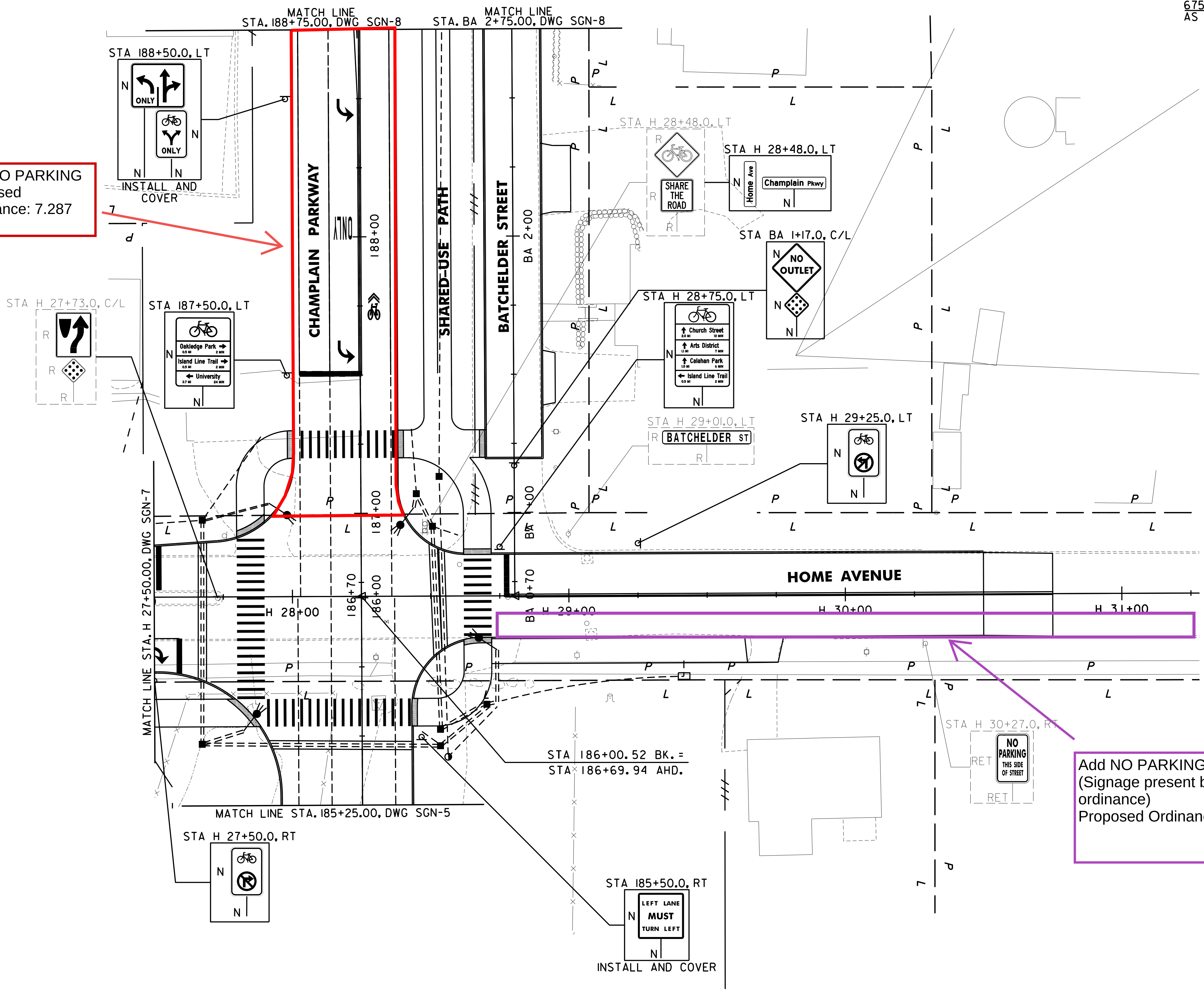
/hm: BCO Appx.C, Section 2, 3, 7, 7A, 10, 11, & 20
11/20/24



Add NO PARKING
Proposed
Ordinance: 7.287

Attachment 1: Champlain Parkway Initial
Construction Contract Changes

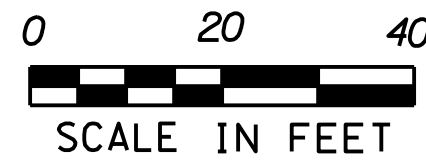
Attachment 2: Corrections to Errors in
Existing Ordinances



Add NO PARKING
(Signage present but no
ordinance)
Proposed Ordinance: 7.9

SIGN LEGEND

R = REMOVE
S = SALVAGE
N = NEW
RET = RETAIN
B-B = BACK TO BACK
EXISTING = - - - - -
NEW = _____

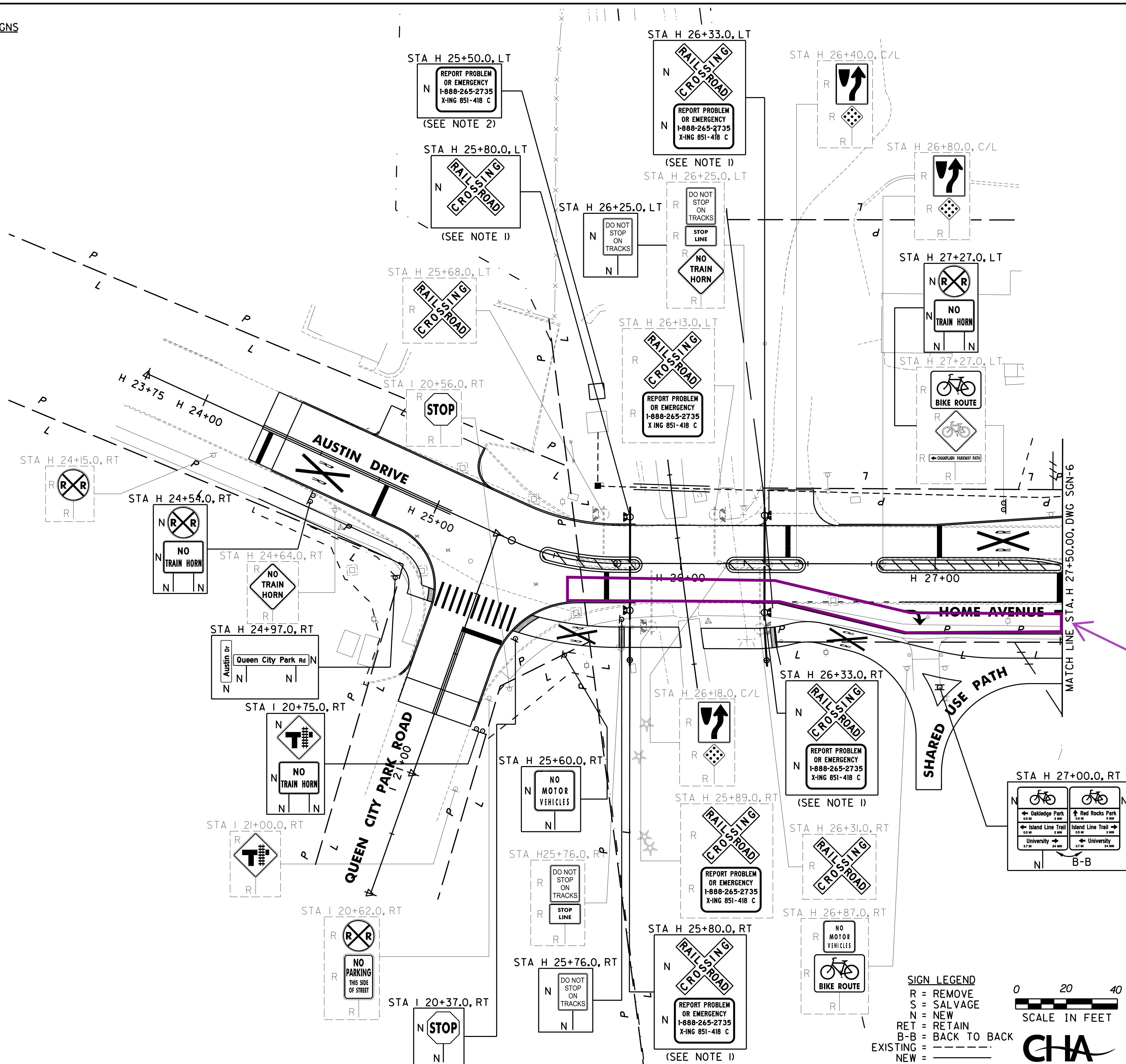


SCALE IN FEET
CHA

PROJECT NAME: CHAMPLAIN PARKWAY-INITIAL CONTRACT
PROJECT NUMBER: MEGC - M5000(I)

FILE NAME: z87d078bdrsgn.dgn
PROJECT LEADER: D. GOZALKOWSKI
DESIGNED BY: J. SCUDDER
SIGNING PLAN SHEET 6 (SGN-6)

PLOT DATE: 2/2/2022
DRAWN BY: J. HEALD
CHECKED BY: J. SHIELDS
SHEET 373 OF 735



Add NO PARKING
(Signage present but no ordinance)
Proposed Ordinance: 7.9

NOTES:

- SIGNS TO BE MOUNTED ON PROPOSED SIGNAL MAST.
- SIGN TO BE MOUNTED ON PROPOSED SIGNAL HOUSE.

PROJECT NAME: CHAMPLAIN PARKWAY-INITIAL CONTRACT
PROJECT NUMBER: MEGC - M5000(I)

FILE NAME: z87d078bdrsgn.dgn
PROJECT LEADER: D. GOZALKOWSKI
DESIGNED BY: J. SCUDDER
SIGNING PLAN SHEET 7 (SGN-7)

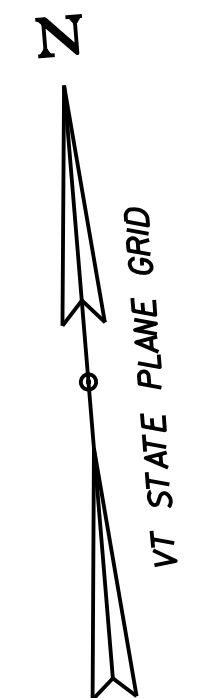
PLOT DATE: 2/2/2022
DRAWN BY: J. HEALD
CHECKED BY: J. SHIELDS
SHEET 374 OF 735

SIGN LEGEND

R = REMOVE
S = SALVAGE
N = NEW
RET = RETAIN
B-B = BACK TO BACK
EXISTING =
NEW =

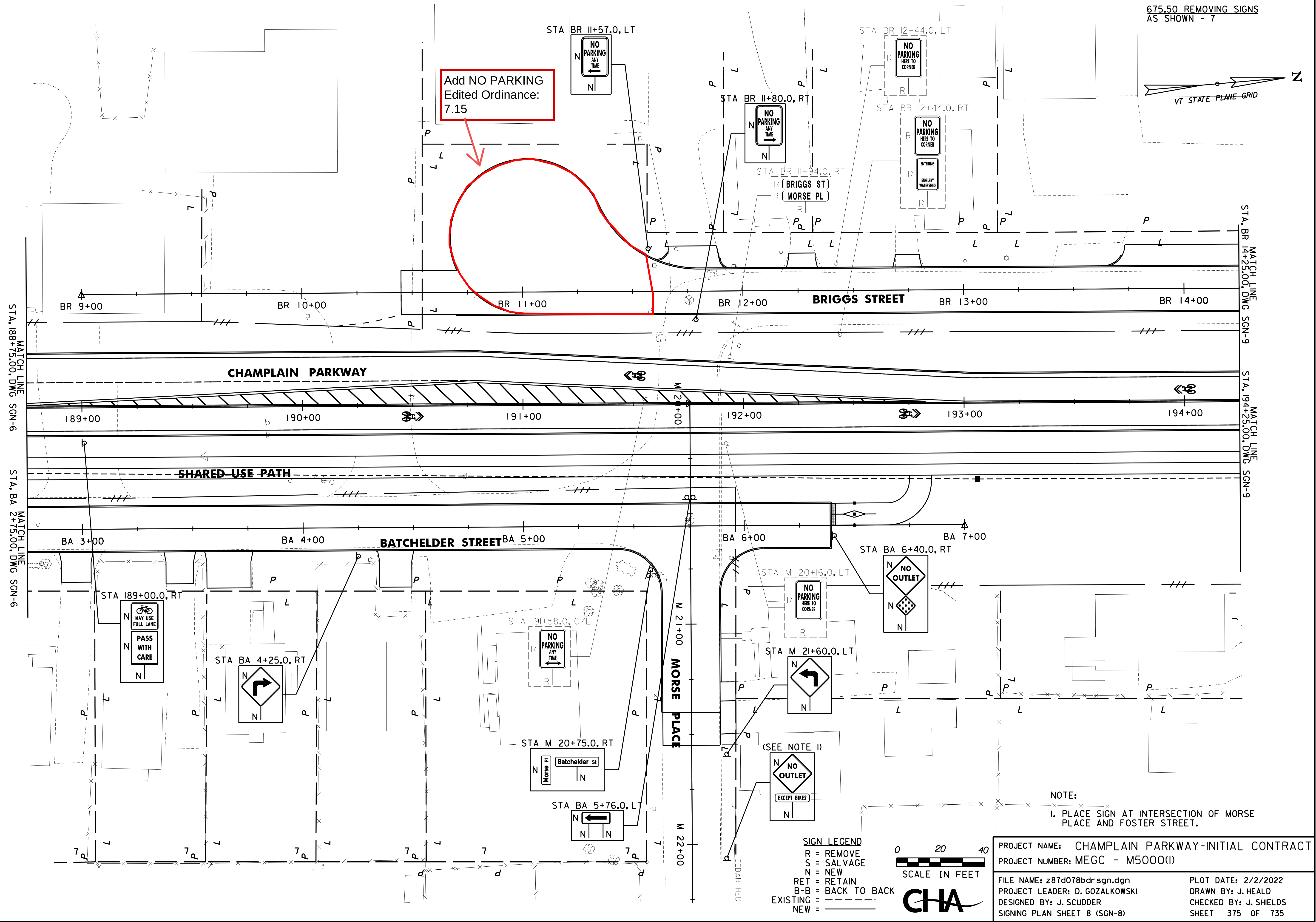
0 20 40
SCALE IN FEET

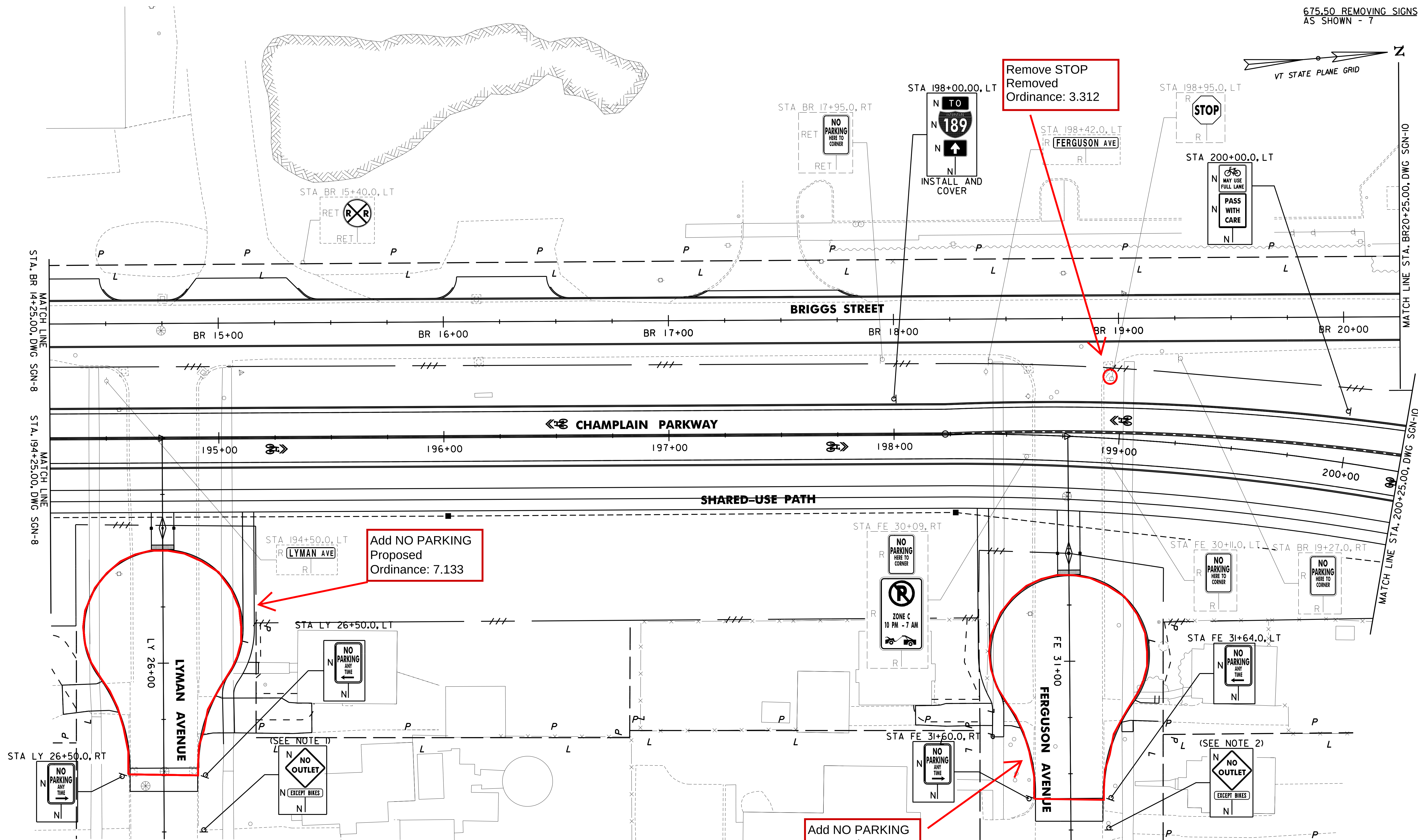
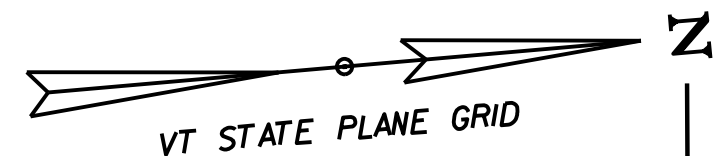
CHA



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DATE: 2/2/2022
USER: JSC

FILE NAME: I:\0655\1870078\Consultants\z87d078bdr-sgn.dgn
DATE: 12/27/2022
USER: JSD





NOTES:

1. PLACE SIGN AT INTERSECTION OF LYMAN AVENUE AND FOSTER STREET.
2. PLACE SIGN AT INTERSECTION OF FERGUSON AVENUE AND FOSTER STREET.

SIGN LEGEND
R = REMOVE
S = SALVAGE
N = NEW
RET = RETAIN
B-B = BACK TO BACK
EXISTING =
NEW =

0 20 40
SCALE IN FEET



PROJECT NAME: CHAMPLAIN PARKWAY-INITIAL CONTRACT
PROJECT NUMBER: MEGC - M5000(I)

FILE NAME: z87d078bdrsgn.dgn
PROJECT LEADER: D. GOZALKOWSKI
DESIGNED BY: J. SCUDDER
SIGNING PLAN SHEET 9 (SGN-9)

PLOT DATE: 2/2/2022
DRAWN BY: J. HEALD
CHECKED BY: J. SHIELDS
SHEET 376 OF 735

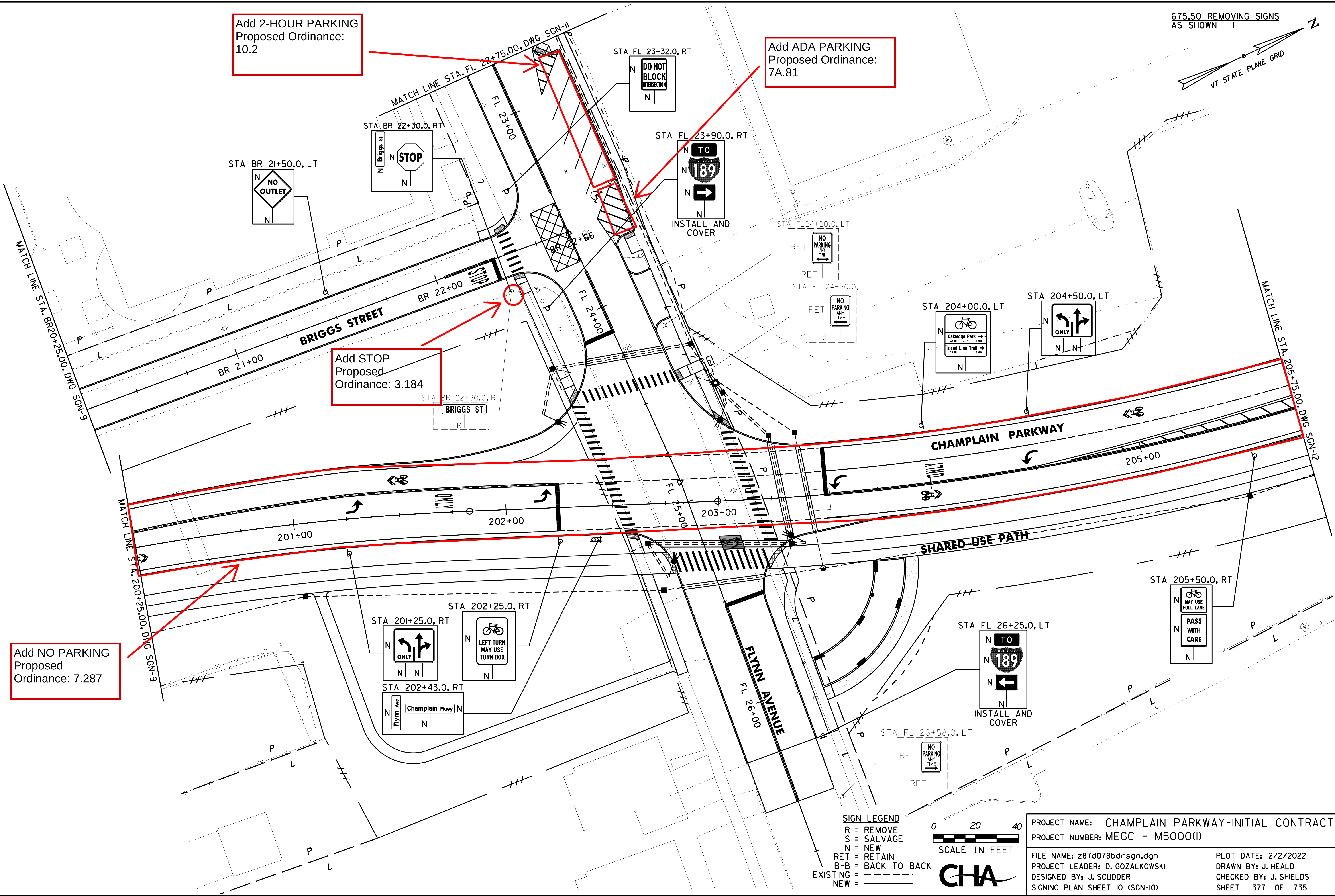
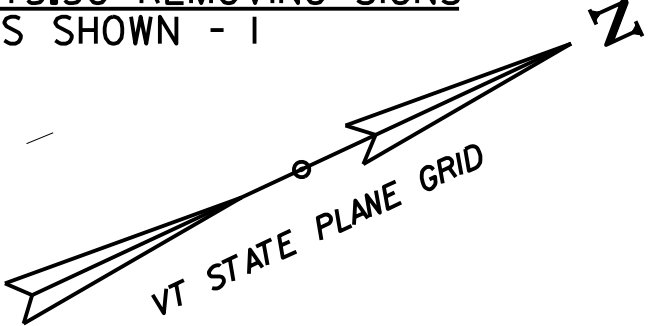
Add 2-HOUR PARKING
Proposed Ordinance:
10.2

Add ADA PARKING
Proposed Ordinance:
7A.81

Add STOP
Proposed
Ordinance: 3.184

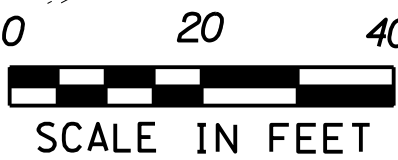
Add NO PARKING
Proposed
Ordinance: 7.287

675.50 REMOVING SIGNS
AS SHOWN - 1



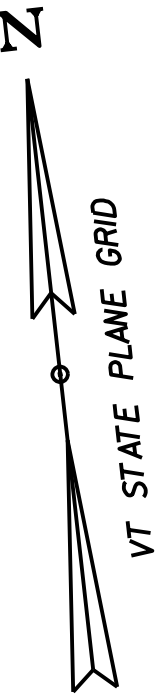
SIGN LEGEND

R = REMOVE
S = SALVAGE
N = NEW
RET = RETAIN
B-B = BACK TO BACK
EXISTING = ---
NEW = —



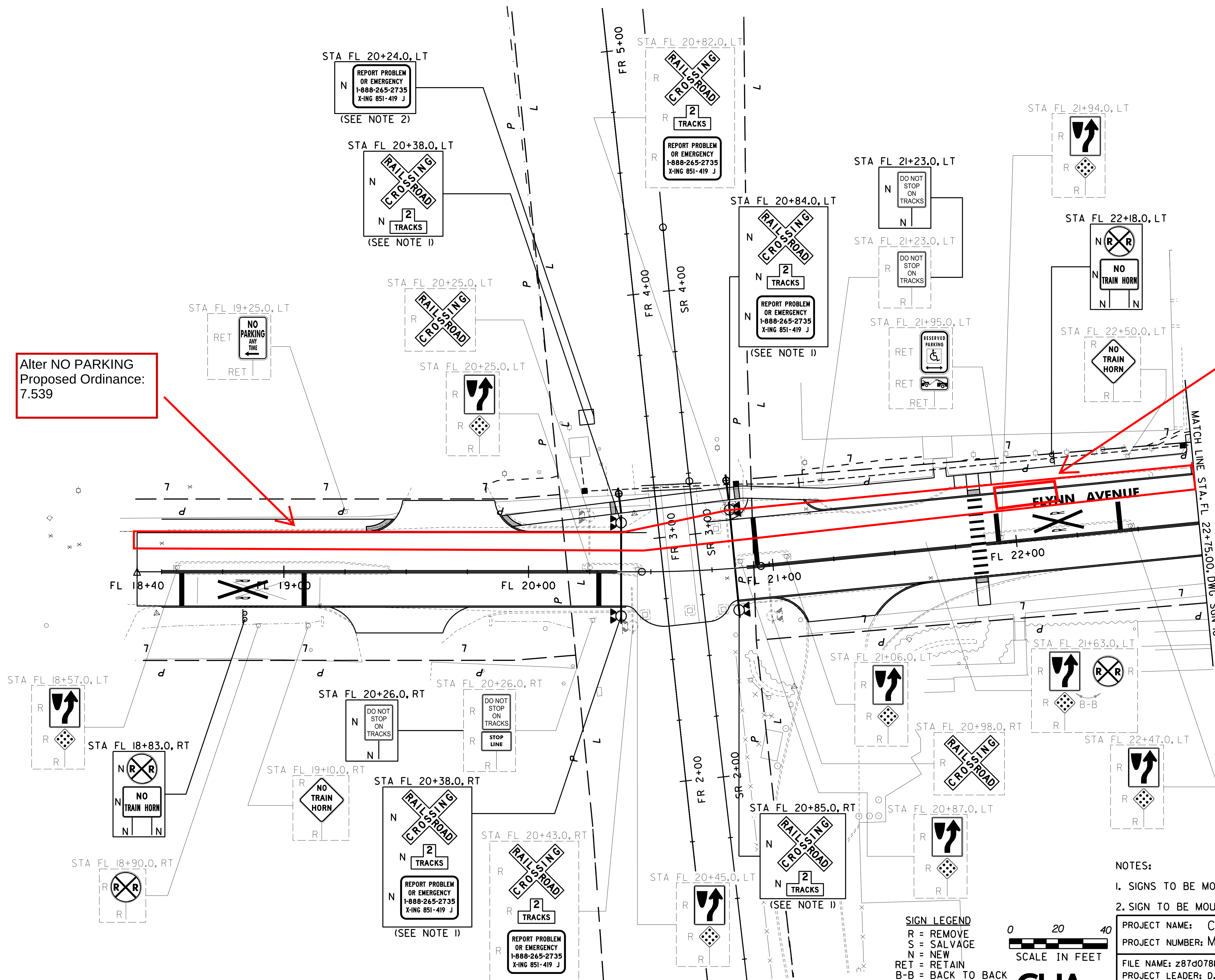
CHA

PROJECT NAME: CHAMPLAIN PARKWAY-INITIAL CONTRACT
PROJECT NUMBER: MEGC - M5000(I)
FILE NAME: z87d078bdrsgn.dgn
PROJECT LEADER: D. GOZALKOWSKI
DESIGNED BY: J. SCUDDER
SIGNING PLAN SHEET 10 (SGN-10)
PLOT DATE: 2/2/2022
DRAWN BY: J. HEALD
CHECKED BY: J. SHIELDS
SHEET 377 OF 735



Alter NO PARKING
Proposed Ordinance:
7.539

Remove ADA PARKING
Removed Ordinance:
7A.77



NOTES:

1. SIGNS TO BE MOUNTED ON PROPOSED SIGNAL MAST.
2. SIGN TO BE MOUNTED ON PROPOSED SIGNAL HOUSE.

PROJECT NAME: CHAMPLAIN PARKWAY-INITIAL CONTRACT
PROJECT NUMBER: MEGC - M5000(I)

FILE NAME: z87d078bdrsgn.dgn
PROJECT LEADER: D. GOZALKOWSKI
DESIGNED BY: J. SCUDDER
SIGNING PLAN SHEET II (SGN-II)

PLOT DATE: 2/2/2022
DRAWN BY: J. HEALD
CHECKED BY: J. SHIELDS
SHEET 378 OF 735

SIGN LEGEND

R = REMOVE
S = SALVAGE
N = NEW
RET = RETAIN
B-B = BACK TO BACK
EXISTING = - - - - -
NEW = _____

0 20 40
SCALE IN FEET



FILE NAME: U:\8655\870078\Consultants\z87d078bdr-sgn.dgn
DATE: 1/15/2022
USER: j3373

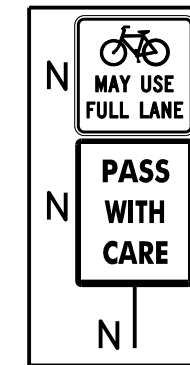
MATCH LINE STA. 205+75.00, DWG SGN-10

Add NO PARKING
Proposed
Ordinance: 7.287

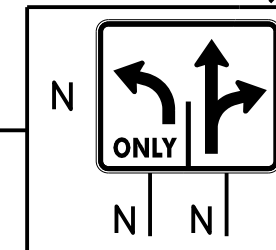
CHAMPLAIN PARKWAY

SHARED-USE PATH

STA 211+00.0, LT



STA 210+70.0, RT



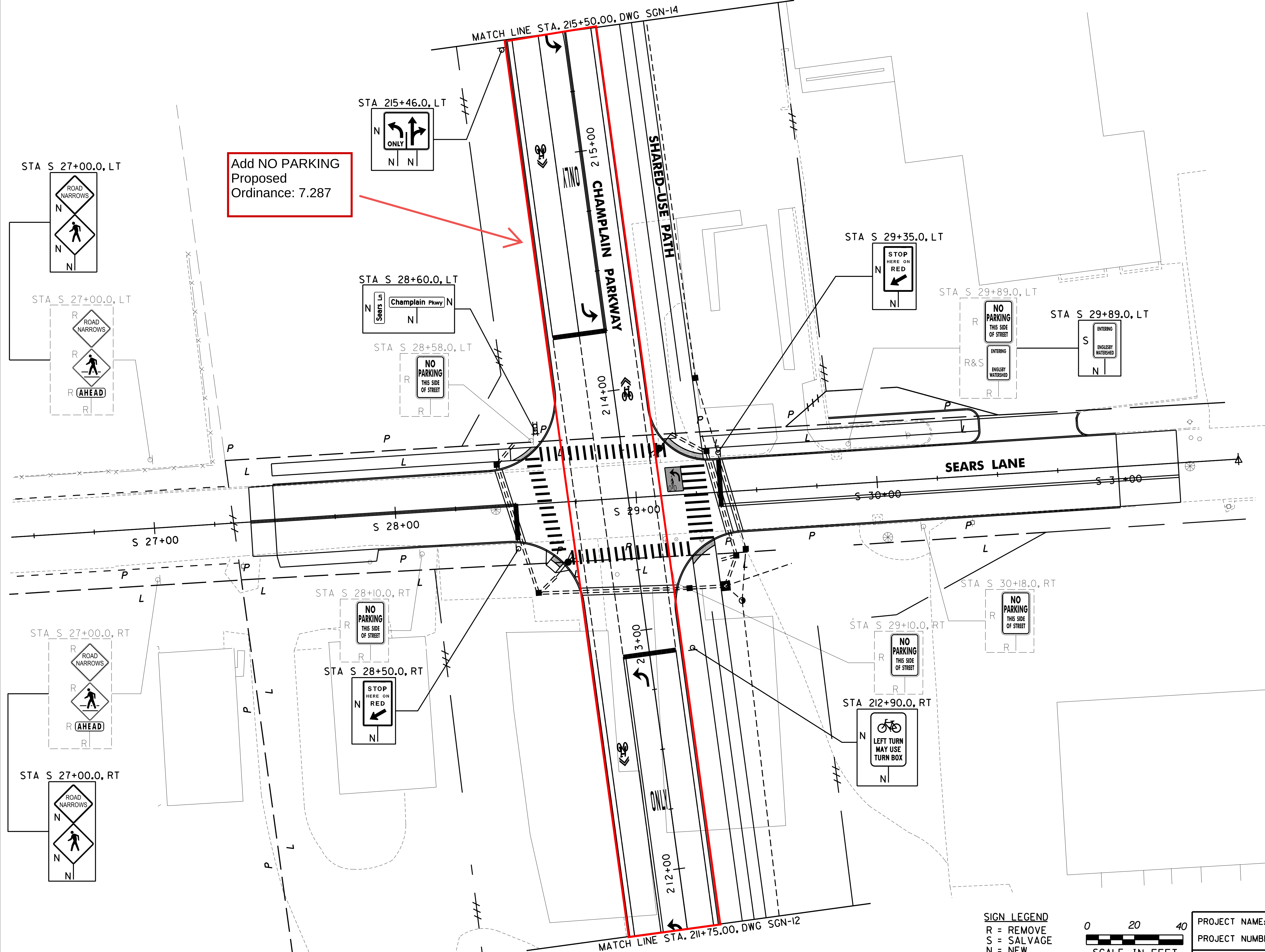
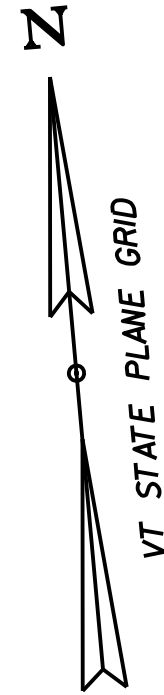
SIGN LEGEND
R = REMOVE
S = SALVAGE
N = NEW
RET = RETAIN
B-B = BACK TO BACK
EXISTING = - - - - -
NEW = _____

0 20 40
SCALE IN FEET

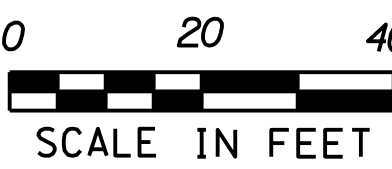
CHA

PROJECT NAME: CHAMPLAIN PARKWAY-INITIAL CONTRACT	
PROJECT NUMBER: MEGC - M5000(I)	
FILE NAME: z87d078bdr-sgn.dgn	PLOT DATE: 2/2/2022
PROJECT LEADER: D. GOZALKOWSKI	DRAWN BY: J. HEALD
DESIGNED BY: J. SCUDDER	CHECKED BY: J. SHIELDS
SIGNING PLAN SHEET 12 (SGN-12)	SHEET 379 OF 735

675.50 REMOVING SIGNS
AS SHOWN: 12
675.60 ERECTING SALVAGED SIGNS
AS SHOWN: 1



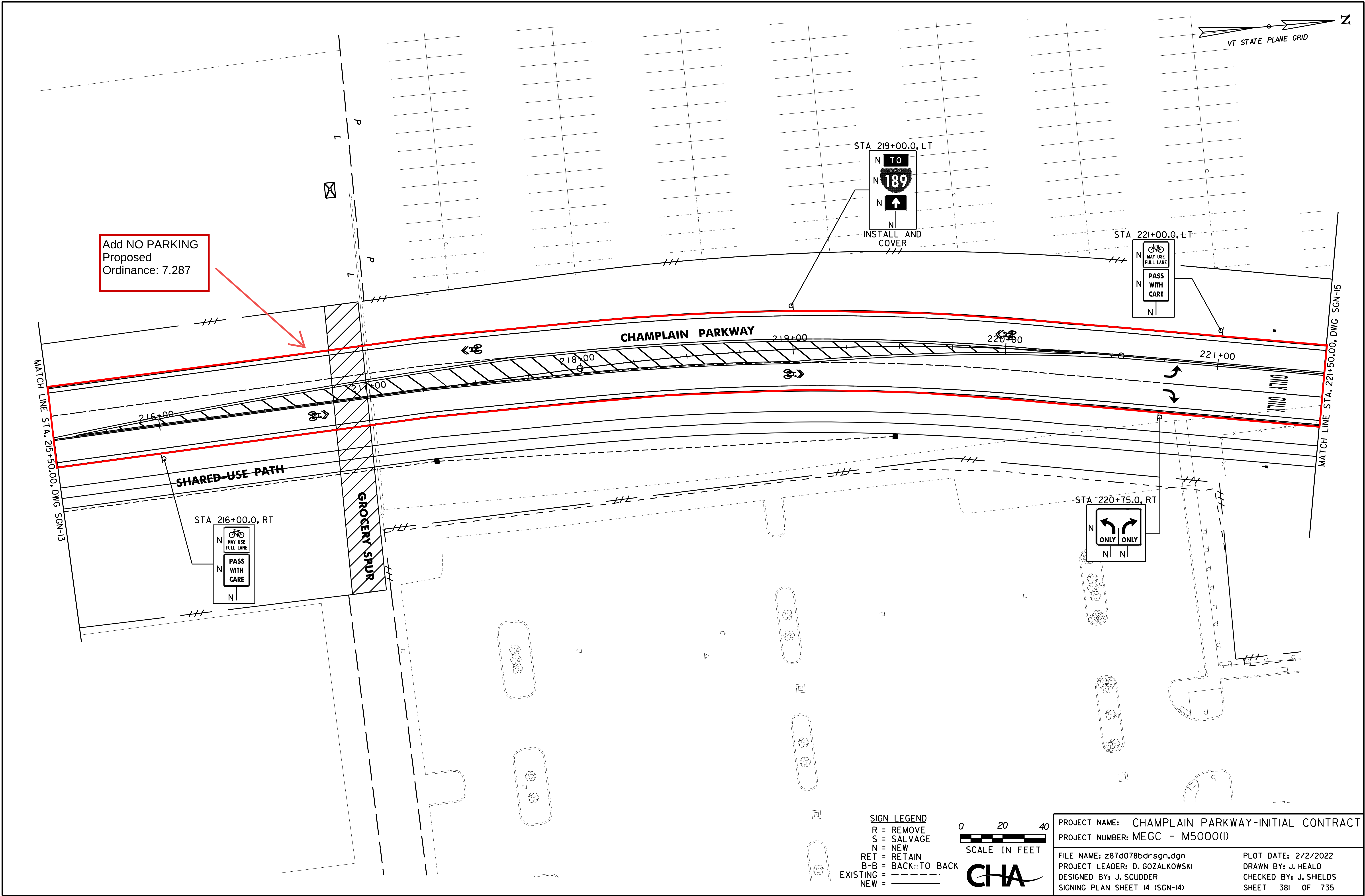
SIGN LEGEND
R = REMOVE
S = SALVAGE
N = NEW
RET = RETAIN
B-B = BACK TO BACK
EXISTING = - - - - -
NEW = _____



PROJECT NAME: CHAMPLAIN PARKWAY-INITIAL CONTRACT	
PROJECT NUMBER: MEGC - M5000(I)	
FILE NAME: z87d078bdrsgn.dgn	PLOT DATE: 2/2/2022
PROJECT LEADER: D. GOZALKOWSKI	DRAWN BY: J. HEALD
DESIGNED BY: J. SCUDDER	CHECKED BY: J. SHIELDS
SIGNING PLAN SHEET 13 (SGN-13)	SHEET 380 OF 735

FILE NAME: I:\0655\870078\Consultants\z87d078bdrsgn.dgn
DATE: 2/2/2022
USER: JSD

FILE NAME: I:\0655\870078\Consultants\z87d078bdr-sgn.dgn
DATE: 2/2/2022
USER: JSH



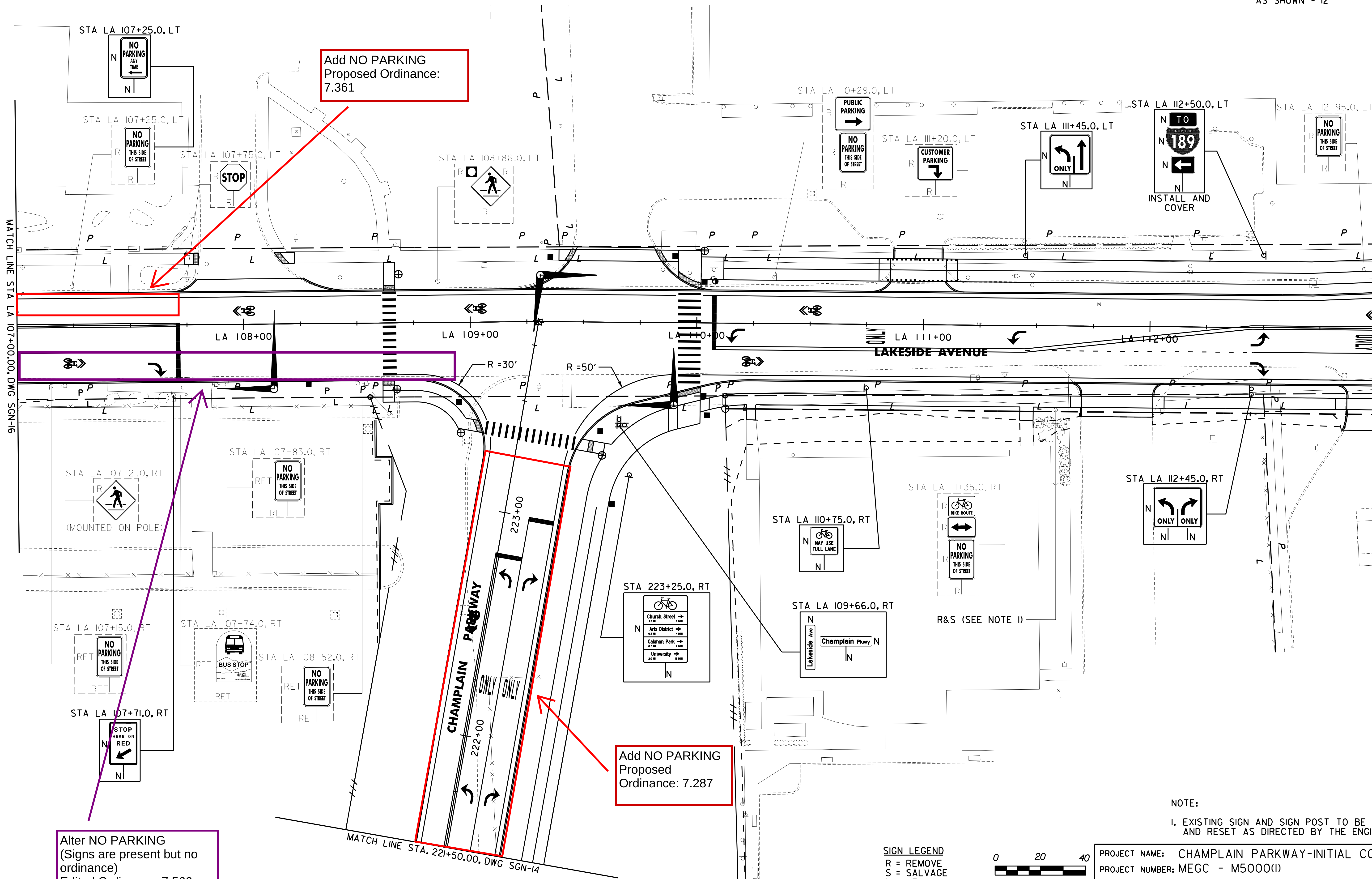
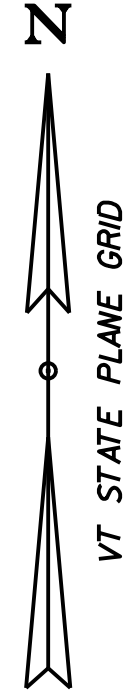
Add NO PARKING
Proposed
Ordinance: 7.287

SIGN LEGEND
R = REMOVE
S = SALVAGE
N = NEW
RET = RETAIN
B-B = BACK-TO-BACK
EXISTING =
NEW =

0 20 40
SCALE IN FEET



PROJECT NAME: CHAMPLAIN PARKWAY-INITIAL CONTRACT	
PROJECT NUMBER: MEGC - M5000(I)	
FILE NAME: z87d078bdr-sgn.dgn	PLOT DATE: 2/2/2022
PROJECT LEADER: D. GOZALKOWSKI	DRAWN BY: J. HEALD
DESIGNED BY: J. SCUDDER	CHECKED BY: J. SHIELDS
SIGNING PLAN SHEET 14 (SGN-14)	SHEET 381 OF 735



MATCH LINE STA LA 113+00.00, SEE SHEET SGN-17

MATCH LINE STA LA 107+00.00, DWG SGN-16

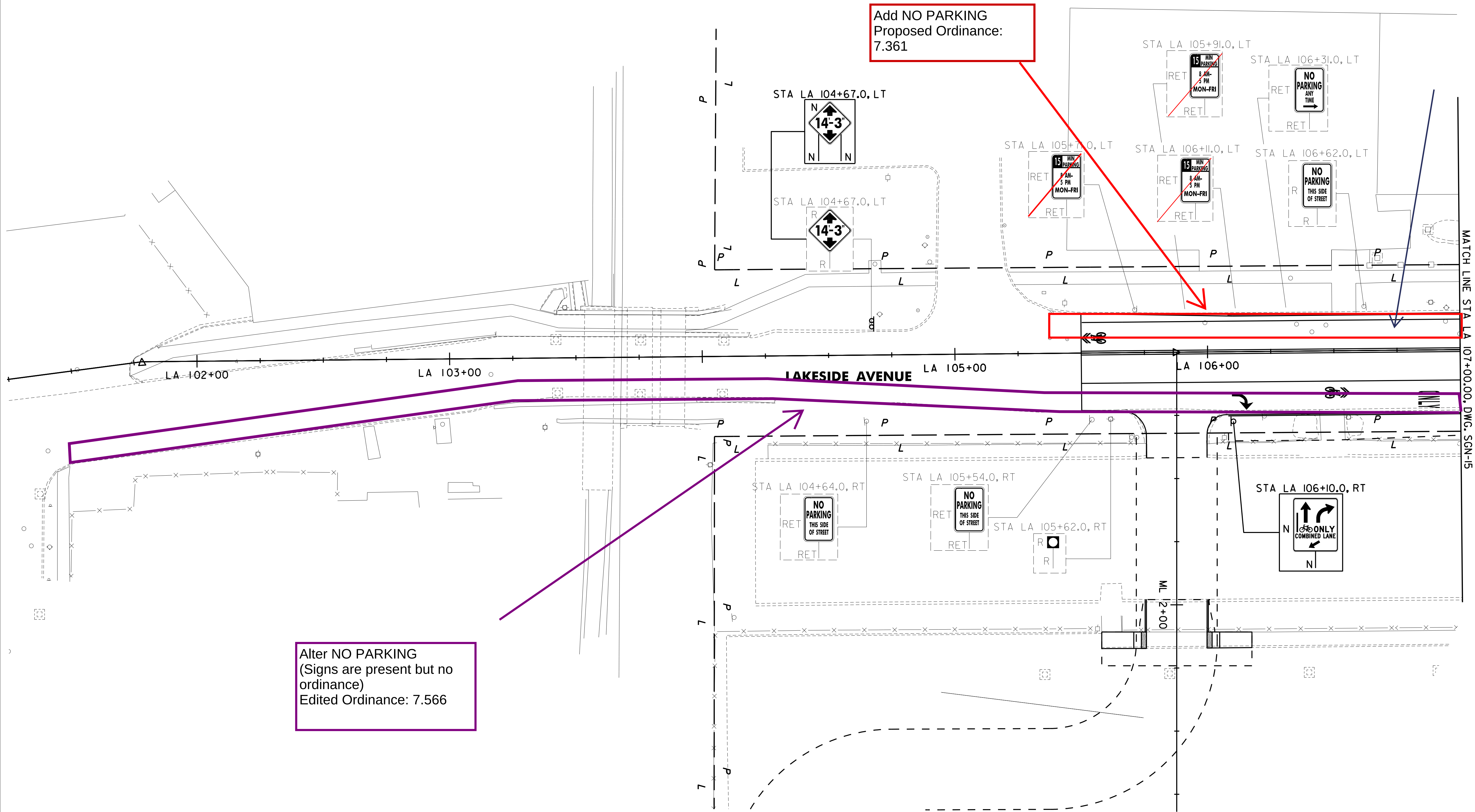
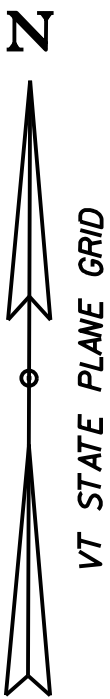
MATCH LINE STA. 221+50.00, DWG SGN-14

NOTE:
1. EXISTING SIGN AND SIGN POST TO BE REMOVED
AND RESET AS DIRECTED BY THE ENGINEER

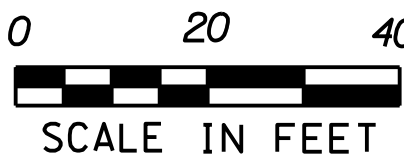
SIGN LEGEND
R = REMOVE
S = SALVAGE
N = NEW
RET = RETAIN
B-B = BACK TO BACK
EXISTING = - - - - -
NEW = _____



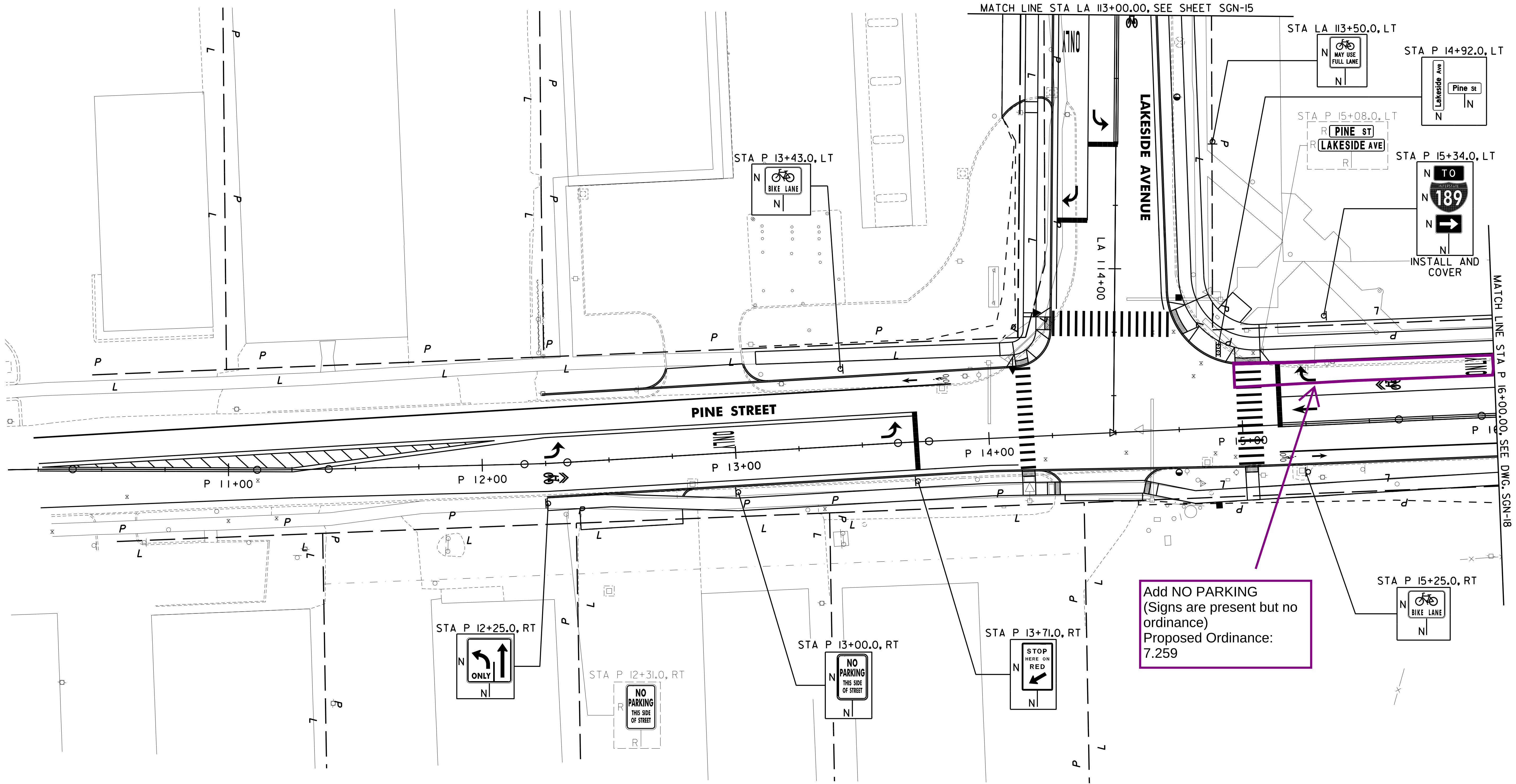
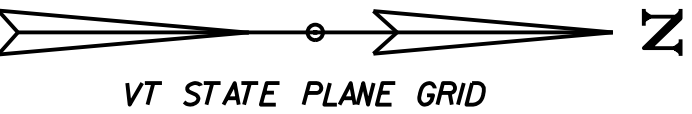
PROJECT NAME: CHAMPLAIN PARKWAY-INITIAL CONTRACT
PROJECT NUMBER: MEGC - M5000(I)
FILE NAME: z87d078bdrsgn.dgn
PROJECT LEADER: D. GOZALKOWSKI
DESIGNED BY: J. SCUDDER
SIGNING PLAN SHEET 15 (SGN-15)
PLOT DATE: 2/2/2022
DRAWN BY: J. HEALD
CHECKED BY: J. SHIELDS
SHEET 382 OF 735



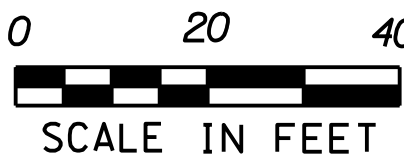
- SIGN LEGEND**
R = REMOVE
S = SALVAGE
N = NEW
RET = RETAIN
B-B = BACK TO BACK
EXISTING = - - - - -
NEW = _____



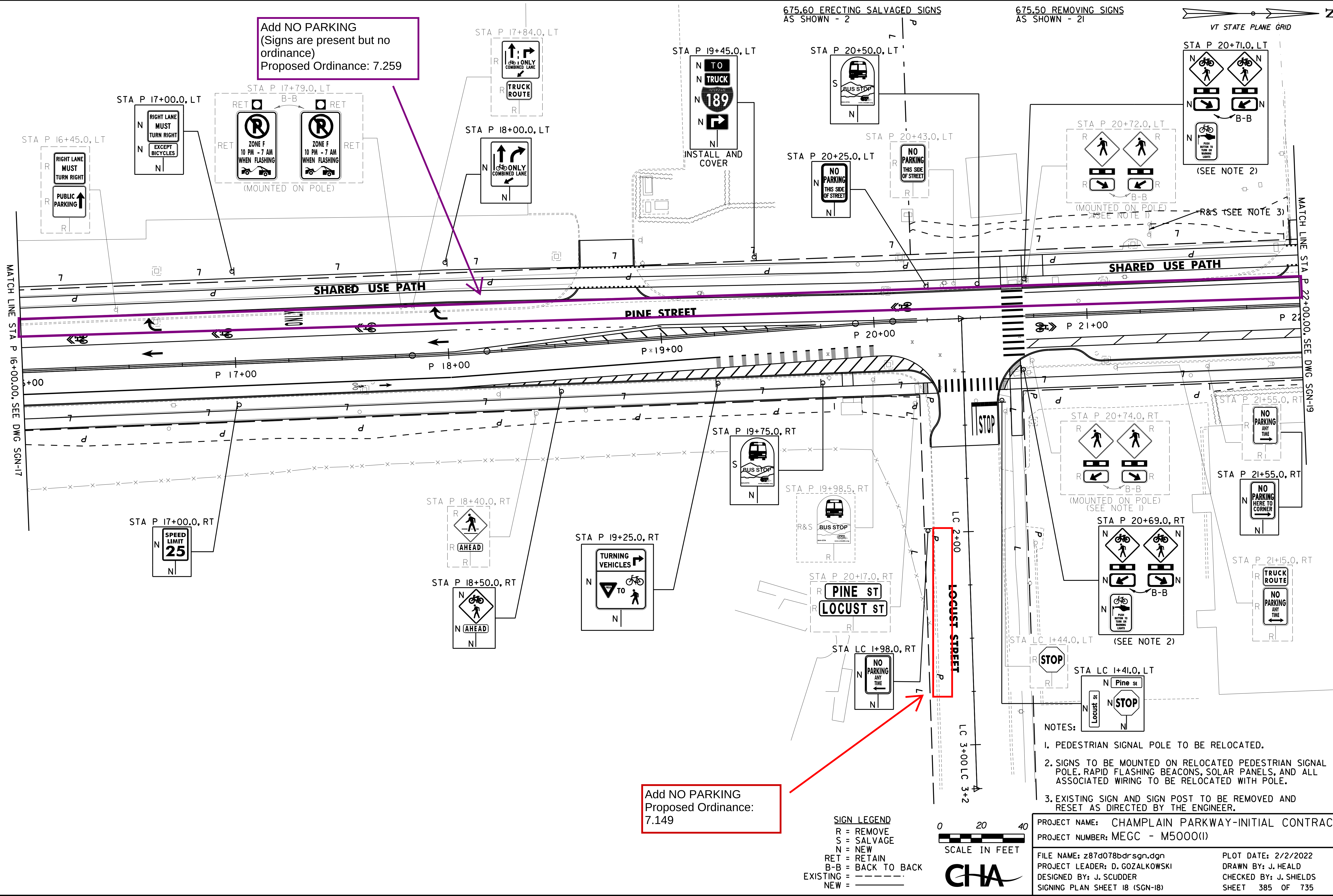
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PROJECT NUMBER: MEGC - M5000(I)	
FILE NAME: z87d078bdrsgn.dgn	PLOT DATE: 2/2/2022
PROJECT LEADER: D. GOZALKOWSKI	DRAWN BY: J. HEALD
DESIGNED BY: J. SCUDDER	CHECKED BY: J. SHIELDS
SIGNING PLAN SHEET 16 (SGN-16)	SHEET 383 OF 735

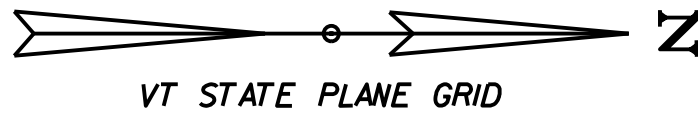


SIGN LEGEND
R = REMOVE
S = SALVAGE
N = NEW
RET = RETAIN
B-B = BACK TO BACK
EXISTING = ---
NEW = _____

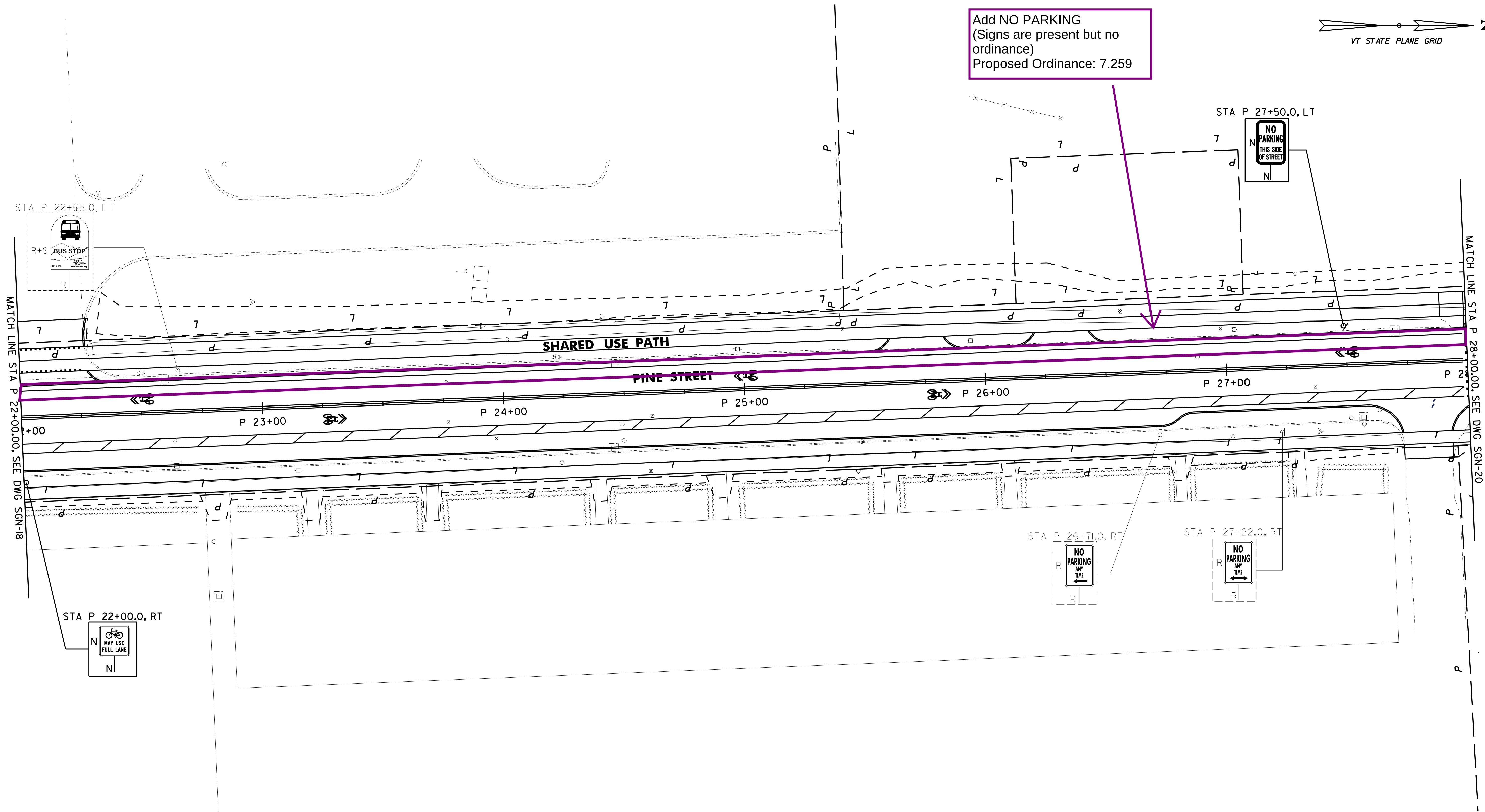


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PROJECT NUMBER: MEGC - M5000(I)	
FILE NAME: z87d078bdrsgn.dgn	PLOT DATE: 2/2/2022
PROJECT LEADER: D. GOZALKOWSKI	DRAWN BY: J. HEALD
DESIGNED BY: J. SCUDDER	CHECKED BY: J. SHIELDS
SIGNING PLAN SHEET 17 (SGN-17)	SHEET 384 OF 735

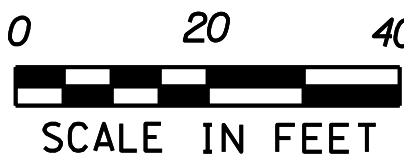




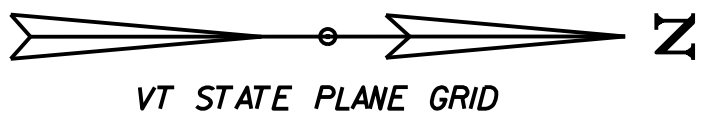
Add NO PARKING
(Signs are present but no
ordinance)
Proposed Ordinance: 7.259



SIGN LEGEND
R = REMOVE
S = SALVAGE
N = NEW
RET = RETAIN
B-B = BACK TO BACK
EXISTING = - - - - -
NEW = _____

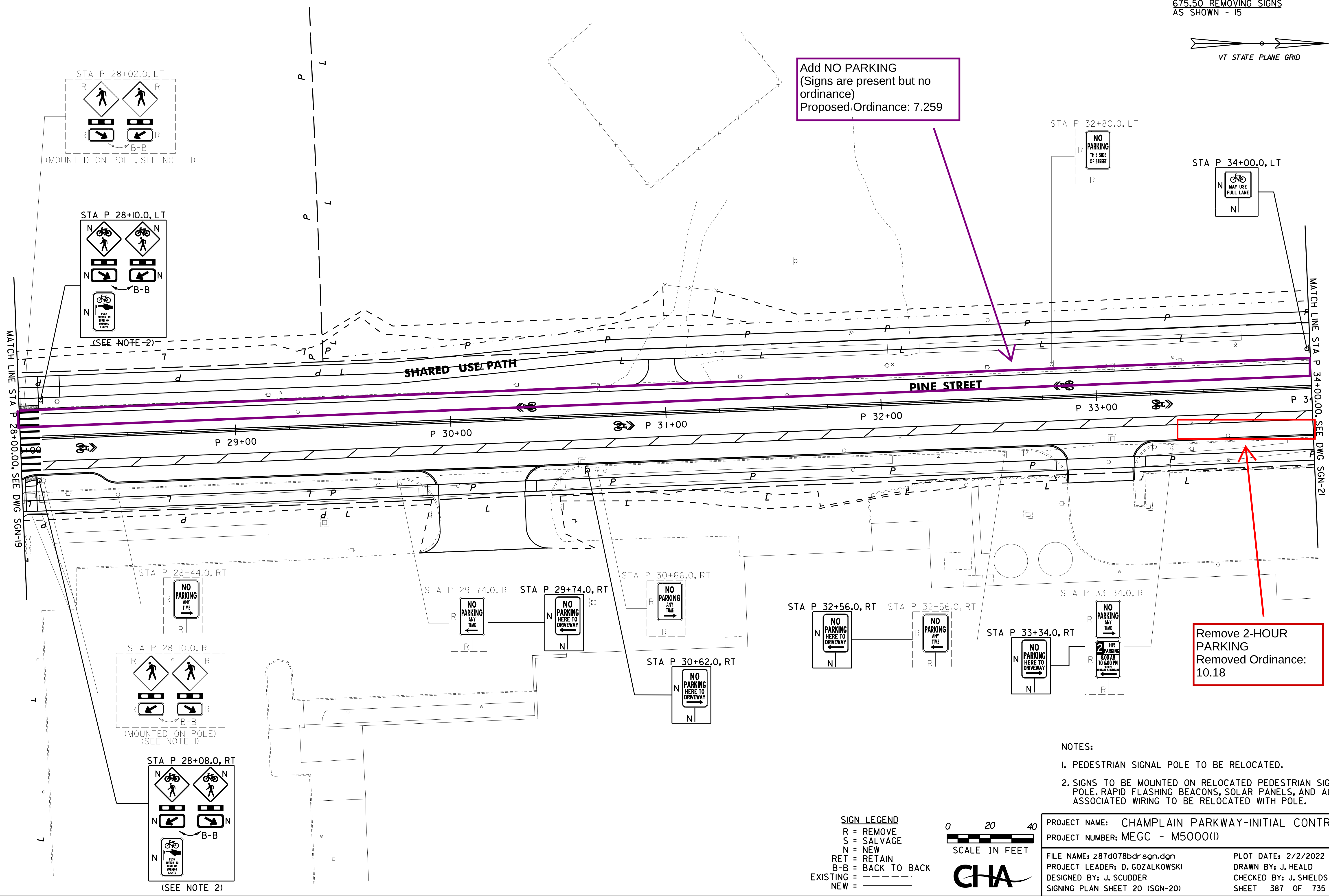


PROJECT NAME: CHAMPLAIN PARKWAY-INITIAL CONTRACT	
PROJECT NUMBER: MEGC - M5000(I)	
FILE NAME: z87d078bdrsgn.dgn	PLOT DATE: 2/2/2022
PROJECT LEADER: D. GOZALKOWSKI	DRAWN BY: J. HEALD
DESIGNED BY: J. SCUDDER	CHECKED BY: J. SHIELDS
SIGNING PLAN SHEET 19 (SGN-19)	SHEET 386 OF 735



Add NO PARKING
(Signs are present but no ordinance)
Proposed Ordinance: 7.259

Remove 2-HOUR
PARKING
Removed Ordinance:
10.18



STA P 28+02.0, LT
(MOUNTED ON POLE, SEE NOTE 1)

STA P 28+10.0, LT
(SEE NOTE 2)

STA P 28+44.0, RT
NO PARKING ANY TIME

STA P 28+10.0, RT
(MOUNTED ON POLE)
(SEE NOTE 1)

STA P 28+08.0, RT
(SEE NOTE 2)

STA P 29+74.0, RT
NO PARKING ANY TIME

STA P 29+74.0, RT
NO PARKING HERE TO DRIVEWAY

STA P 30+66.0, RT
NO PARKING ANY TIME

STA P 30+62.0, RT
NO PARKING HERE TO DRIVEWAY

STA P 32+56.0, RT
NO PARKING HERE TO DRIVEWAY

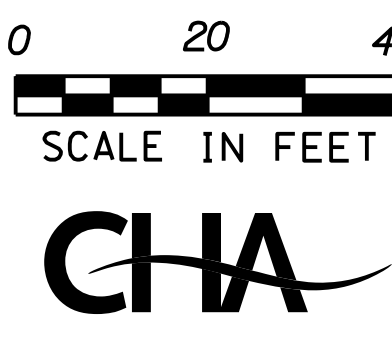
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NO PARKING ANY TIME

STA P 33+34.0, RT
NO PARKING HERE TO DRIVEWAY

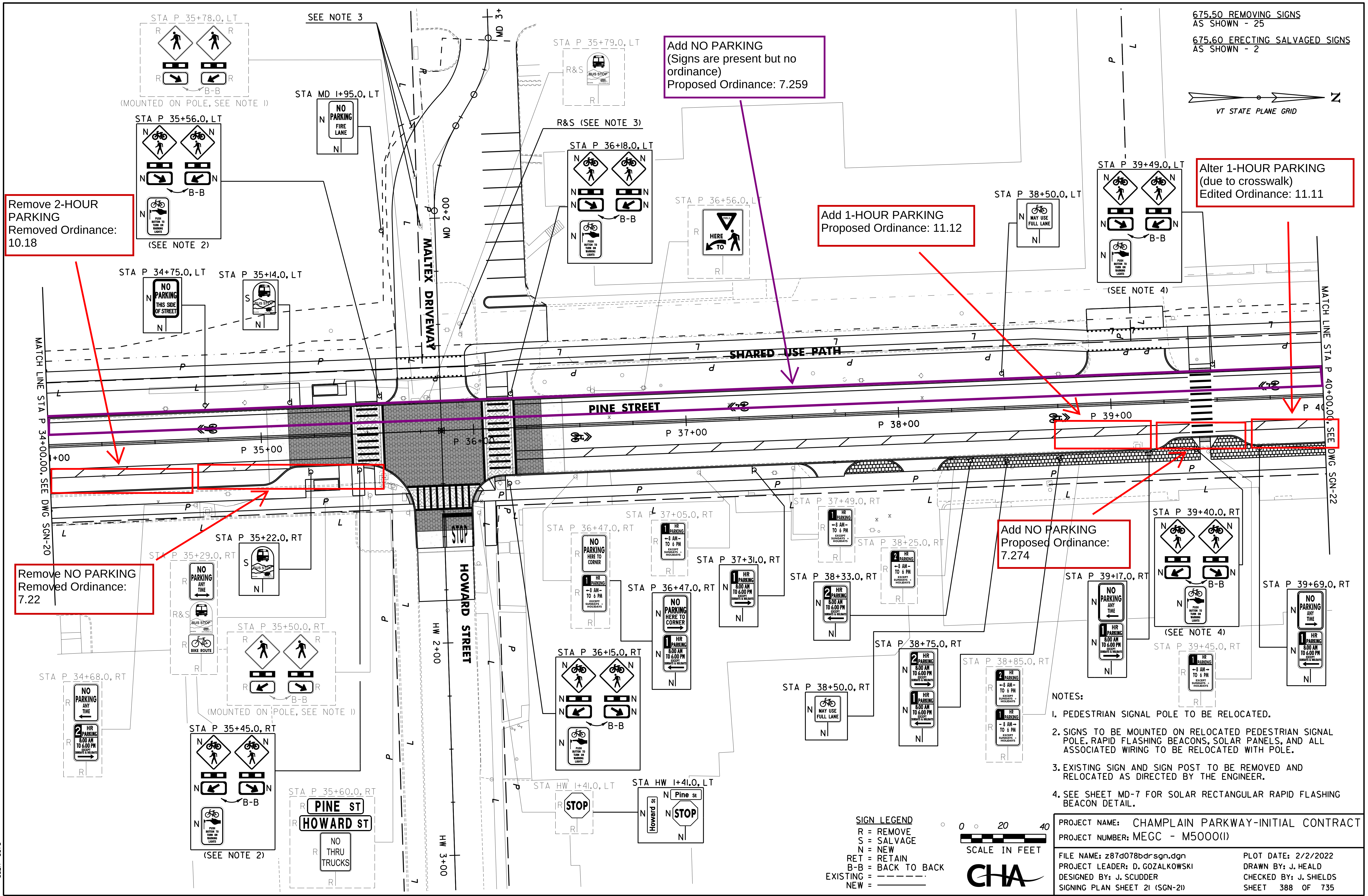
STA P 33+34.0, RT
NO PARKING ANY TIME

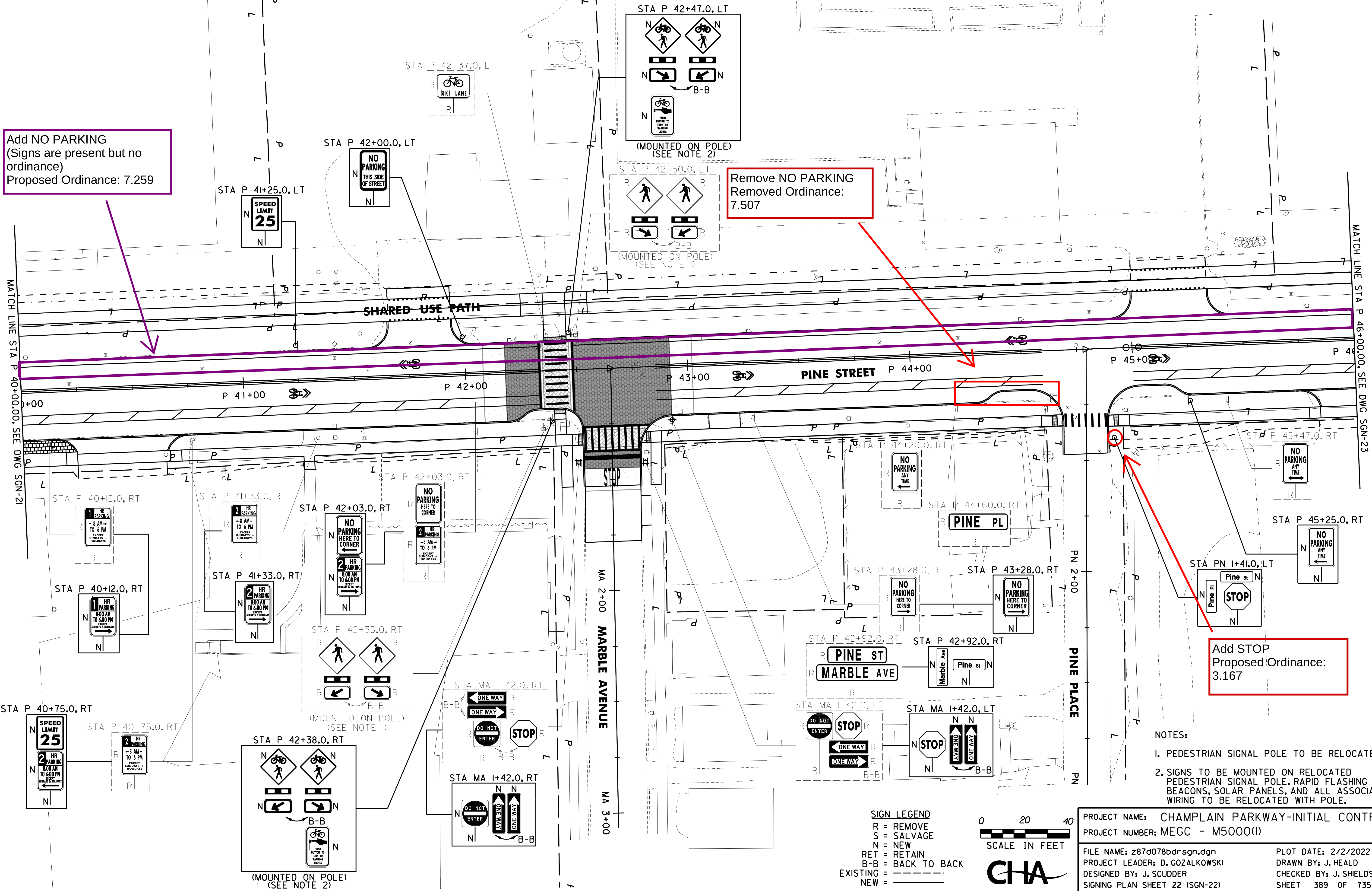
- NOTES:
1. PEDESTRIAN SIGNAL POLE TO BE RELOCATED.
 2. SIGNS TO BE MOUNTED ON RELOCATED PEDESTRIAN SIGNAL POLE. RAPID FLASHING BEACONS, SOLAR PANELS, AND ALL ASSOCIATED WIRING TO BE RELOCATED WITH POLE.

SIGN LEGEND
R = REMOVE
S = SALVAGE
N = NEW
RET = RETAIN
B-B = BACK TO BACK
EXISTING = -----
NEW = _____



PROJECT NAME: CHAMPLAIN PARKWAY-INITIAL CONTRACT
PROJECT NUMBER: MEGC - M5000(I)
FILE NAME: z87d078bdrsgn.dgn
PROJECT LEADER: D. GOZALKOWSKI
DESIGNED BY: J. SCUDDER
SIGNING PLAN SHEET 20 (SGN-20)
PLOT DATE: 2/2/2022
DRAWN BY: J. HEALD
CHECKED BY: J. SHIELDS
SHEET 387 OF 735





- NOTES:
1. PEDESTRIAN SIGNAL POLE TO BE RELOCATED.
 2. SIGNS TO BE MOUNTED ON RELOCATED PEDESTRIAN SIGNAL POLE. RAPID FLASHING BEACONS, SOLAR PANELS, AND ALL ASSOCIATED WIRING TO BE RELOCATED WITH POLE.

SIGN LEGEND

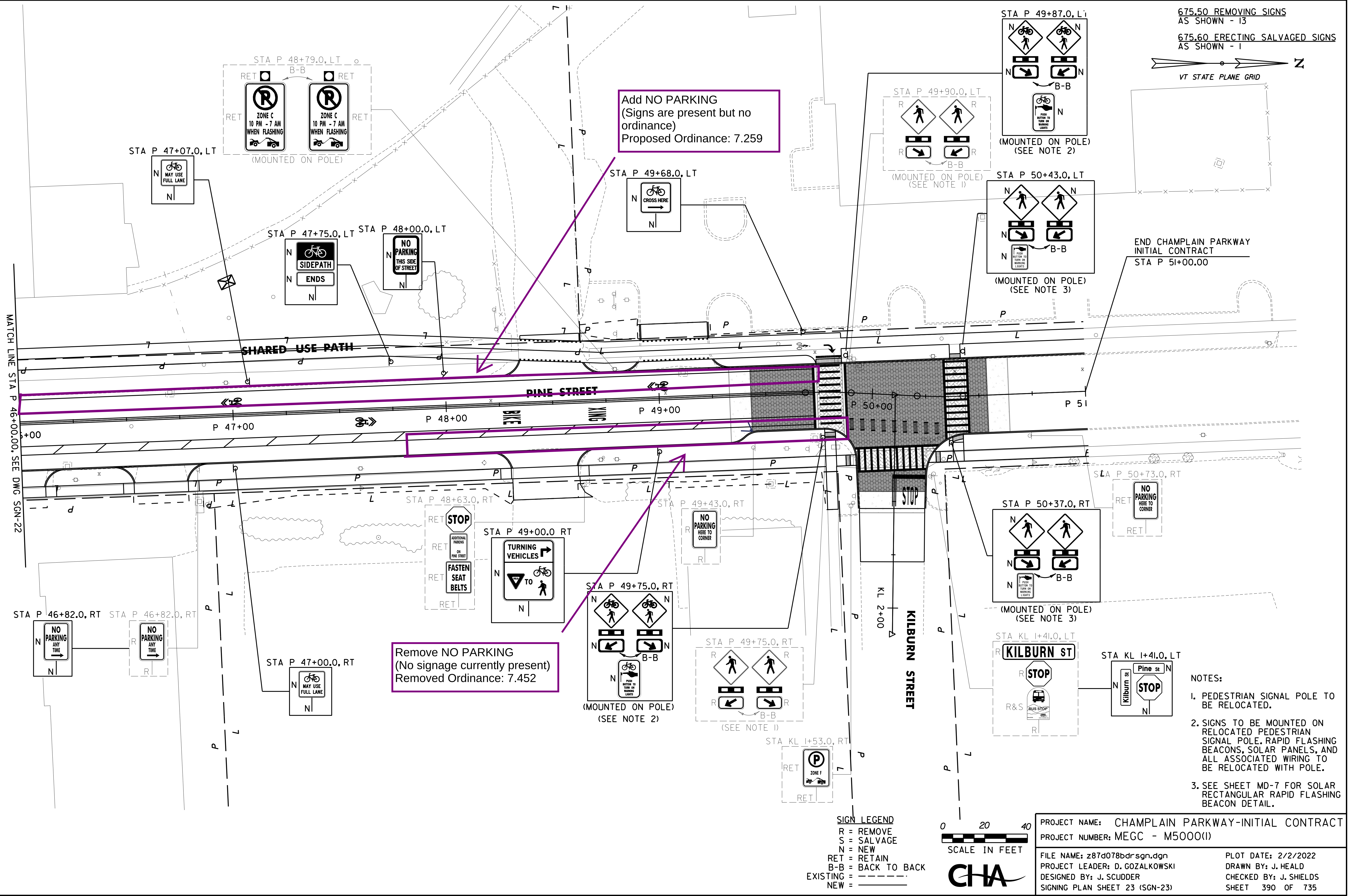
R = REMOVE
S = SALVAGE
N = NEW
RET = RETAIN
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EXISTING =
NEW =

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SCALE IN FEET

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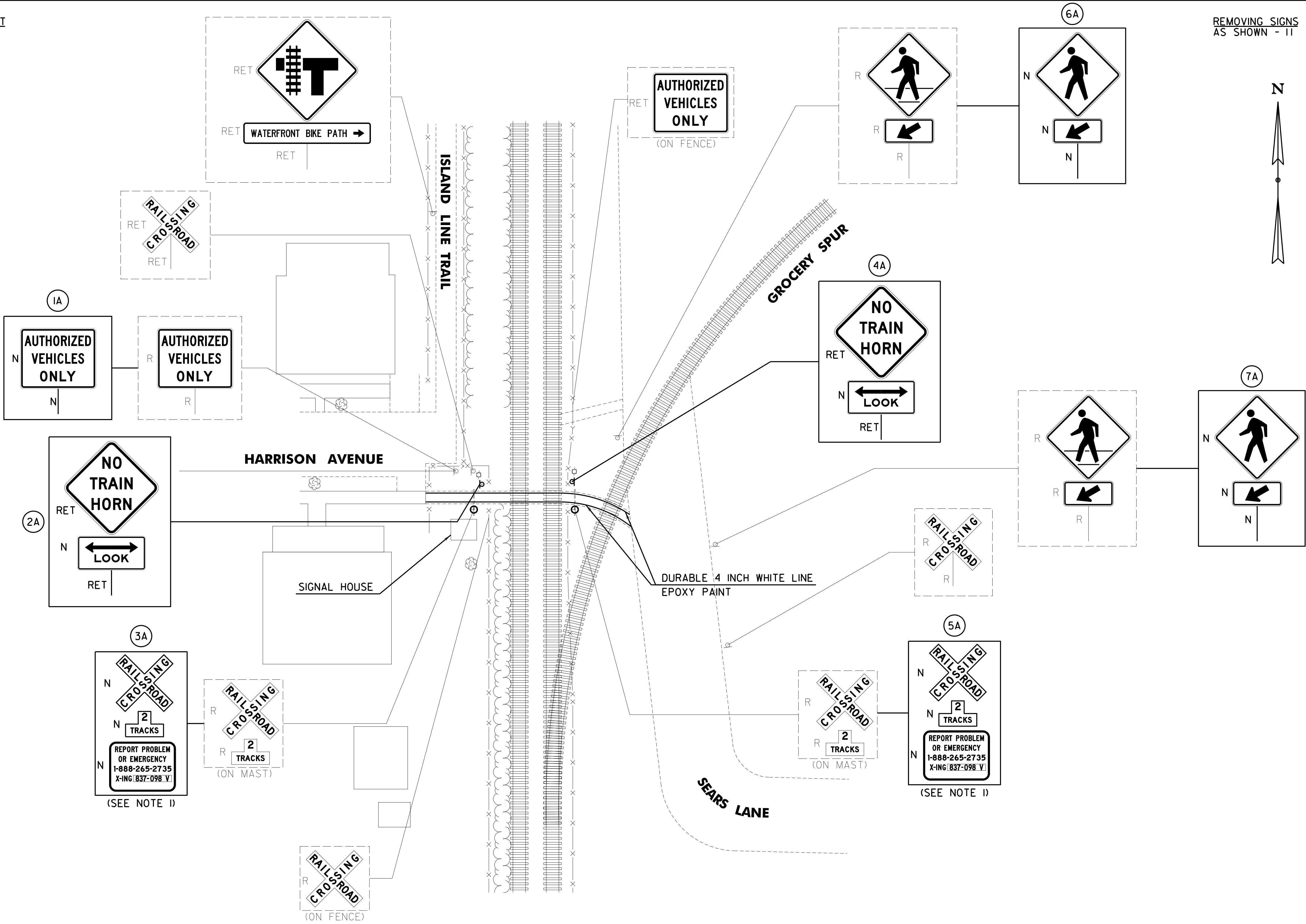
PROJECT NAME: CHAMPLAIN PARKWAY-INITIAL CONTRACT	
PROJECT NUMBER: MEGC - M5000(I)	
FILE NAME: z87d078bdrsgn.dgn	PLOT DATE: 2/2/2022
PROJECT LEADER: D. GOZALKOWSKI	DRAWN BY: J. HEALD
DESIGNED BY: J. SCUDDER	CHECKED BY: J. SHIELDS
SIGNING PLAN SHEET 22 (SGN-22)	SHEET 389 OF 735

FILE NAME: I:\0655\1870078\Consult\anta\z87d078bdr-sgn.dgn
DATE: 2/2/2022
USER: 5375



646.403 DURABLE 4 INCH WHITE LINE, EPOXY PAINT
BURLINGTON:
SIDEWALK CROSSING EDGE LINES (165 LF)

REMOVING SIGNS
AS SHOWN - 11



SEARS LANE PEDESTRIAN RAIL CROSSING
DOT 837-098 V

SIGN LEGEND
R = REMOVE
S = SALVAGE
N = NEW
RET = RETAIN
B-B = BACK TO BACK
EXISTING = _____
NEW = _____

NOT TO SCALE



NOTE:
1. SIGNS TO BE MOUNTED ON EXISTING SIGNAL MAST.

PROJECT NAME: CHAMPLAIN PARKWAY-INITIAL CONTRACT	
PROJECT NUMBER: MEGC - M5000(I)	
FILE NAME: z87d078oss01.dgn	PLOT DATE: 2/2/2022
PROJECT LEADER: D. GOZALKOWSKI	DRAWN BY: J. HEALD
DESIGNED BY: J. SCUDDER	CHECKED BY: J. SHIELDS
OFF-SITE SIGNING PLAN SHEET 1 (OSS-1)	SHEET 391 OF 735



Memo

Date: November 20, 2024

To: Public Works Commission

From: Madeline Suender, Public Works Engineer
Laura Wheelock P.E., Division Director of Tech Services/City Engineer

CC: Chapin Spencer, Director Public Works

Subject: Burlington - Winooski Bridge Project and Colchester/Barrett/Riverside Base
Technical Concept

The Department of Public Works (DPW) will be seeking 12/16/24 City Council approval of the Burlington - Winooski Bridge and Colchester/Barrett/Riverside Intersection (COBRI) Base Technical Concept (BTC). In doing this, the City Council would reaffirm prior approval (5/15/23) of the COBRI Intersection alignment. This approval is not a change, but a third and final reaffirmation of the City's project preferred alternative from the Scoping Study completed by the Chittenden County Regional Planning Commission (CCRPC) and Stantec for the Intersection. This action is necessary to provide DPW Director Spencer authorization to send the City's final approval letter – a draft of which is Attachment 3 in this packet.

What you need to know:

- DPW will be seeking approval of the Base Technical Concept of both the Bridge & Intersection from Council on 12/16/24.
- This approval would reaffirm past Council decisions which supported a signalized intersection. Recent Council actions which affirmed this decision came in April 2024 and May 2023.
- Tonight, we are asking you for additional input on the Base Technical Concept.
- The Bridge is funded via 80% federal, 10% state, 5% Burlington, 5% Winooski funds. The Intersection is funded 100% by federal funds.
- While separate projects, advancing them together saves time and money and will be less disruptive than separately staged projects.
- This project is cross-municipal and managed by the state with various federal and state requirements. Projects of this magnitude and with this many government partners are complex. This project has proceeded at each stage with feedback from municipal leaders,

stakeholders and past Council direction. There are real consequences of significant delay or loss of funding if we deviate from prior direction and do not stay on a tight timeline.

- A roundabout was evaluated and ruled out. The geometry does not work, and the smallest feasible roundabout would impact a property that contributes to the historic character of the surrounding area. Impacts to this property would disqualify us from our funding. See Attachment 4 for more info.

Background:

The Burlington-Winooski Bridge is nearing the end of its service life and functionally deficient for bikes and pedestrians. As such, the State is progressing this replacement timeframe to allow thoughtful design to be incorporated into construction. The COBRI intersection was separately determined to be in need of replacement and upgrades.

The Bridge is being funded through a Rebuilding American Infrastructure with Sustainability and Equity (RAISE) grant, and State of Vermont Infrastructure budget with the following funding split: 80% Federal, 10% State, 5% City of Burlington, 5% City of Winooski. The Intersection was selected through the Vermont Project Selection and Prioritization (VPSP2) and is 100% Federal funding. The financial commitment from the City to the Project team was made at the 4/15/24 City Council with the approval of the Finance and Maintenance Agreements. The City's local match is estimated to be \$3,855,000 with an additional \$1,000,000 for non-participating costs of soil disposal. The cost estimate for the bridge is currently \$77,100,000 and the current estimate for the intersection is roughly \$9,000,000; a detailed break out of the bridge estimate can be found in Attachment 1.

Though the Bridge and Intersection are separate projects with unique funding sources and criteria, they are both being progressed together as the design of the bridge directly impacts the design of the intersection. Doing the projects together also allows for efficiency with contracting, traffic control, and design. This coordinated approach will therefore reduce the overall construction-related impacts for the general public.

VTrans is managing both of these projects with input from the Cities of Burlington and Winooski as well as the Chittenden Regional Planning Commission (CCRPC). VTrans has contracted HNTB for the design and outreach on the project. More info on the projects can be found here: <https://www.burlingtonwinooskibridge.vtransprojects.vermont.gov/>

Bid Process – Design-Build:

The Bridge and Intersection projects will be bid through a design-build contract. VTrans defines design-build as a project delivery method that combines two, usually separate services into a single contract. With design-build procurements, owners execute a single, fixed-fee contract for both engineering services and construction. The design-build entity - also known as a constructor - may be a single firm, a consortium, joint venture or other organization assembled for a particular project.

HNTB, will work to get to 30% plans that will then be put out for procurement in 2025 through this process. In doing this, HNTB will choose one bridge/intersection alignment and formalize the design documents. They will also need to add criteria to the procurement that must be met and incorporated into the design of the constructor. This is known as the Base Technical Concept (BTC). This process will allow constructors to creatively and efficiently propose design/construction methods that best suit them.

HNTB has worked through various design alternatives for both the bridge and the intersection that are likely to arise from the design-build process. The curved alignment, which is what is proposed as the BTC by the project team, is one likely outcome that the entire project team is supportive of. Plans can be found in Attachment 2. This is being recommended as the BTC for the reasons outlined in the BTC Design Considerations section below. This allowed the project team to start the permitting, design, and right-of-way processes for the more impactful scenario. If an on alignment bridge is proposed, it will fall into the approvals already received for the off-alignment option.

The BTC approval is comparable to approving a conceptual design under a typical bid process. The notable difference with design-build procurement is the constructor may propose a different layout so as we ask for BTC concept approval we do so with providing conditions or provisions that should be included as information/guidance to a bidding team to incorporate into any proposal. These conditions come from the design team, HNTB, as well as the state and municipal partners with consideration for comments received during our public outreach and permit process.

BTC Design Considerations:

DPW is looking for City Council to inform and ultimately approve the BTC for the Burlington-Winooski Bridge Project. To help inform this BTC approval, staff has put together the following pros/cons list for consideration.

- BTC Pros:
 - Cost reduction for structure and surrounding improvements
 - Maintenance of traffic throughout project
 - Further away from dam to allow for balanced widening and buffer space
 - Possible future under bridge path opportunities
- BTC Cons:
 - Significant aesthetic change
 - The curved bridge is visually interesting it is a different experience than what exists currently which could be perceived as a con

While the intersection type (i.e. signalized) was already approved by CC, the bridge alignment will impact the intersection geometry. The following list is compiled for the intersection geometry that would result from the curved bridge BTC:

BTC Curved Bridge Intersection:

- | | |
|--|---|
| <ul style="list-style-type: none">○ Greenspace on both sides with better gateway and landscaping opportunities○ Roadway is further away from east side properties which provides activation space and separation○ Shorter pedestrian crossings (compared to on-alignment geometry) ranging from 2' to 22' shorter.○ Better for predominant vehicle movement US Route 7 - Riverside. | <ul style="list-style-type: none">○ Traffic calming with visual changes. Reduce the current ~0.5 mile site line○ Construction will not require full vehicular closure. |
|--|---|

On-Alignment Bridge Intersection

- Intersection crossings are longer than BTC
 - Colchester is 10' wider
 - Riverside is 20' wider
- Barrett crosswalk same
- Largest crosswalk would be 80' in on alignment (similar to Shelburne and Farrell St)
- Intersection geometry similar to existing and creates traditional 4 way geometry.
- Concept similar to the scoping study.
- Construction will require full closure to vehicular traffic.

DPW is recommending selection of the curved bridge alignment option for the replacement of Burlington-Winooski Bridge as the Base Technical Concept, and corresponding intersection geometry. The Agreements we have executed with the Vermont Agency of Transportation require the City of Burlington formally acknowledge the BTC with a Letter of Agreement for the Burlington-Winooski Bridge Project as well as the Colchester/Barrett/Riverside Intersection Reconfiguration (Attachment 3).

As noted under the Bid Process, procurement of the contractor and the final design will include conditions for which will need to be considered in their proposal/bid. Some of these prescriptive requirements include the bridge cross section which from downstream to upstream is a 15' shared-use path, 2' shoulder, four 11' travel lanes, 2' shoulder, and a 12' shared-use path.

Staff propose the following draft conditions to be included in the BTC Letter Agreement.

(DRAFT) Bridge Conditions:

- Maintains traffic in a capacity that will not result in a failure of the transportation grid within the surrounding area
- Construction does not increase emergency vehicle response by more than 5 minutes.

(DRAFT) Intersection Conditions:

- Incorporates the shortest crosswalks possible
- Includes a robust gateway design
- Provides adequate space for large tree species within green belt/amenity zones
- Provides seamless and safe bike access between roadway and shared use facilities

Through City Council and public engagement, additional comments and conditions will be added to those above to be included in the BTC Letter Agreements.

Timeline:

The project is currently still in the Conceptual Design phase and entering the Permitting phase. Solicitation of Constructors will begin this time next year. Construction will occur fall of 2027 and is anticipated to last for two years.

Previous Public Meetings:

- ***TEUC 5/3/23 – Letter of Support – Signalized Intersection**
- ***CC 5/15/23 – Letter of Support – Signalized Intersection**
- Public Meeting 9/19/23 – Project overview
- ***Winooski CC 10/6/23 – Finance and Maintenance Agreement**
- TEUC 12/19/23 – Project overview

- Burlington Walk Bike Council 1/3/24 – Project overview
- Design Advisory Board 1/9/24 – Project overview
- CC 1/16/24 – Project overview
- Public Meeting 1/23/24 – Project overview
- ***CC 4/15/24 – Finance and Maintenance Agreement**
- TEUC 4/23/24 – Written communication with CC follow up Q/A.
- ***Winooski CC 10/21/24 – Base Technical Concept Approval**
- TEUC 10/29/24 – Informational, BTC overview
 - o Follow-up Councilor Q/A posted here:
<https://burlingtonvt.portal.civicclerk.com/event/7658/files/agenda/12272>

Upcoming Public Meetings:

- CC 11/18/24 – Informational, BTC overview
- DPW Commission 11/20/24 – Project overview
- BWBC 12/4/24 – Project overview
- Public Meeting 12/11/24 – Open House, project overview
- ***CC 12/18/24 – Approval of BTC**

*** Indicates action/approval.**

Attachments:

1. BTC Estimate
2. BTC Plans
3. BTC Approval Letter
 - Burlington – Winooski Bridge BF RAIZ(2)
 - Colchester/Barrett/Riverside Intersection STP5000(29)
4. Project FAQ Sheet

BURLINGTON-WINOOSKI BF RAIZ(2) Draft Base Technical Concept - Engineer's Estimate Last Revised: October 17, 2024	
DESCRIPTION	Estimated Cost
Roadway Cost Estimate Subtotal	\$1,100,000
Burlington Path Cost Estimate Subtotal	\$1,275,000
Structures Cost Estimate Subtotal	\$33,210,000
Traffic Control and Off-Site Improvements	\$5,658,500
Mobilization	\$3,663,500
Misc. Items, Contingency, Escalation	\$12,721,898
Utility Relocation	\$500,000
ROW	\$2,500,000
Preliminary Engineering	\$6,000,000
Designer-Builder Design Fee	\$4,616,000
Construction Engineering	\$5,770,000
Estimated Total \$ 77,100,000	

REVIEWER NOTES:

1. THIS COMBINED PROJECT (BURLINGTON-WINOOSKI BF RAIZ(2) AND BURLINGTON STP 5000(29)) WILL USE A DESIGN-BUILD CONTRACTING APPROACH.
2. THIS PLAN SUBMISSION IS INTENDED TO SUPPORT THE BASE TECHNICAL CONCEPT (BTC) MUNICIPAL COORDINATION AND APPROVAL PROCESS. THESE PLANS DO NOT REFLECT A FINAL DESIGN, WHICH WILL BE COMPLETED BY OTHERS UPON CONTRACT AWARD IN COMPLIANCE WITH THE REQUIREMENTS OF THE DESIGN BUILD CONTRACT DOCUMENT.
3. PAVEMENT STRUCTURE SHOWN ON TYPICAL SECTIONS IS ASSUMED BASED ON SIMILAR ROADWAYS, AND SUBJECT TO CHANGE PRIOR TO RFP RELEASE.
4. RESTORATION DETAILS OF IMPACTED AREAS ARE NOT SHOWN ON THESE PLANS.
5. FINAL DETERMINATION ON INCLUSION OF THE UNDER-BRIDGE PATH SHOWN ON THE BURLINGTON SIDE WILL BE MADE AT A LATER DATE.
6. THE LAYOUT FOR THE PROPOSED PATH CONNECTING THE MAIN STREET SIDEWALK TO THE UNDER-BRIDGE PATH IN WINOOSKI IS CONCEPTUAL. THE FINAL LOCATION AND TYPICAL SECTION WILL BE DETERMINED AT A LATER DATE.

STATE OF VERMONT
AGENCY OF TRANSPORTATION



PROPOSED IMPROVEMENT
CITIES OF BURLINGTON AND WINOOSKI
COUNTY OF CHITTENDEN
COLCHESTER AVE & RIVERSIDE AVE
(US ROUTE 2 & 7) - PRINCIPAL ARTERIAL

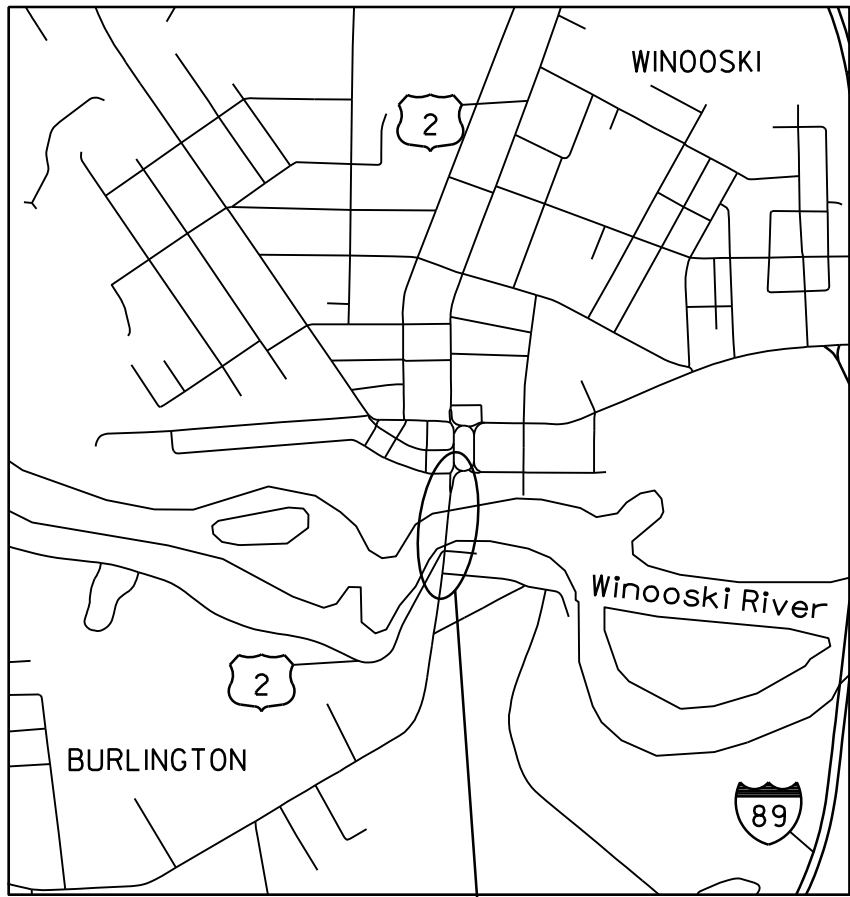
- PROJECT LOCATION:

LOCATED IN THE COUNTY OF CHITTENDEN, IN THE CITIES OF BURLINGTON AND WINOOSKI, ON COLCHESTER AVE AND RIVERSIDE AVE (US ROUTES 2 AND 7). THE INTERSECTION AND THE BRIDGE ARE LOCATED APPROXIMATELY 1.2 MILES SOUTH OF THE JUNCTION WITH INTERSTATE 89, EXIT 16.
- PROJECT DESCRIPTION:

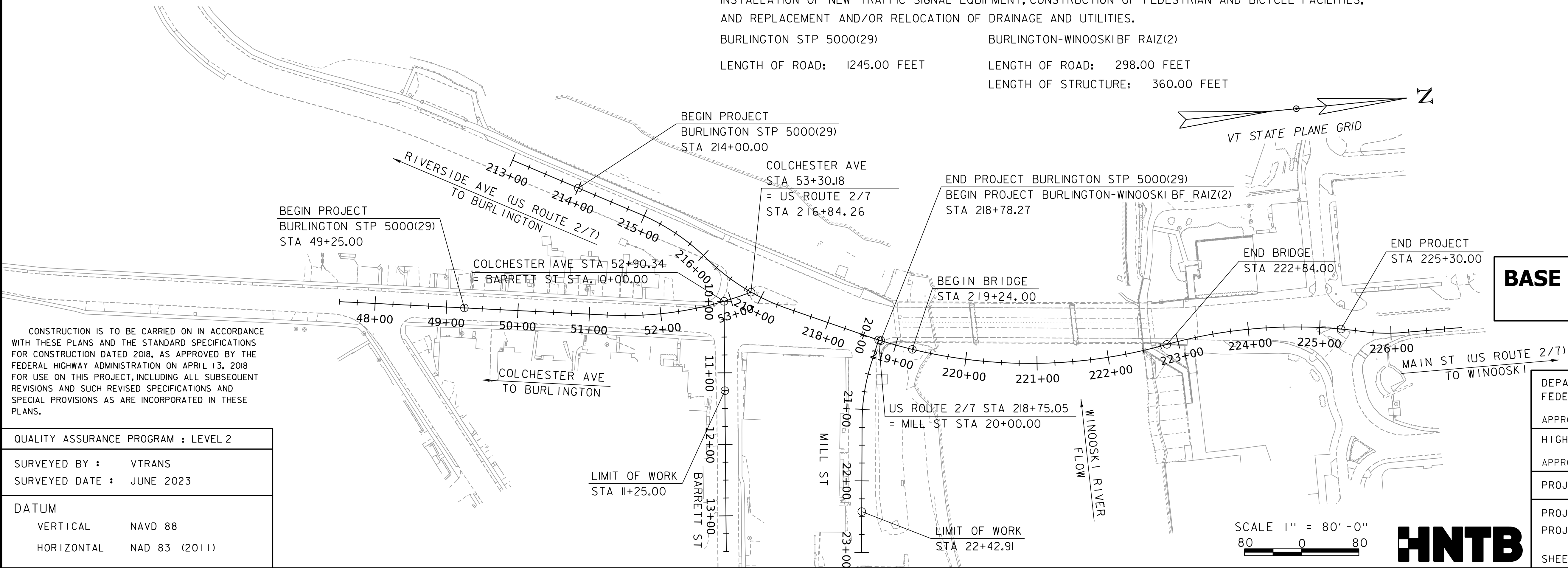
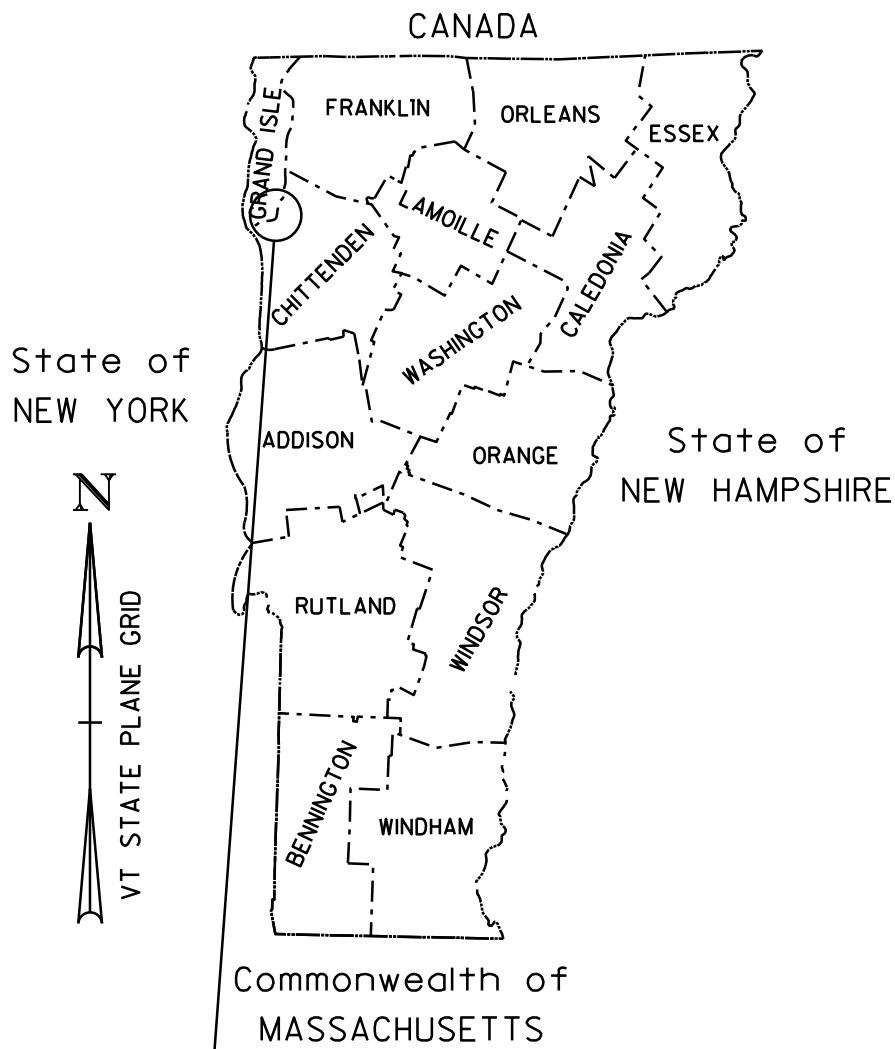
FULL REPLACEMENT OF THE EXISTING BRIDGE WITH ASSOCIATED ROADWAY AND CHANNEL WORK, RECONSTRUCTION OF THE INTERSECTION INCLUDING REALIGNMENT OF THE RIVERSIDE AVE APPROACH, INSTALLATION OF NEW TRAFFIC SIGNAL EQUIPMENT, CONSTRUCTION OF PEDESTRIAN AND BICYCLE FACILITIES, AND REPLACEMENT AND/OR RELOCATION OF DRAINAGE AND UTILITIES.
- BURLINGTON STP 5000(29)

BURLINGTON-WINOOSKI BF RAIZ(2)
- LENGTH OF ROAD: 1245.00 FEET

LENGTH OF ROAD: 298.00 FEET
LENGTH OF STRUCTURE: 360.00 FEET



BURLINGTON-WINOOSKI BF RAIZ(2) &
BURLINGTON STP 5000(29)



CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2018, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON APRIL 13, 2018 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

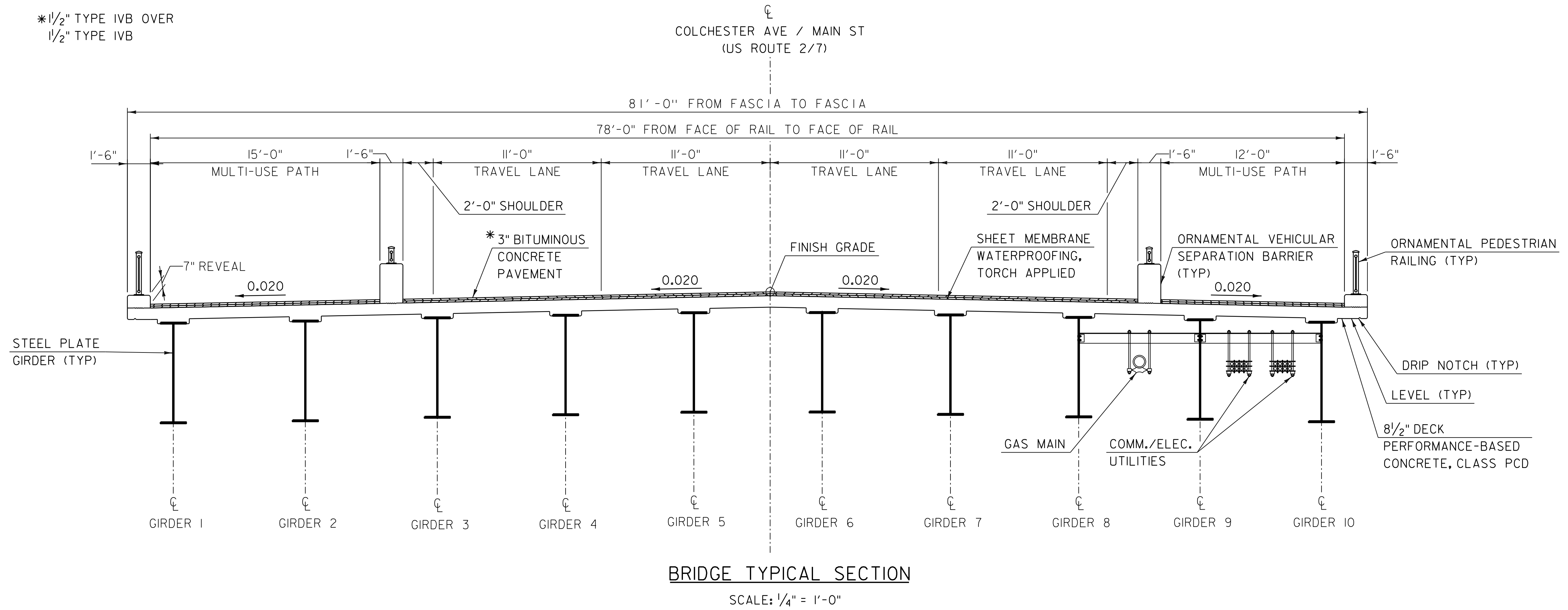
QUALITY ASSURANCE PROGRAM : LEVEL 2	
SURVEYED BY :	VTRANS
SURVEYED DATE :	JUNE 2023
DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (2011)

BASE TECHNICAL CONCEPT
17-OCT-2024

DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATOR
APPROVED _____ DATE _____
HIGHWAY DIVISION, CHIEF ENGINEER
APPROVED _____ DATE _____
PROJECT MANAGER : ROBERT KLINEFELTER, P.E. MICHAEL LACROIX
PROJECT NAME : BURLINGTON-WINOOSKI PROJECT NUMBER : STP 5000 (29) & BF RAIZ (2)
SHEET 1 OF 11 SHEETS

SCALE 1" = 80' - 0"
80 0 80

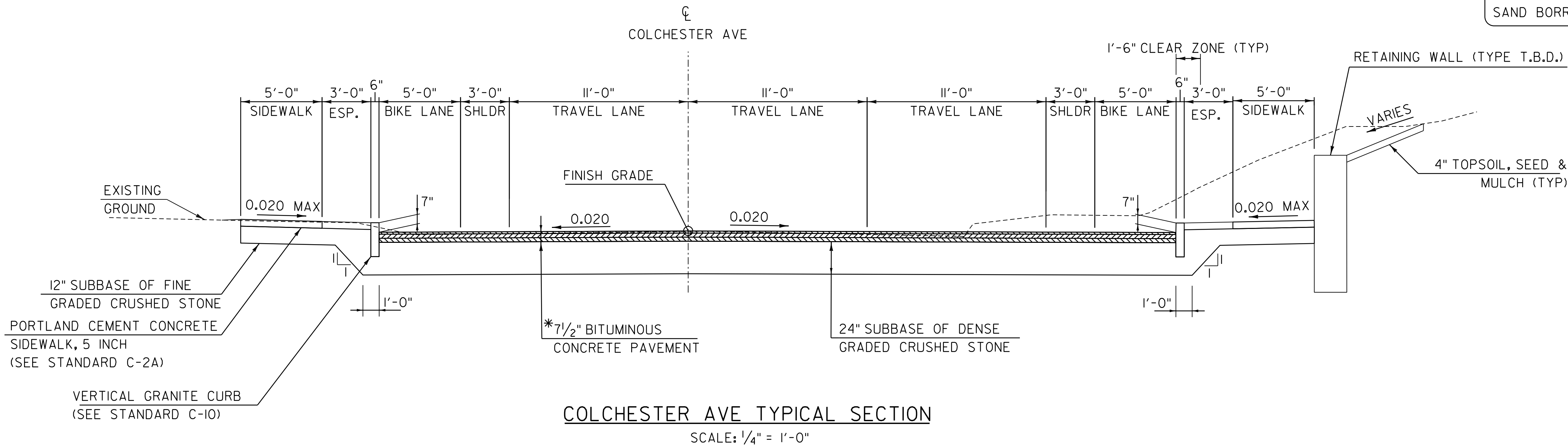




PROJECT NAME: BURLINGTON-WINOOSKI	
PROJECT NUMBER: STP 5000(29) & BF RAIZ(2)	
FILE NAME: z22j351typ.dgn	PLOT DATE: 17-OCT-2024
PROJECT LEADER: J. OLUND	DRAWN BY: K. BELISLE
DESIGNED BY: T. POULIN	CHECKED BY: D. GOBEIL
BRIDGE TYPICAL SECTION	SHEET 2 OF 11



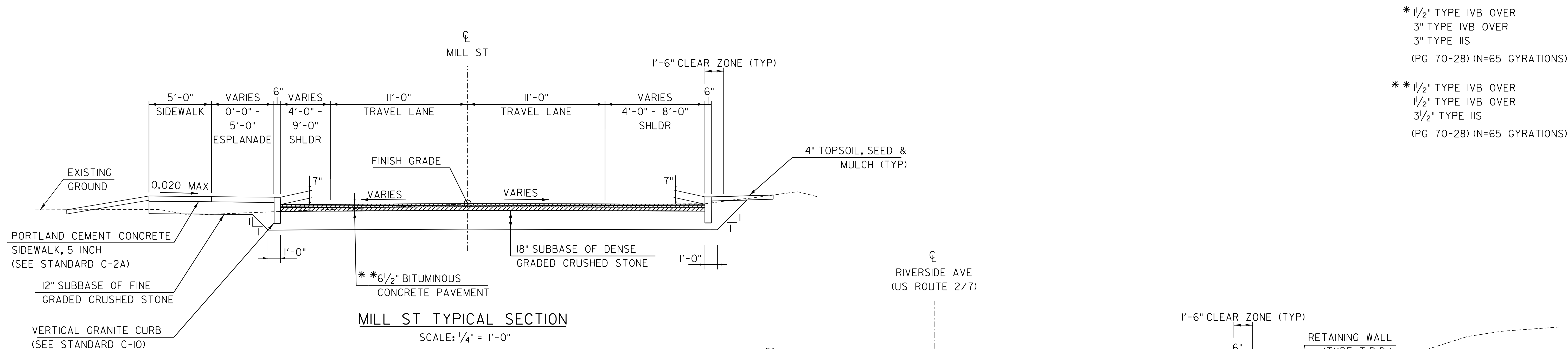
MATERIAL TOLERANCES	
(IF USED ON PROJECT)	
SURFACE	
- PAVEMENT (TOTAL THICKNESS)	+/- 1/4"
- AGGREGATE SURFACE COURSE	+/- 1/2"
SUBBASE	+/- 1"
SAND BORROW	+/- 1"



*1 1/2" TYPE IVB OVER
3" TYPE IVB OVER
3" TYPE IIS
(PG 70-28) (N=65 GYRATIONS)

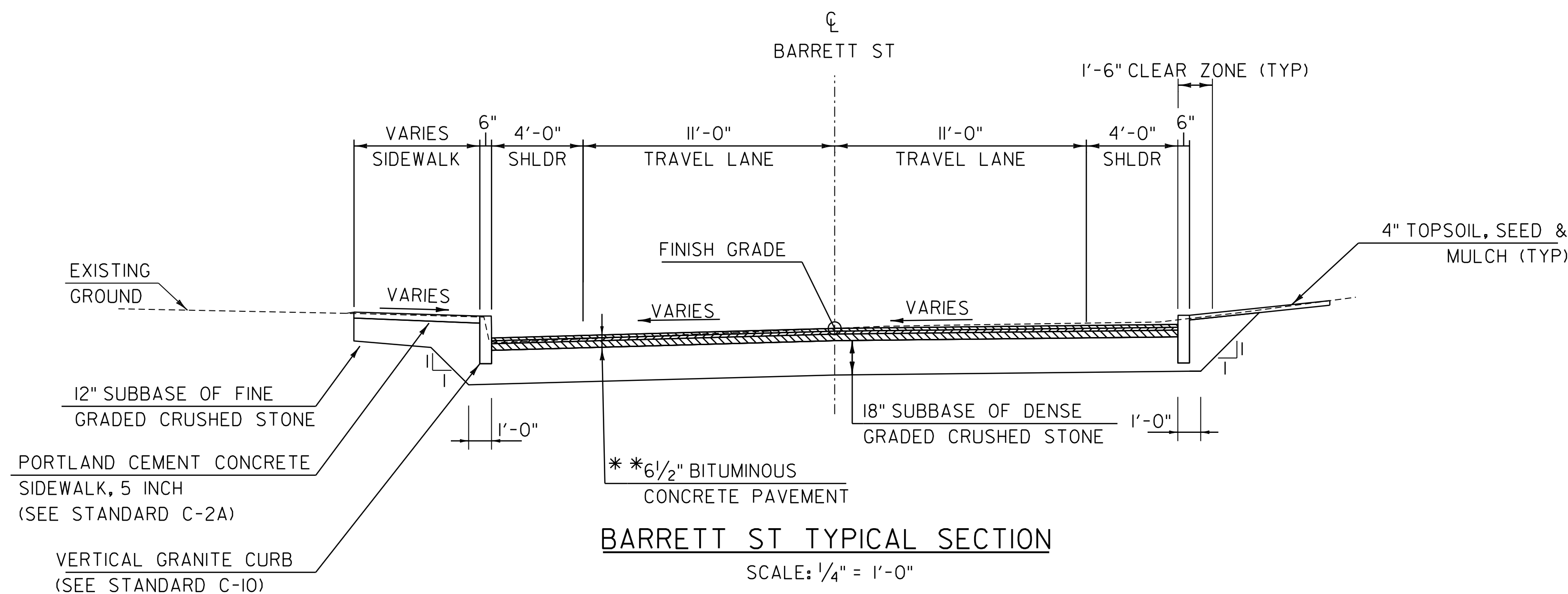
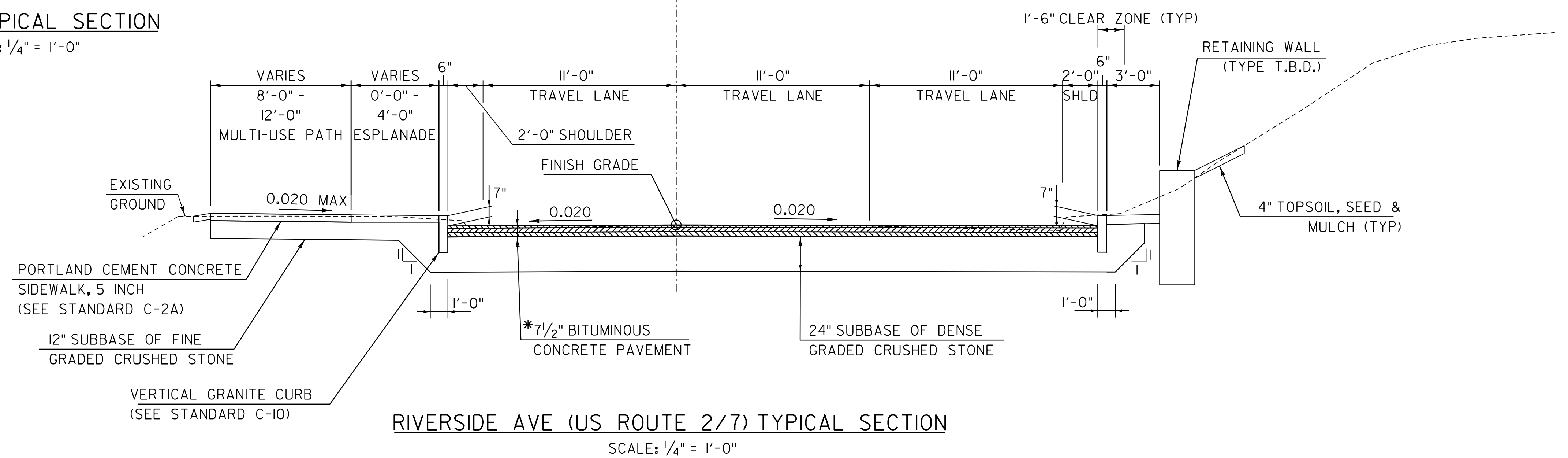
PROJECT NAME:	BURLINGTON-WINOOSKI
PROJECT NUMBER:	STP 5000(29) & BF RAIZ(2)
FILE NAME:	z22j351typ.dgn
PROJECT LEADER:	J. OLUND
DESIGNED BY:	C. TOBIN
TYPICAL SECTIONS:	1
PLOT DATE:	17-OCT-2024
DRAWN BY:	C. TOBIN
CHECKED BY:	S. SPEAR
SHEET	3 OF 11





* 1 1/2" TYPE IVB OVER
3" TYPE IVB OVER
3" TYPE IIS
(PG 70-28) (N=65 GYRATIONS)

* * 1 1/2" TYPE IVB OVER
1 1/2" TYPE IVB OVER
3 1/2" TYPE IIS
(PG 70-28) (N=65 GYRATIONS)



PROJECT NAME: BURLINGTON-WINOOSKI	
PROJECT NUMBER: STP 5000(29) & BF RAIZ(2)	
FILE NAME: z22j351typ.dgn	PLOT DATE: 17-OCT-2024
PROJECT LEADER: J. OLUND	DRAWN BY: C. TOBIN
DESIGNED BY: C. TOBIN	CHECKED BY: S. SPEAR
TYPICAL SECTIONS 2	SHEET 4 OF 11

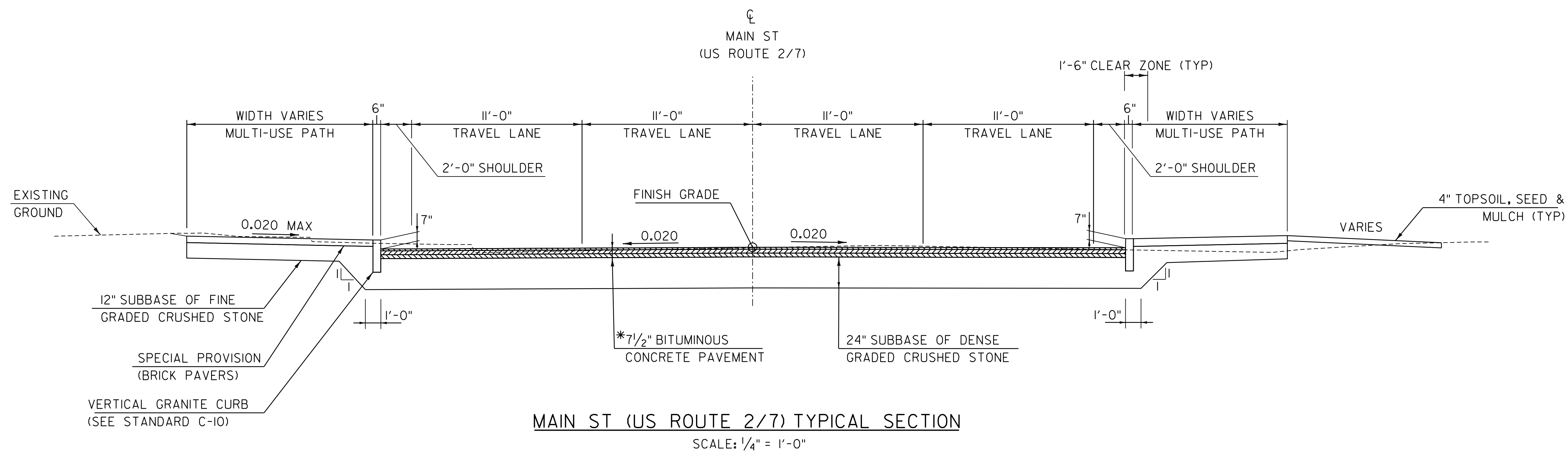
HNTB

MATERIAL TOLERANCES

(If Used on Project)

SURFACE	
- PAVEMENT (TOTAL THICKNESS)	+/- 1/4"
- AGGREGATE SURFACE COURSE	+/- 1/2"
SUBBASE	+/- 1"
SAND BORROW	+/- 1"

* 1 1/2" TYPE IVB OVER
3" TYPE IVB OVER
3" TYPE IIS
(PG 70-28) (N=65 GYRATIONS)

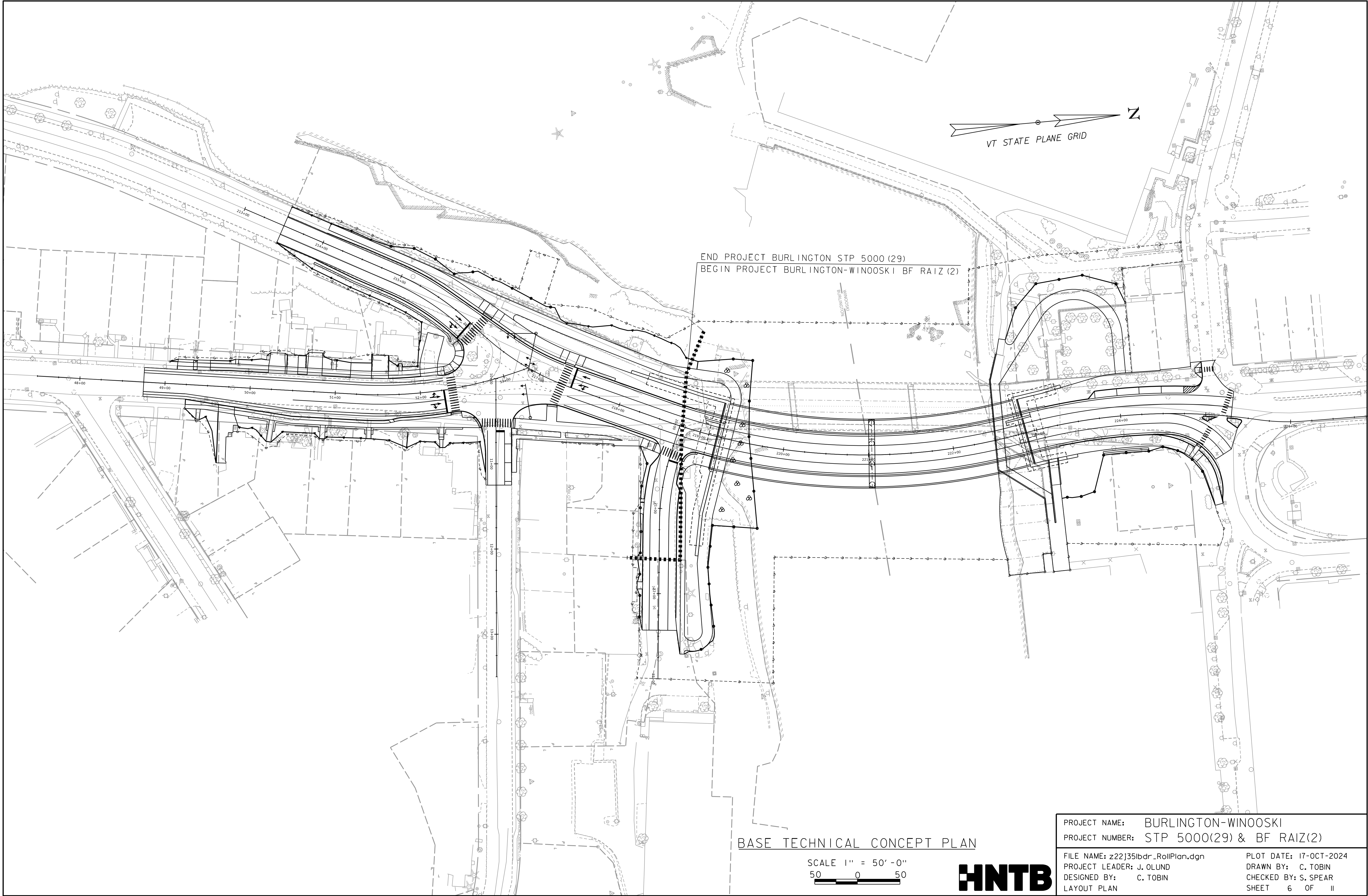


PROJECT NAME: BURLINGTON-WINOOSKI
PROJECT NUMBER: STP 5000(29) & BF RAIZ(2)

FILE NAME: z22j35l+yp.dgn
PROJECT LEADER: J. OLUND
DESIGNED BY: C. TOBIN
TYPICAL SECTIONS 3

PLOT DATE: 17-OCT-2024
DRAWN BY: C. TOBIN
CHECKED BY: S. SPEAR
SHEET 5 OF 11

HNTB

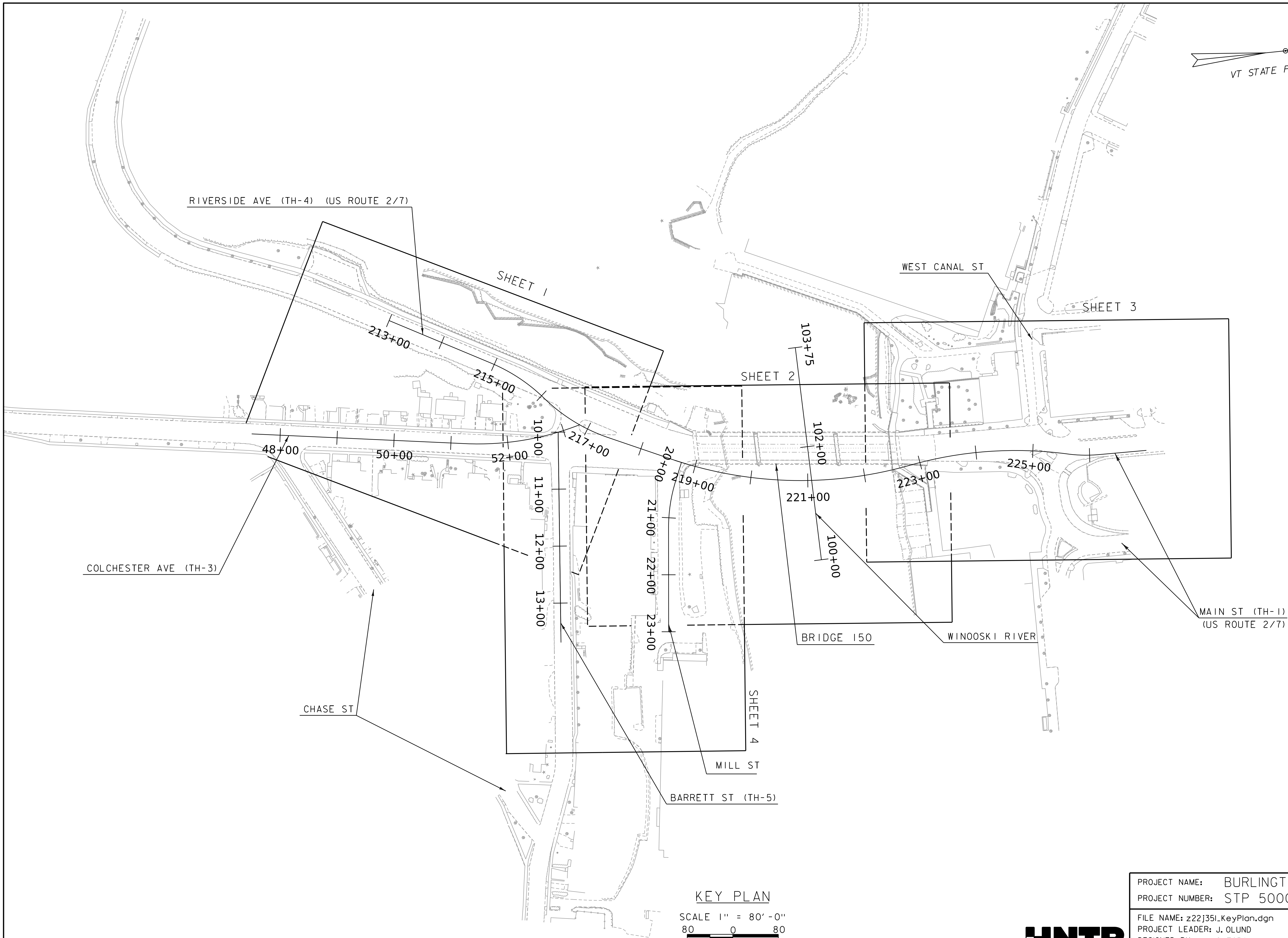
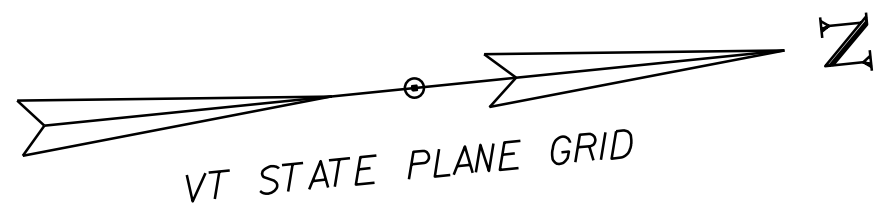


BASE TECHNICAL CONCEPT PLAN

SCALE 1" = 50' - 0"
50 0 50



PROJECT NAME:	BURLINGTON-WINOOSKI
PROJECT NUMBER:	STP 5000(29) & BF RAIZ(2)
FILE NAME:	z22j35lbr_RollPlan.dgn
PROJECT LEADER:	J. OLUND
DESIGNED BY:	C. TOBIN
LAYOUT PLAN	
PLOT DATE:	17-OCT-2024
DRAWN BY:	C. TOBIN
CHECKED BY:	S. SPEAR
SHEET	6 OF 11

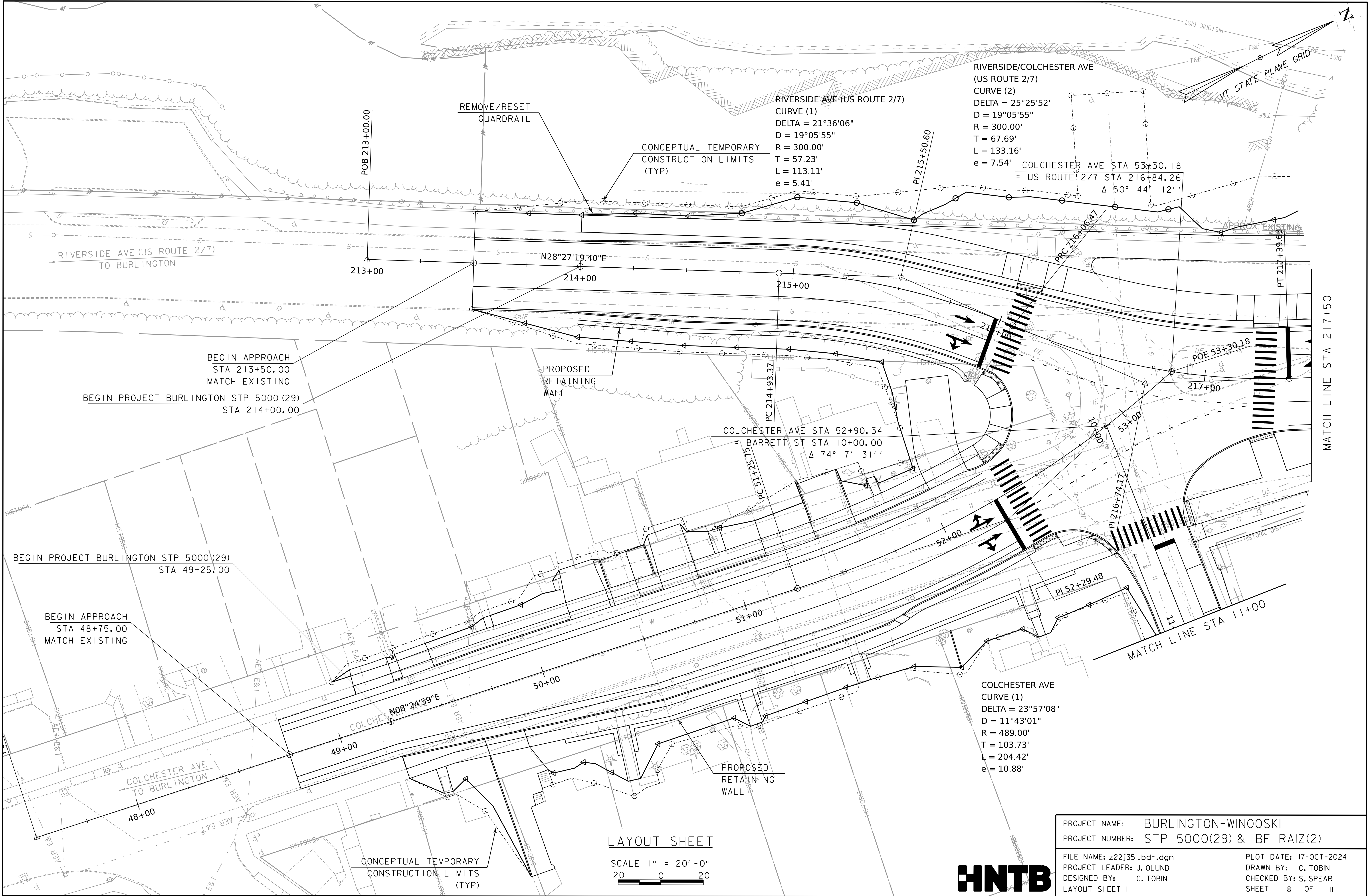


KEY PLAN

SCALE 1" = 80' - 0"
80 0 80



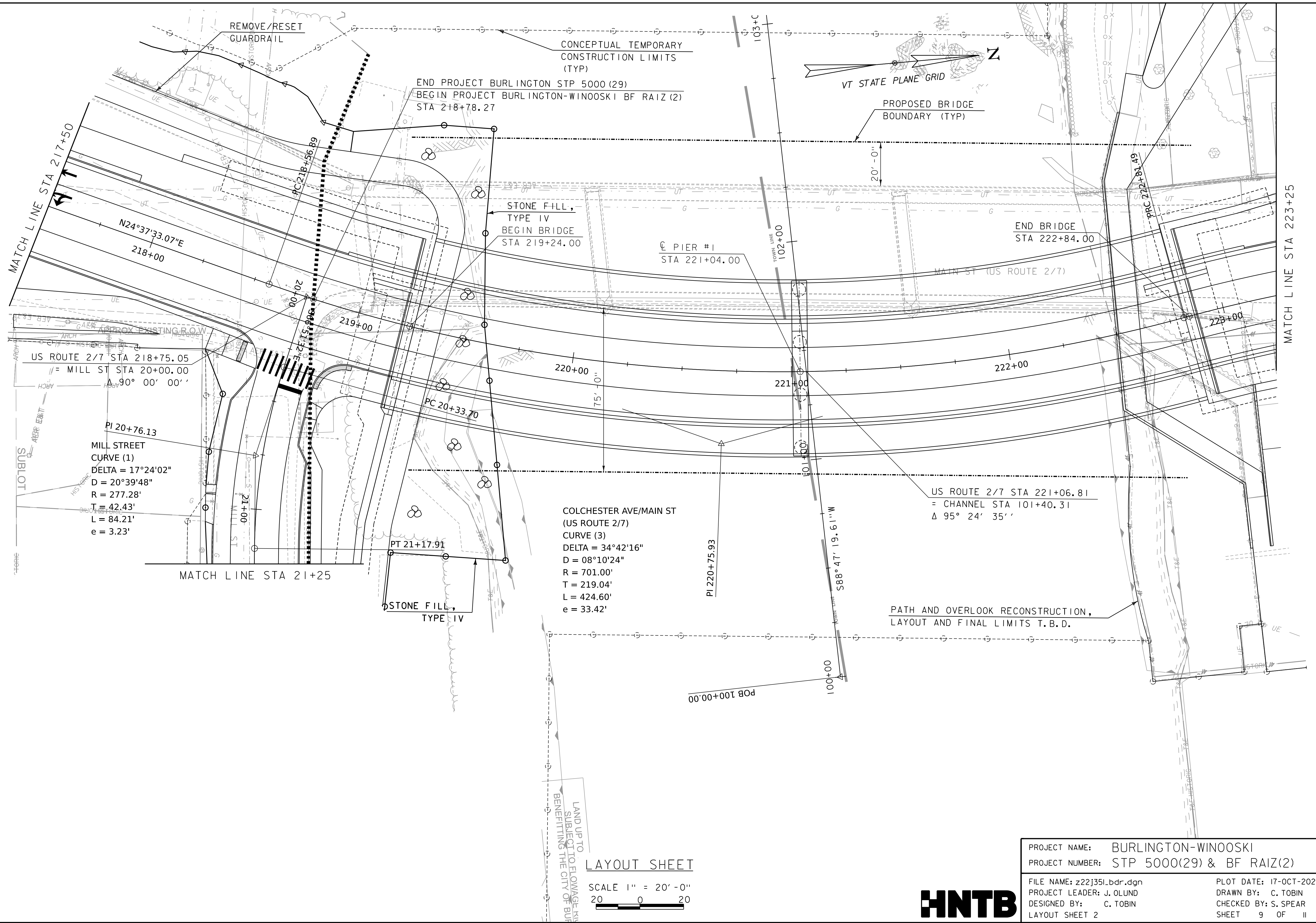
PROJECT NAME: BURLINGTON-WINOOSKI	
PROJECT NUMBER: STP 5000(29) & BF RAIZ(2)	
FILE NAME: z22j35l.KeyPlan.dgn	PLOT DATE: 17-OCT-2024
PROJECT LEADER: J. OLUND	DRAWN BY: C. TOBIN
DESIGNED BY: C. TOBIN	CHECKED BY: S. SPEAR
KEY PLAN	SHEET 7 OF 11

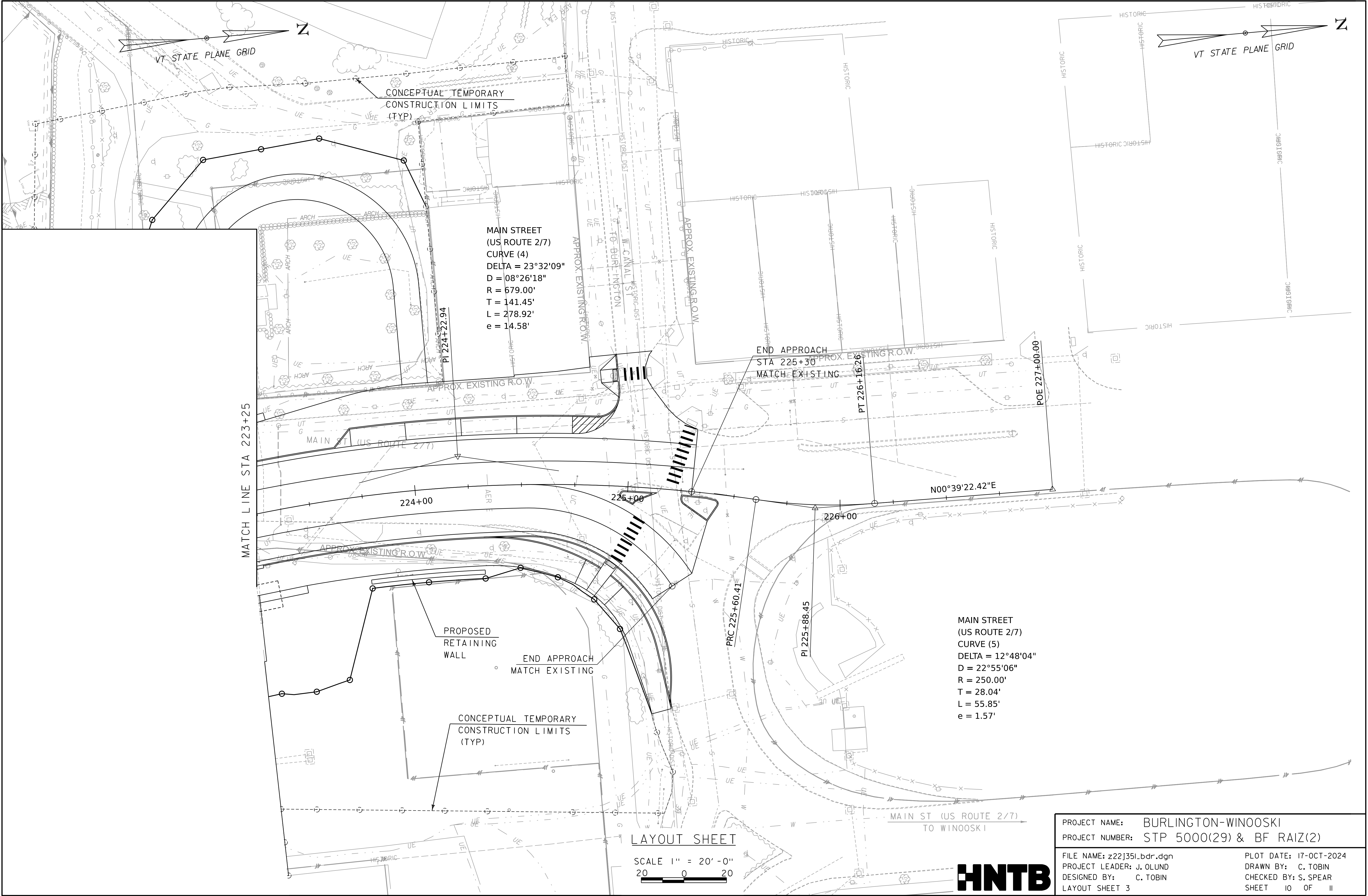


LAYOUT SHEET
SCALE 1" = 20' - 0"
20 0 20

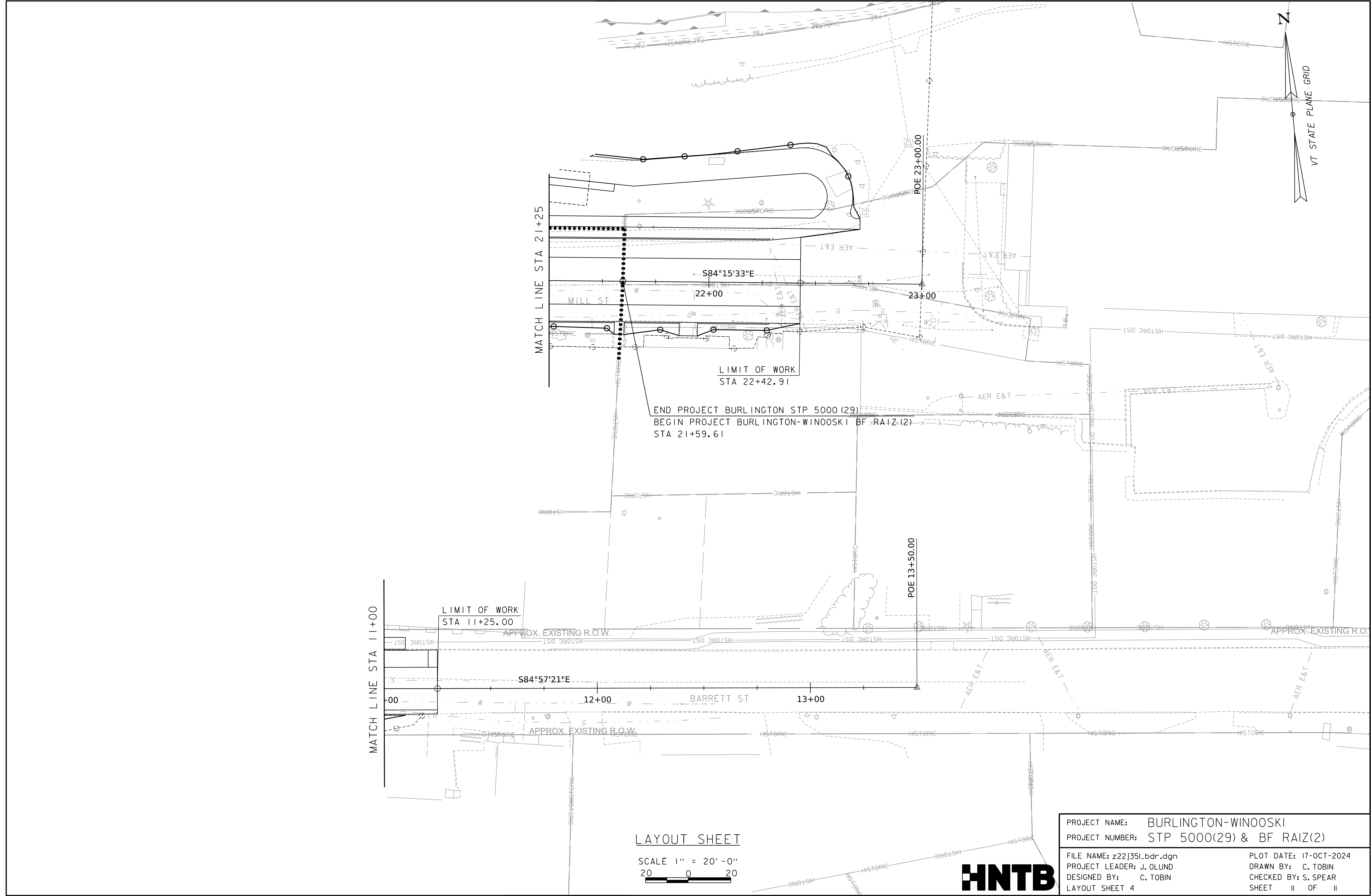


PROJECT NAME: BURLINGTON-WINOOSKI	
PROJECT NUMBER: STP 5000(29) & BF RAIZ(2)	
FILE NAME: z22j35l.bdr.dgn	PLOT DATE: 17-OCT-2024
PROJECT LEADER: J. OLUND	DRAWN BY: C. TOBIN
DESIGNED BY: C. TOBIN	CHECKED BY: S. SPEAR
LAYOUT SHEET I	SHEET 8 OF 11





PROJECT NAME: BURLINGTON-WINOOSKI	
PROJECT NUMBER: STP 5000(29) & BF RAIZ(2)	
FILE NAME: z22j35l.bdr.dgn	PLOT DATE: 17-OCT-2024
PROJECT LEADER: J. OLUND	DRAWN BY: C. TOBIN
DESIGNED BY: C. TOBIN	CHECKED BY: S. SPEAR
LAYOUT SHEET 3	SHEET 10 OF 11



LAYOUT SHEET

SCALE 1" = 20' - 0"
20 0 20



Attachment 3: BTC Approval Letter

To: Michael LaCroix, VTrans Traffic Project Manager

From: Chapin Spencer, Burlington Director of Public Works

Subject: **Burlington STP 5000(29) - Colchester Avenue, Riverside Avenue and Barrett Street Intersection**

Date: _____

A meeting for the subject project was held on Monday, December 9, 2024, as part of the Burlington City Council meeting, to present and discuss the Base Technical Concept (BTC) Plans and cost estimates. A summary of the project development, including public input, design iterations, and traffic management were presented to the Council at this meeting. The presentation included details on the design-build contracting method, and how the Request for Proposals (RFP) will contain both prescriptive and flexible requirements for final design and construction. BTC Plans will be included in the RFP as a conceptual design that satisfies the RFP requirements. The RFP will ultimately become the construction contract and will allow some flexibility for the design-build team to develop a final design that differs from the BTC Plans within the limits established in the RFP. RFP language will be developed by VTrans with review and input from the Burlington Department of Public Works.

Based on this presentation, the City of Burlington approves the Base Technical Concept Plans with the following details:

- 1. A realignment of Colchester Avenue and/or Riverside Avenue to create a signalized intersection with Barrett Street.
- 2. A stop-controlled approach from Mill Street to Colchester Avenue.
- 3. Widening of Colchester Avenue to allow for 2 lanes northbound approaching the signalized intersection.
- 4. Crosswalks at all four approaches of the new signalized intersection.
- 5. Bike lanes and/or shared use paths along Colchester Avenue and Riverside Avenue connecting to the shared use paths on the new bridge.
- 6. Bike and Pedestrian intersection mobility improvements consisting of either leading pedestrian intervals or an exclusive pedestrian phase.
- 7. Retaining walls on the east sides of Colchester Avenue and Riverside Avenue to support the revised roadway layouts.

Details shown on the BTC Plans that are not specifically noted above are considered conceptual and may change between City approval of the BTC Plans and advertisement of the RFP, with review and input from the Burlington Department of Public Works.

The City of Burlington would like to make the following comments regarding this project:

Signature

Printed Name

State of Vermont
Highway Division
Structures Design Section
219 North Main Street
Barre, VT 05641

Agency of Transportation

[phone] 802-595-4403
[ttd] 800-253-0191

Chapin Spencer
Burlington Director of Public Works
645 Pine Street
Burlington, VT 05401

October 22, 2024

Project Name: Burlington-Winooski BF RAIZ(2)

Structure Identification: Bridge 150 on U.S. Route 2/7 (Riverside Ave.) over the Winooski River

Dear Mr. Spencer:

VTrans has completed work on the Base Technical Concept (BTC) for the above-referenced project. BTC plans and cost estimates are attached for the City's review and approval in accordance with the Finance and Maintenance Agreement. Please return the attached form with any comments that the City has by December 20, 2024.

This bridge replacement project is being progressed concurrently with an intersection safety improvement project, located immediately south of the bridge in Burlington, with the intent of constructing the two projects under one contract. However, this letter is only applicable to the bridge replacement project. The physical delineation between the two projects is represented on the attached plans.

Ownership and maintenance of the bridge is the joint responsibility of the City of Burlington and the City of Winooski. The funding split for participating project costs, including preliminary engineering, right-of-way, and construction costs, is 80% Federal, 10% State, 5% City of Burlington, and 5% City of Winooski. The City of Burlington will be responsible for 100% of non-participating project costs that are specified in the Finance and Maintenance Agreement. The current construction cost estimate is \$68,600,000 including construction engineering, contingency, and inflation. Our current preliminary engineering and right-of-way cost estimates total \$8,500,000 (of which we have spent \$2,645,065) for an overall total project cost estimate of \$77,100,000.

The project will be advertised through a design-build contracting method, with the formal solicitation to contractors anticipated in spring of 2026. The design-build contracting method requires the contractor to complete the final design as well as construct the project. This allows the contractor to tailor the project to meet their preferred approach to construction, which will help reduce cost and schedule. All of the contractor's work will be in conformance with contractual obligations being developed by VTrans with review and input from the Burlington Department of Public Works.

The next step in our process is to acquire rights from adjacent properties. We are in the process of scheduling meetings with affected property owners, and we welcome the City to attend these meetings. Although dates and durations are partially dependent upon the contractor's approach, the final design is anticipated to occur in 2027, construction is anticipated to begin in the fall of 2027, and the overall construction duration is expected to last three construction seasons.

If you have questions, please do not hesitate to contact me.

Sincerely,

Robert Klinefelter

Robert Klinefelter, P.E.
Structures Project Manager



To: Robert Klinefelter, P.E. VTrans Structures Project Manager

From: Chapin Spencer, Burlington Director of Public Works

Subject: **Burlington-Winooski BF RAIZ(2), Bridge 150 on U.S. Route 2/7 (Riverside Ave.) over the Winooski River**

Date: _____

A meeting for the subject project was held on Monday, December 9, 2024, as part of the Burlington City Council meeting, to present and discuss the Base Technical Concept (BTC) Plans and cost estimates. A summary of the project development, including public input, design iterations, and traffic management were presented to the Council at this meeting. The presentation included details on the design-build contracting method, and how the Request for Proposals (RFP) will contain both prescriptive and flexible requirements for final design and construction. BTC Plans will be included in the RFP as a conceptual design that satisfies the RFP requirements. The RFP will ultimately become the construction contract and will allow some flexibility for the design-build team to develop a final design that differs from the BTC Plans within the limits established in the RFP. RFP language will be developed by VTrans with review and input from the Burlington Department of Public Works.

- Based on this presentation, the City of Burlington approves the Base Technical Concept Plans with the following details:
- 1. A bridge cross section consisting of four, 11’-0” lanes; two, 2’-0” shoulders; a 15’-0” shared-use path on the western side of the bridge; a 12’-0” shared-use path on the eastern side of the bridge; and concrete barrier separation between vehicular travel lanes and the shared-use paths.
 - 2. A two-span bridge with an overall length of approximately 360-ft.
 - 3. A fully curved bridge with an alignment shifted to the east of the existing bridge.
 - 4. An under-bridge path on the Winooski side.
 - 5. A path connecting the shared-use path on the western side of the bridge to the under-bridge path, through Winooski Falls Park.
 - 6. Traffic management that maintains bicycle and pedestrian access and two northbound traffic lanes across the bridge throughout the duration of construction, closure of both southbound traffic lanes with an offsite detour for approximately 4-6 months, and only one southbound traffic lane on the bridge for approximately 12-16 months (open to Riverside Avenue only). Temporary lane closures will be permitted throughout construction at times of lower traffic volumes that can be adequately maintained with reduced lane capacity. Short-term stoppages of traffic, bicycles, and pedestrians will be permitted when necessary for the safety of the traveling public.

Details shown on the BTC Plans that are not specifically noted above are considered conceptual and may change between City approval of the BTC Plans and advertisement of the RFP, with review and input from the Burlington Department of Public Works.

The City of Burlington would like to make the following comments regarding this project:

Signature Printed Name



Burlington-Winooski
BF RAIZ(2) Burlington & STP 5000(2) Burlington
FAQ Page

What groups/organizations does the project team consist of?

The project team includes the Vermont Agency of Transportation (VTrans), the Cities of Burlington and Winooski, the Chittenden County Regional Planning Commission (CCRPC) and HNTB, the design consultant. The project is administered by VTrans on behalf of the Cities, with HNTB providing design services and CCRPC acting in a support/advisory role.

Why does the bridge need to be replaced?

The bridge has been in service for nearly 100 years and is reaching the end of its service life. Due to continued deterioration and its narrow width that no longer meets the needs of the community, a decision was made to replace the bridge. Refer to the Project's Scoping Report (see Project Documents page on this website) for additional information.

When will construction of the new bridge occur?

Active construction is anticipated to begin in 2027. Intermittent onsite field work and data collection will be occurring over the next few years to support the design efforts.

How long will construction last?

Construction is anticipated to take 2 to 3 years. This duration will continue to be evaluated as the design progresses.

The project is anticipated to be complete in 2030.

What is Design Build?

Design-Build is a project delivery method that allows VTrans to execute a single, fixed fee contract for construction and final design. Design-Build has two primary phases: preliminary design and construction. The preliminary design phase will occur over the next few years as the project team establishes project-specific criteria and impact limitations that the construction team will need to satisfy.

The selected construction team then completes the design and construction for their solution that meets criteria established by the project team. This contracting method allows the project to be contracted more quickly, for construction to commence earlier than traditional construction contracting methods and promotes increased innovation and cost-savings measures due to the competitive bid environment among contractor teams. Refer to



https://www.fhwa.dot.gov/ipd/alternative_project_delivery/defined/new_build_facilities/design_build.aspx for additional information.

What is accelerated bridge construction?

Accelerated Bridge Construction (ABC) makes use of prefabricated elements to minimize the amount of construction work on site. Elements for bridges are built off site in a fabrication plant or nearby staging yard. Once they are completed, these elements can be brought to the site and be quickly installed with less impact to the traveling public than conventional bridge construction methods. By employing ABC, impacts to traffic can be reduced from months to just weeks or even days. Refer to <https://vtrans.vermont.gov/highway/structures-hydraulics/accelerated-bridge-program/faqs> for additional information.

How will pedestrians and bicyclists cross the river during construction?

Pedestrian and bicyclist facilities will be provided throughout construction. Short term or intermittent closures may be required.

Will the project include work to the intersection south of the bridge in Burlington?

Yes. This overall project will include intersection improvements immediately south of the bridge, involving Riverside Street, Colchester Avenue, Mill Street, and Barrett Street. The improvements will generally consist of roadway reconstruction and traffic signal modifications, with the goal of improving safety and mobility for all users.

The existing three-way intersection will be reconfigured, thereby simplifying geometry to feature a four-way intersection with modernized traffic control and enhanced bicycle and pedestrian facilities.

Was a roundabout considered for the intersection project?

A roundabout at this site was evaluated as part of the scoping study. Although roundabouts have been successfully implemented throughout Vermont, this particular site has notable constraints that led to the roundabout option being ruled out. Specifically, the width required for a roundabout to convey the traffic volume at this site resulted in impacts to historic properties and impacts to the steep slopes adjacent to the Winooski River. Additionally, the topography of the site would result in undesirable roadway grades along the roundabout.

How will the proposed intersection improvements address the needs of pedestrians and cyclists?

The intersection will feature crosswalks with ADA accommodations and the revised intersection configuration aims to reduce pedestrian and bicycle crossing distances. The proposed traffic signal phasing will result in improved pedestrian safety through one or



more of the following: exclusive pedestrian phases, concurrent pedestrian phases, leading pedestrian intervals, restricted turn movements on red, and pedestrian detection. The signal design is in progress and the intent is to balance improvements to mobility for all modes of travel, without compromising safety.

The intersection geometry also significantly reduces vehicular conflict points compared to the existing intersection complex, which reduces driver confusion and contributes to a safer intersection.

Who is paying for this project?

The bridge project has received a federal RAISE Grant that will cover a portion of the project construction. The bridge project costs will be split as follows: 80% Federal, 10% State, 5% City of Burlington, and 5% City of Winooski.

Construction of the intersection immediately south of the bridge is 100% Federally funded.

What will the new bridge look like?

In general, the bridge is anticipated to improve mobility for all users by incorporating slightly wider travel lanes and wider multi-use paths/sidewalks to accommodate pedestrians and bicycles. Overall, the new bridge will be approximately 24 feet wider than the existing bridge. However, much of the remaining appearance of the new bridge is yet to be determined, and some features will be influenced by public input.

Will the new bridge have four traffic lanes?

Yes. The new bridge will have the same number of traffic lanes as the existing bridge to accommodate the high volume and types of vehicles (e.g., buses and emergency vehicles) that cross the Winooski River at this location. In addition to traffic volume, the four lanes will:

- Allow for future flexibility in repurposing space on the bridge if travel modes change.
- Act as an emergency crossing in the event of a major accident on I-89.
- Better accommodate emergency vehicle access over the bridge, compared to a narrower bridge.
- Better accommodate future maintenance on the bridge by allowing traffic to be shifted around.

How wide will the traffic lanes be on the new bridge?

The existing travel lanes on the bridge are approximately 10 feet and 6 inches wide. The proposed travel lanes are 11 feet wide. The proposed lane widths on the bridge are governed by the Vermont State Design Standards and are based on the roadway classification, traffic volume, and design speed. This roadway is a designated truck route



and is classified as a Principal Arterial, which indicates that this is a critical roadway with a relatively high traffic volume that includes wide vehicles such as buses and emergency services. Given the urban context, the lower end of the allowable width for travel lanes on this type of roadway are proposed for this project.

Will the new bridge have roadway shoulders? If so, why?

Yes. Narrow, 2-foot-wide shoulders will be added adjacent to the traffic lanes. This is the minimum shoulder width, as per the Vermont State Design Standards, for this type of roadway. The shoulders provide several benefits, including:

- A buffer between vehicles and the barrier separating the roadway and multi-use path.
- Providing snow storage following winter storms.
- Improving vehicle safety by separating stormwater runoff from the travel lanes.

Are traffic calming features being considered in the design?

The project team has received comments related to concerns with vehicle speeds on the bridge and is in the process of assessing traffic calming measures that may be appropriate for inclusion in the project. Traffic calming will likely consist primarily of striping, signing, and roadway layout. As part of the intersection improvements, Riverside Avenue and Colchester Avenue may be realigned such that low vehicular speeds will be required to navigate the intersection. The project team has determined that certain traffic calming measures, such as raised intersections and raised crosswalks, are not appropriate for this project based on the traffic volume, roadway classification, and due to winter maintenance concerns.

Burlington City Council Meeting

Burlington-Winooski BF RAIZ(2)
Burlington STP 5000(29)

November 18, 2024



Introductions

- **Bob Klinefelter** – VTrans Structures Project Manager
- **Michael LaCroix** – VTrans Traffic Project Manager
- **Carolyn Cota** – VTrans Structures Program Manager
- **Josh Olund** – HNTB Structures Project Manager
- **Steve Spear** – HNTB Roadway Project Manager

Agenda



Meeting Purpose



Project Recap and Updates



Base Technical Concept



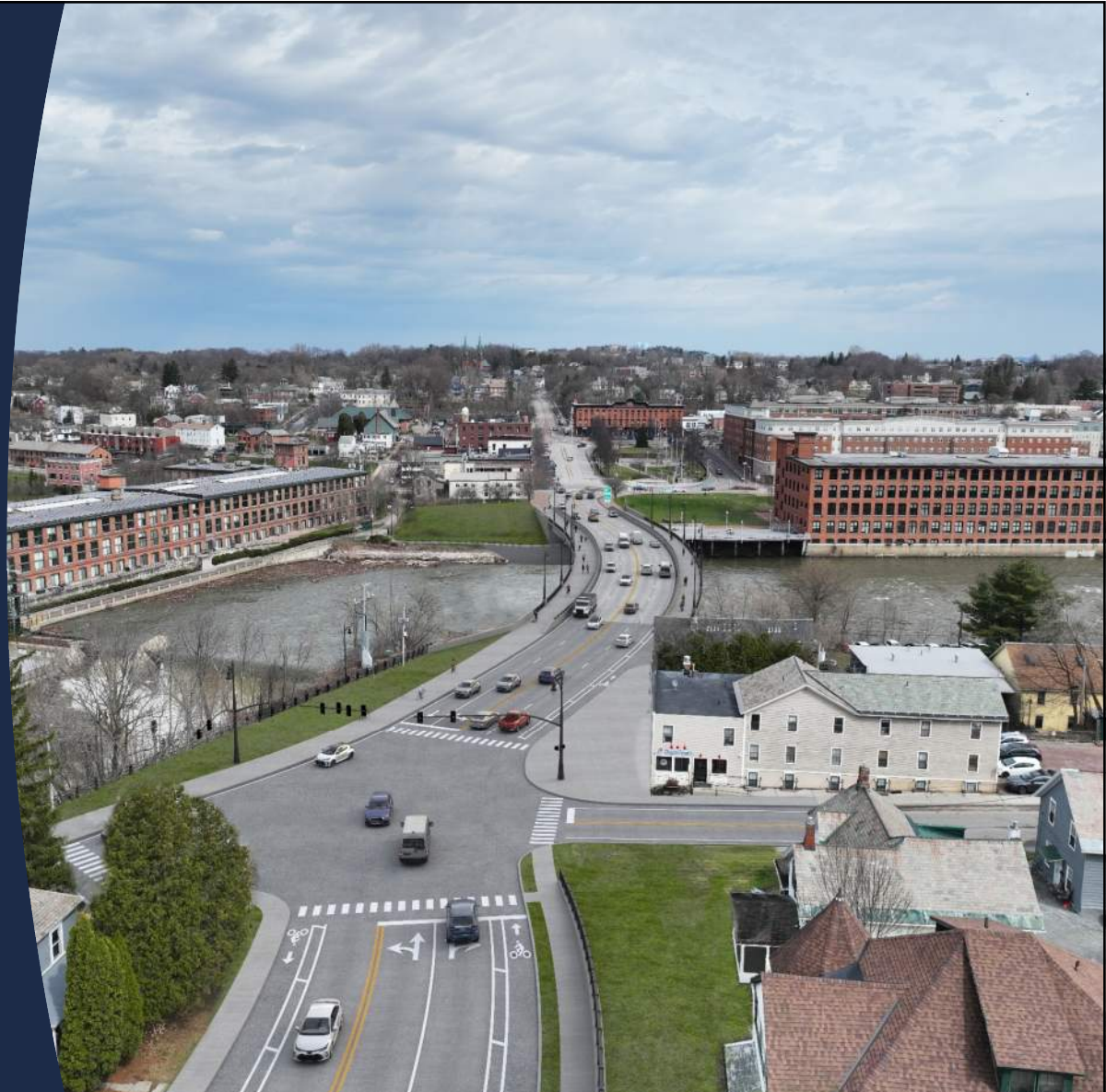
RFP Considerations



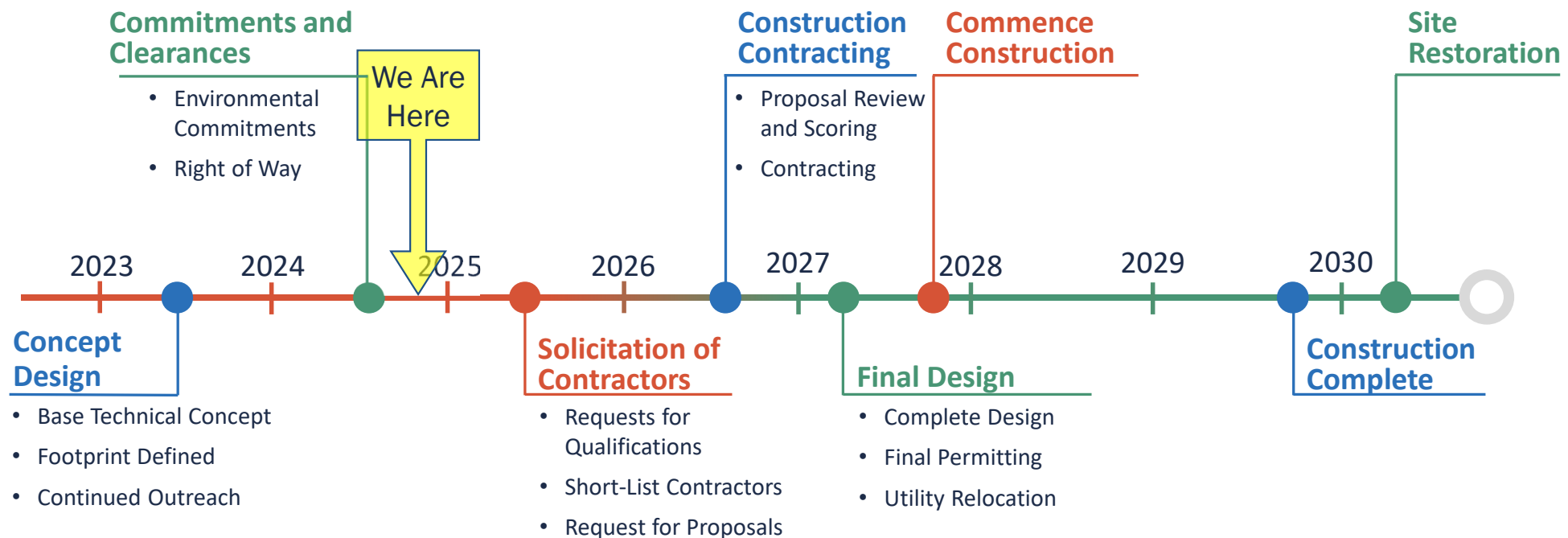
Next Steps, Schedule, and Funding

Meeting Purpose

- *To seek approval on the Base Technical Concept and the approach towards developing the contract documents.*



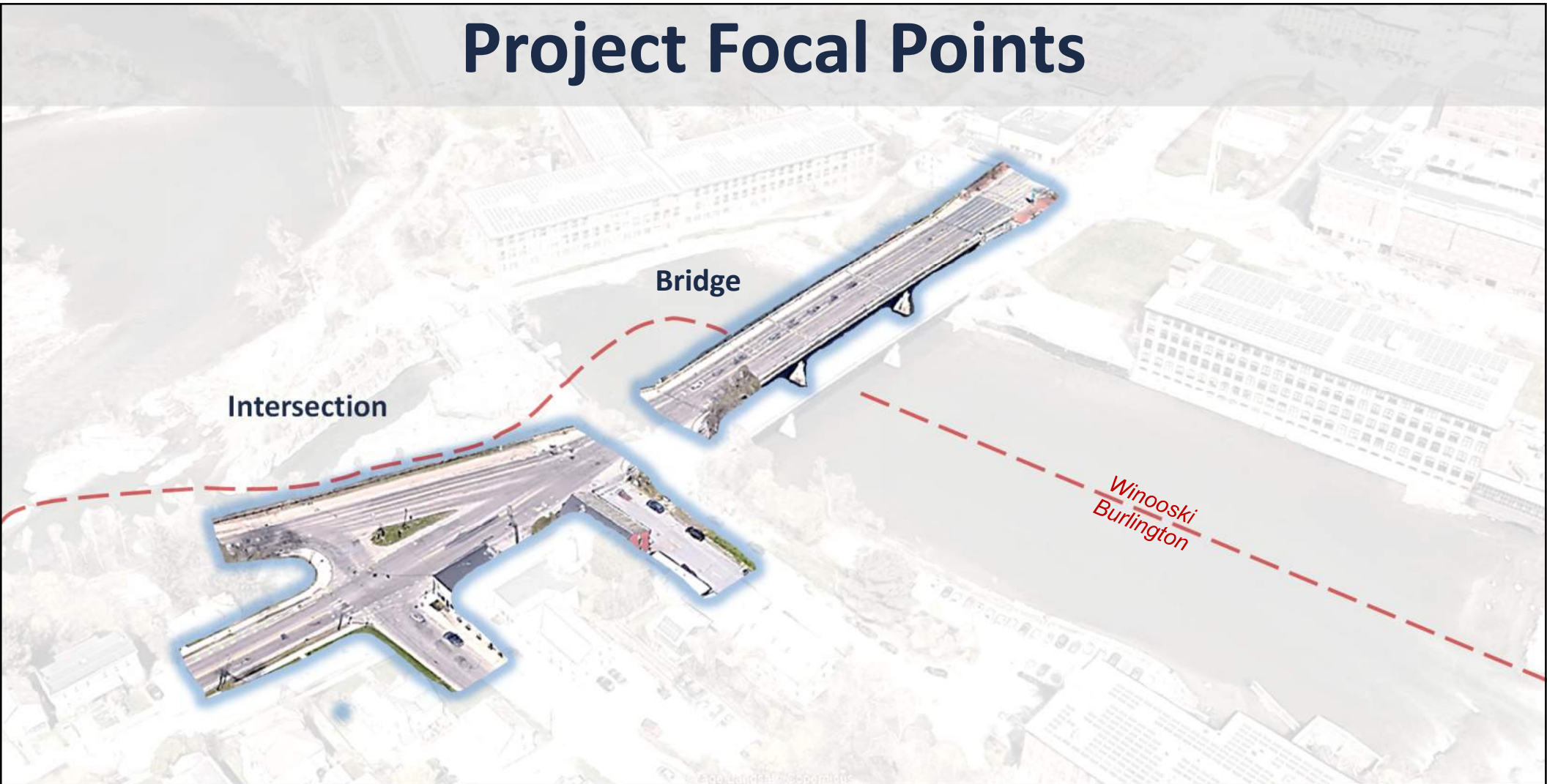
Schedule – Current and Future



Project Recap and Updates



Project Focal Points

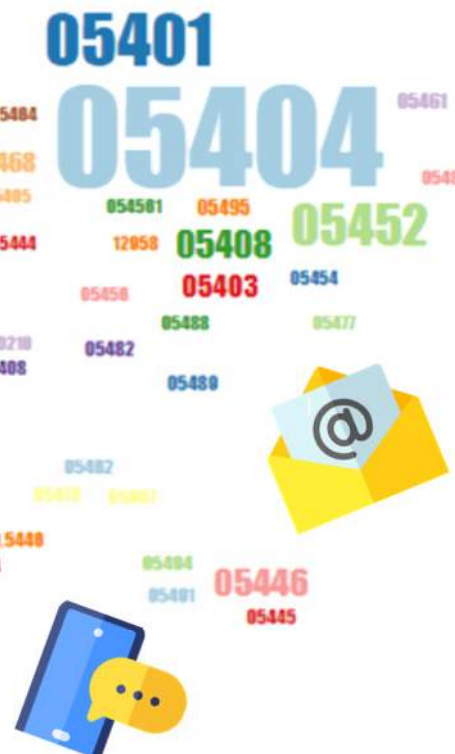


Schedule – Past



Coordination *(Since Spring 2023)*

	Public Meetings
	Local Government Meetings
	Stakeholder Engagement
	Website and E-Blasts
	Travel Survey
	Utility Coordination
	Environmental Coordination



Stakeholders Engaged:

Burlington Electric Department
 Burlington Fire
 Burlington Telecom
 Burlington Walk Bike Council
 Chittenden County Sheriffs
 Colchester Rescue
 Consolidated Communications
 Comcast
 Downtown Winooski
 Essex Rescue
 Firstlight
 Green Mountain Power
 Green Mountain Transit
 Lake Monsters
 Local Motion
 Lumen
 Premier Coach
 St. Michael's Fire and Rescue
 State Police
 UVM CATS
 UVM Health
 UVM Police
 Vermont Division for Historic Preservation
 Vermont Gas
 Vermonters for People Oriented Places
 VTEL
 Winooski Alliance for Active
 Transportation
 Winooski Fire and Rescue

Project Refinement

- Merge the Bridge and Intersection Projects
- Assess and Confirm Scoping Decisions
- Alternate Construction Phasing
- Alternate Traffic Management
- Intersection Configurations

Alternate Alignments and Construction Methods

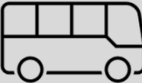
On-Alignment	<u>FEATURE</u>	Shifted Alignment
Tangent	Alignment	Curved
4	Lanes Detoured	2
4 - 6*	Detour Duration (Weeks)	16 - 24**
24 - 30	Construction Duration (Months)	24 - 30
No	Potential Under Bridge Path in Burlington	Yes

* Detour duration is for a full vehicular closure (NB & SB traffic detoured)

** Detour duration is for a partial vehicular closure (only SB traffic detoured)

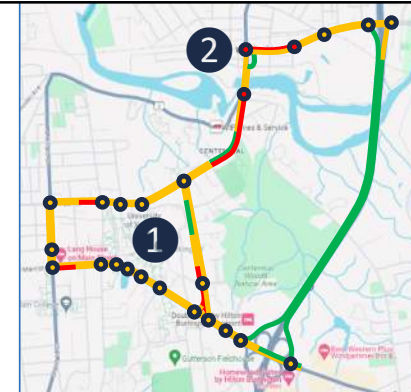
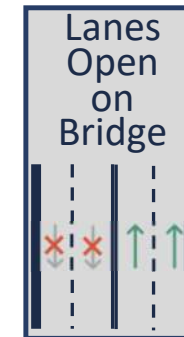
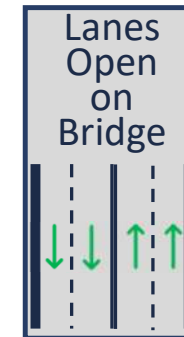


Traffic During Construction

Summer Travel Time Between ① & ②			
①→② (②→①)	Existing Conditions	With Full Bridge Closure	With SB Bridge Closure
	4 – 7 min. (4 – 7 min.)	10 – 15 min. (7 – 12 min.)	4 – 6 min. (7 – 12 min.)
  *	6 – 9 min. (5 – 8 min.)	12 – 22 min. (14 – 19 min.)	4 – 6 min. (12 – 15 min.)
	8 – 10 min. (8 – 10 min.)	18 – 25 min. (16 – 23 min.)	6 – 8 min. (14 – 21 min.)

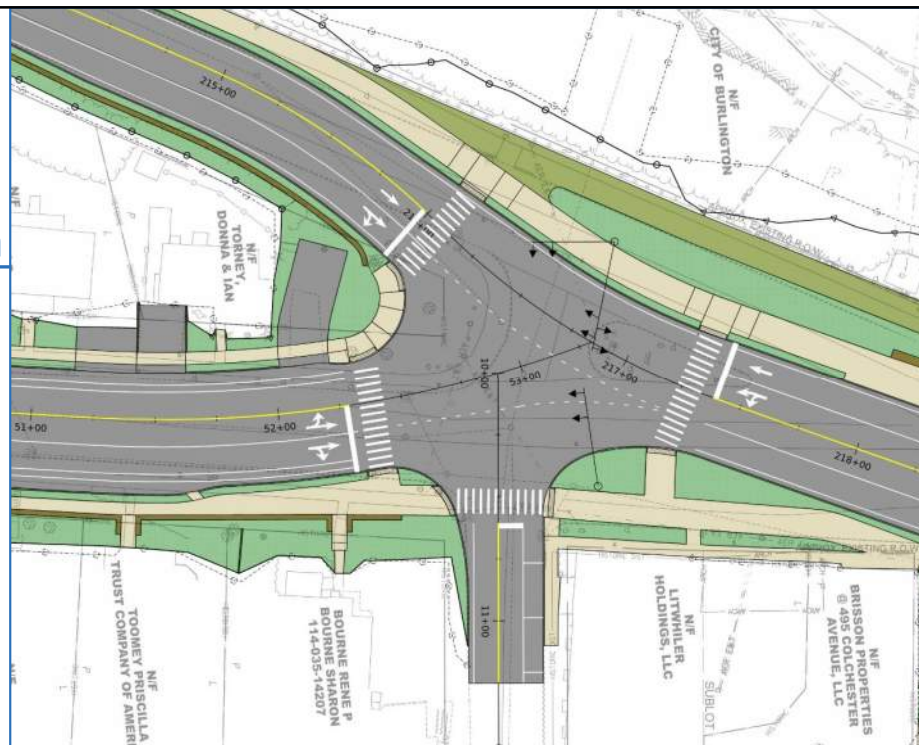
* Trucks may experience additional 1-2 min. of delay

- ① UVM Medical Center
- ② Downtown Winooski





Intersection Alignments

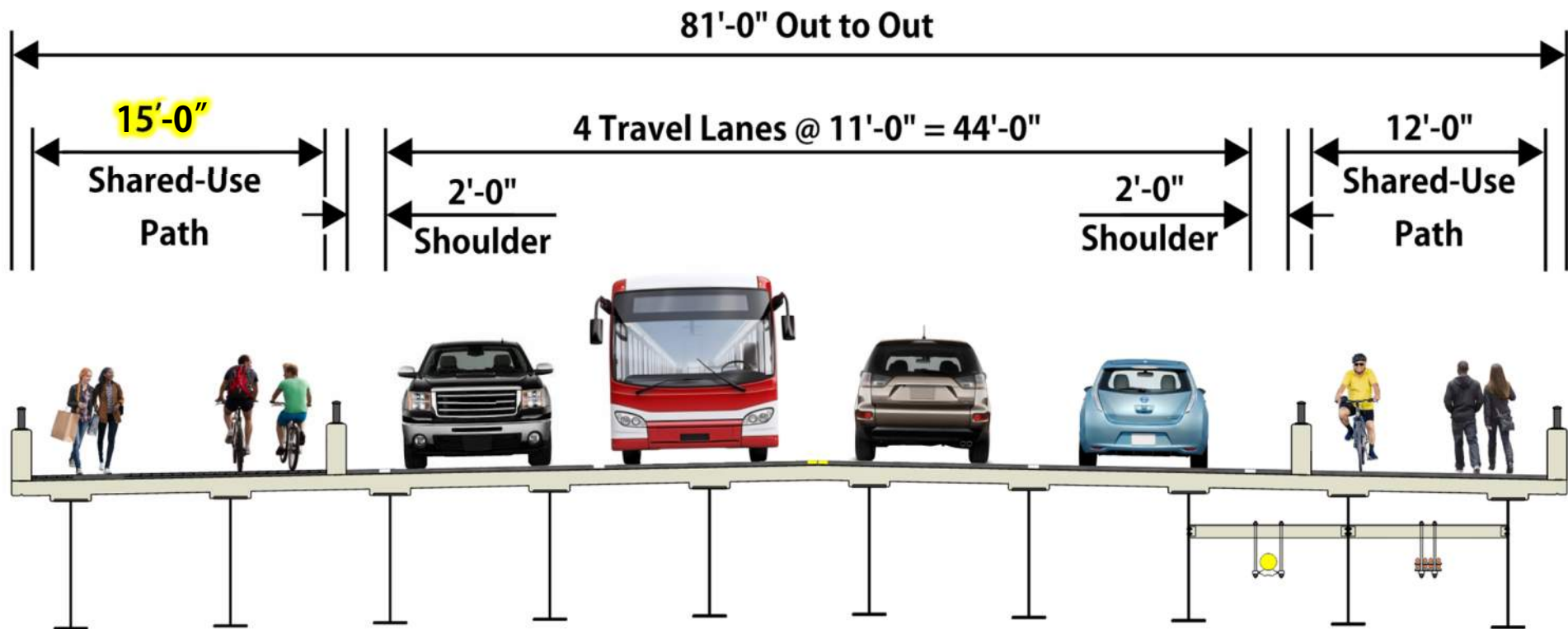


On-Alignment	<u>FEATURE/NEED</u>	Shifted Alignment
✓	Four-way signalized intersection	✓
✓	Simplify intersection, reduce conflicting movements	✓
✓	Manage Traffic Congestion	✓
✓	Improved mobility for bikes and pedestrians	✓
✓	Safety Improvement for all modes of travel	✓
✓	Shared use path extending through intersection	✓

Base Technical Concept (BTC)



Bridge Cross Section



Existing Conditions

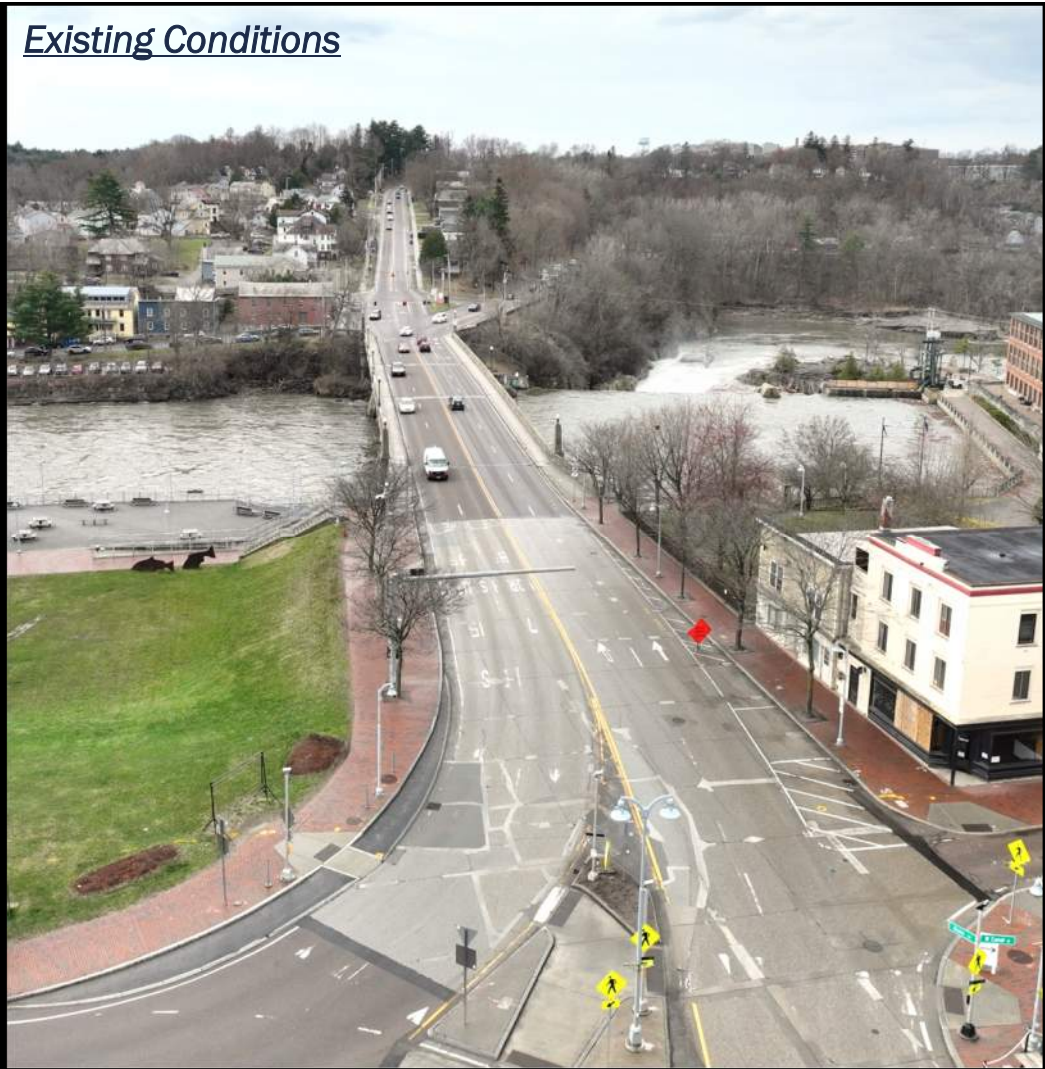


Conceptual Shifted-Alignment



View Looking North

Existing Conditions



Conceptual Shifted-Alignment



View Looking South





Existing Conditions



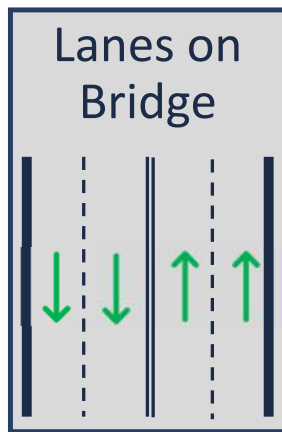
Conceptual Shifted-Alignment



Bridge/Intersection Continuity

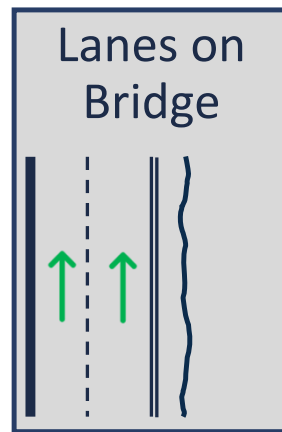
Construction Progression

Partial Construction,
Upstream of Existing
Bridge



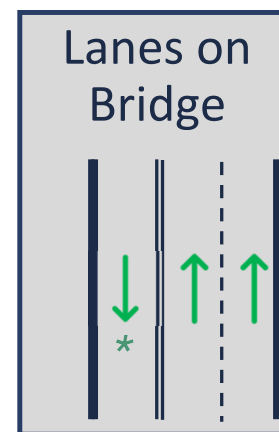
*Existing
Conditions*

Remove Portion of
Existing Bridge;
Complete Upstream
Construction



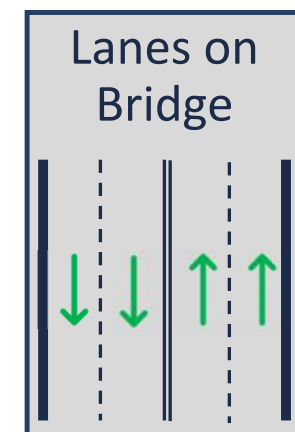
4-6 Months

Transfer Traffic;
Complete Demolition;
Complete Construction



12-16 Months

Fully Open Bridge;
Site Restoration

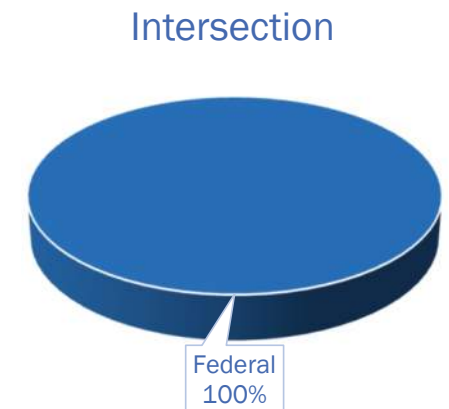
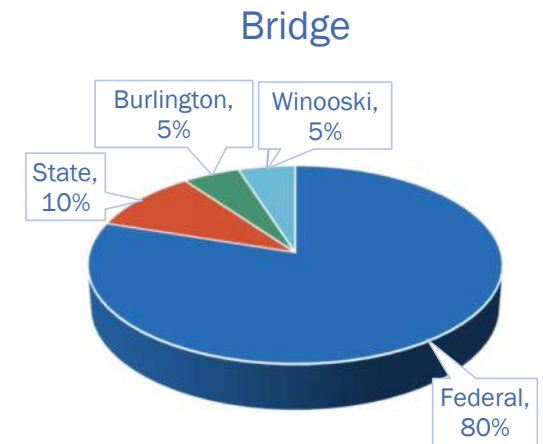


*Final
Conditions*

** Southbound to Riverside Avenue Only*

Project Costs and Funding

- Bridge Project Received a Federal RAISE Grant worth approximately \$24.8-million
- Total Bridge Project costs are estimated to be conceptually \$70 - \$80-million
- Total Intersection Project costs are estimated to be conceptually \$8 - \$9 million



RFP Considerations

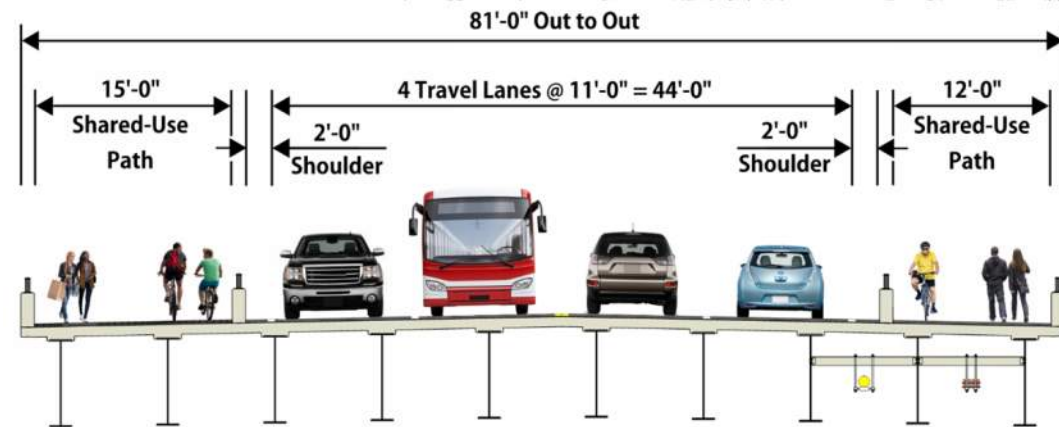


Prescriptive vs Flexible Requirements

- **Prescriptive**: Items or actions that are required within specifically defined parameters, without exception.
- **Flexible**: Items or actions that represent the nature and goals of the project and have established boundaries, but are not prescriptively defined.

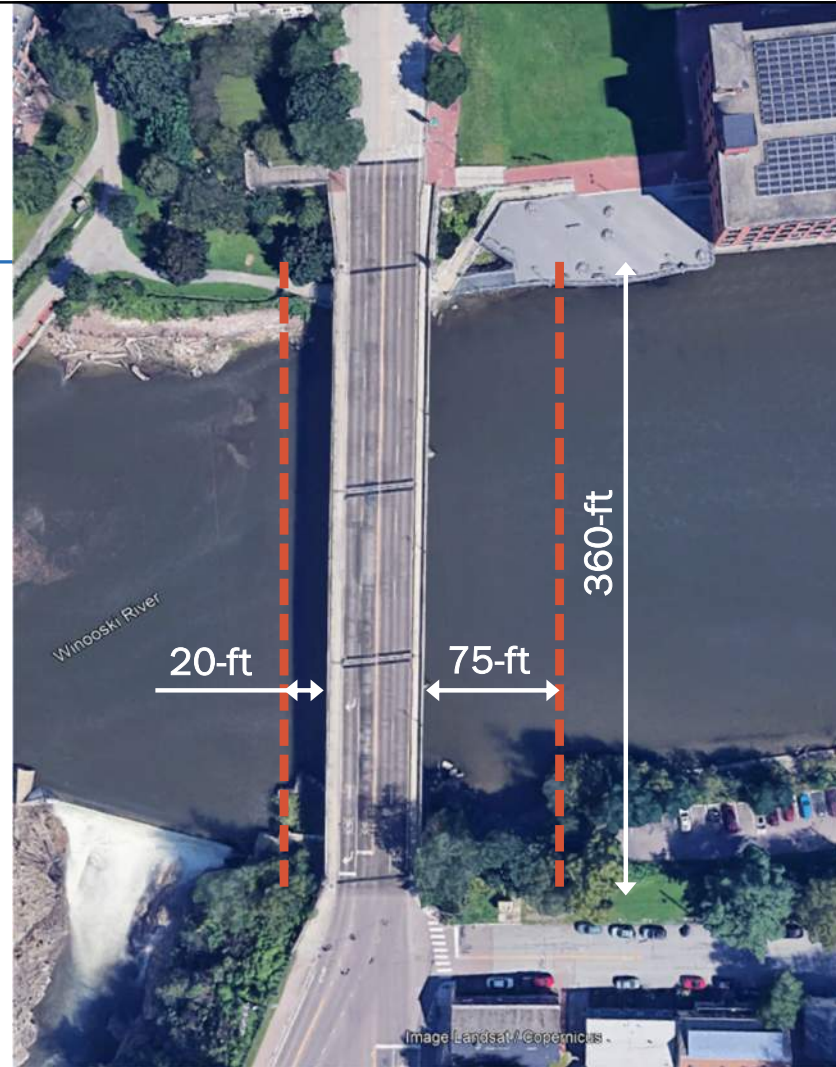
Prescriptive Requirement Examples

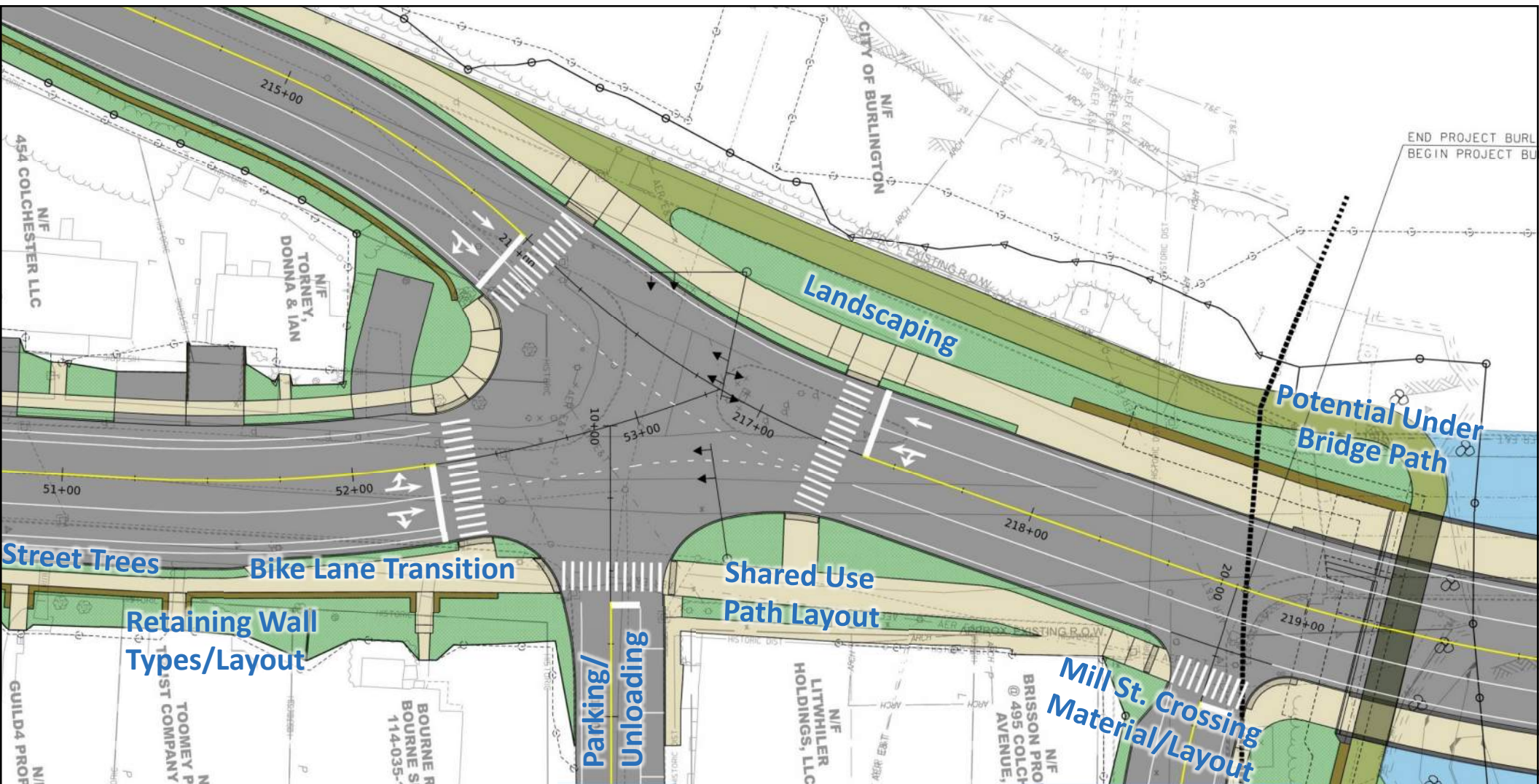
- Bridge Cross Section
- Two Span Bridge
- Minimum Hydraulic Opening
- Historic requirements
- Signalized Intersection



Flexible Requirement Examples

- Approximately 360-ft Long
- Bridge Location/Alignment
- Girder Spacing
- Traffic Control/Schedule
- Pedestrian Phasing
- Sidewalk/greenbelt/shared use path materials
- Stormwater features





Additional Considerations

Conceptual Shifted/Curved Alignment



Conceptual On-Alignment



Intersection View

Next Steps



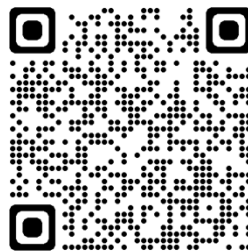
Next Steps

- Public Open House
- Burlington City Council Meeting
- RFQ and RFP Development
- Continued Coordination for:
 - Right of Way
 - Environmental Commitments
 - Utility Relocation

Questions?



**BURLINGTON
WINOOSKI
BRIDGE**



<https://burlingtonwinooskibridge.vtransprojects.vermont.gov/>



THE **CITY**
OF **BURLINGTON**





City of Burlington
Department of Public Works

Technical Services Engineering Division
645 Pine Street, Suite A
Burlington, VT 05402
P 802-863-9094 / F 802-863-0466 / TTY 802-863-0450
www.burlingtonvt.gov/DPW

Memorandum

Date: November 20th, 2024

To: Public Works Commission

From: Calvin Wuthrich, Engineering Intern
Phillip Peterson P.E., Senior Transportation Planner
Julia Ursaki, P.E., Public Works Engineer

CC: Laura Wheelock, P.E., City Engineer/Division Director of Tech Services
Chapin Spencer, Director of Public Works

Subject: Strategic Traffic Calming Initiatives: Rubber Speed Humps

Purpose & Need:

The purpose of this memorandum is to inform the Public Works Commission about the selection, implementation, and effectiveness of rubber speed humps on three roadways in the City of Burlington. This document details the need for strategic traffic calming initiatives, the criteria used to select the model of speed hump, locations of installment, outreach processes, and the findings of data collection and public outreach throughout the project.

Background:

As of June 2024, the Department of Public Works (DPW) had a backlog of 56 unresolved traffic calming requests, with 25 of them qualified for a traffic calming project based on DPW's 2020 Traffic Calming Manual. Faced with staffing shortages and limited time and funds, our team sought out alternative approaches to respond to traffic calming requests more rapidly and with quick build materials.

Speed humps are an effective way to reduce vehicle speeds through design rather than enforcement. However, standard asphalt speed bumps traditionally cost \$20K-\$30K each. Rubber speed humps, which cost roughly \$2K-\$3K per installment, were chosen as a way to begin tackling the traffic calming requests throughout the City. These products can be easily removed for winter months, ensuring that snow plowing can continue normally. Additionally, the speed humps can move locations from year to year to respond to different traffic calming requests.

Speed humps are not the right design solution for every street. Several factors including traffic volume, traffic type (trucks with trailers, buses, etc), and proximity to houses need to be considered

in every installation. The rubber speed humps were installed between July and November of 2024 and DPW collected data about speeds, noise impact, and public input to understand how and where rubber speed humps can work in our City.

Choice of Product:

After reviewing speed hump product options from a number of vendors, DPW was able to narrow the product decision down to three possible vendor alternatives: RubberForm, Traffic Logix, and Treetop Products. RubberForm has the lowest product cost of any of the vendors, but their speed humps have a height of 2 inches, which our team was concerned would not do enough to slow vehicle speeds. Traffic Logix's speed humps have the largest width of the three alternatives, with a shape that most closely resembles a conventional asphalt speed hump. However, these speed humps were significantly more expensive than the other alternatives. TreeTop Products offered a 2.75 inch height for their speed humps and had a price slightly higher than that of RubberForm, but also offered a 15-year warranty on their speed humps, which far exceeded that of RubberForm (3 years) and Traffic Logix (2 years). Based on a sufficient height for the speed humps, a reasonably low price, and an excellent warranty policy, our team determined TreeTop Products to be the product with the best value. We also reached out to the Salem, MA Public Works Department, who has TreeTop rubber speed humps installed on a number of their streets, to confirm the effectiveness of the product before purchasing the speed humps.

Vendor	Quote	Warranty
TreeTop Products	\$16,588.08	15 years
RubberForm	\$12,644.44	3 years
Traffic Logix	\$27,468.00	2 years

Choice of Locations:

Locations for the rubber speed humps were chosen from the list of qualified traffic calming requests submitted by the public. These requests were qualified based on the 2020 Traffic Calming Manual, which considers 85th percentile speed, percentage of heavy vehicles, and crash history including any crashes involving bikes or pedestrians and resulting in an injury or fatality. The three locations chosen were:

- **Grove St** had one of the highest 85th percentile speeds at 33mph and had 30 crashes reported in the last five years, with two injuries reported. This street is also home to Schmanska Park and a dense residential area along on the northern stretch of the roadway. Grove St is an arterial, and has the highest average annual daily traffic of any of the roads chosen for rubber speed humps.
- **Elmwood Ave**, a collector, had a 27mph 85th percentile speed and 9 total crashes in the last 5 years with 2 injuries.
- **Gosse Ct**, a relatively low volume roadway, had a high 85th percentile speed at 29mph and serves as a key connecting road to Lyman C. Hunt Middle School, the Robert Miller Community & Recreation Center, and Schifilliti Park.

Given that this project was the first time rubber speed humps have been installed in the City of Burlington, DPW chose to strategically install the rubber speed humps on three different types of roadways that are in different parts of the city to test their effectiveness in different environments.

Outreach:

The proposal for the rubber speed humps project, including proposed locations and a preferred product, was brought to the Public Works Commission at their monthly meeting on June 19th, 2024. In addition, flyers with information about the project and the reasons for installation were delivered door-to-door to houses on Grove St, Elmwood Ave, and Gosse Ct. These flyers also contained contact information for DPW Planning and a QR code linked to a project website. On this website, a survey was included to allow for public comment on the efficacy of the rubber speed humps, perceived changes in safety, and other observations. Once the speed humps were implemented, signs with more information and QR code links to the website were placed in the greenbelt adjacent to each speed hump. Department of Public Works staff also met with a resident of Grove St at their residence to discuss and observe noise concerns with the rubber speed humps. Public Works has kept a record of all calls and emails concerning the rubber speed humps since their implementation in June 2024.

Traffic Data:

Table 1. Traffic Data Collection

Street	85 th Percentile Speed (MPH)		Annual Average Daily Traffic (vehicles/day)	
	Before Installation	After Installation	Before Installation	After Installation
Grove St	33	22	6299	5829
Elmwood Ave	27	18	1243	680
Gosse Ct	29	*	1438	*

*indicates that DPW was not able to collect traffic speed and volume on Gosse Court before they were taken out for the winter.

In addition, there were no reported crashes on Grove St, Elmwood Ave (North St - Spring St), and Gosse Ct during the installation timeframe.

Traffic data from Table 1 shows that:

- Vehicle speed decreased an average of 10 mph following the installment of the rubber speed humps
- There was a 45% decrease in traffic volumes on Elmwood Ave, indicating that drivers may have been choosing to take alternative routes to reach their destinations, possibly displacing these traffic calming concerns to other roadways
- Grove St also experienced a decrease in vehicle traffic with the addition of the rubber speed humps, though this decrease was less dramatic, likely since there is not a nearby alternate route

Of note, DPW did receive a traffic calming request on Intervale Ave while the rubber speed humps were in place on Elmwood Ave, which is a parallel/alternate route to Elmwood Ave.

Noise Data:

Table 2. Noise Data Collection

Street	Noise Impact (Volume of Vehicles going over Speed Humps, dB)	
	Average Volume	Peak Volume
Grove St	65	95
Elmwood Ave	63	80
Gosse Ct	62	79

Residents on both Grove St and Elmwood Ave expressed concern about the noise levels when vehicles, especially large trucks with trailers or buses, drove over the rubber speed bumps. In response to these concerns, DPW conducted noise monitoring on the three roadways in question.

Agencies such as the Environmental Protection Agency (EPA) and Federal Transit Administration (FTA) use an average decibel threshold over a period of time to measure noise impacts. According to the EPA, a 24-hour exposure level over 70 decibels on average would cause measurable change in hearing loss over a lifetime. However, it is likely that people will find average noise levels above 65 decibels an annoyance. For reference, a typical conversation is usually about 60 decibels while thunder is typically 120 decibels (noiseawareness.org).

DPW therefore seeks to keep the noise impact of speed humps below 65 decibels on average, and the peak noise impact should exceed 80 decibels. Using these noise criteria is especially important when there are residences within 20 feet of the street.

This research and noise data show that these rubber speed humps:

- Are not appropriate for a street like Grove St, since the peak volume exceeds 80 decibels and houses are located within 15 feet of the street edge
- Are not appropriate for Elmwood Ave, since the peak volume is at 80 decibels and houses are located within 20 feet of the street edge
- Are within acceptable levels for Gosse Ct, since the peak and average volumes are below 65 and 80 decibels, respectively, and houses are located about 35 feet from the street edge

Public Feedback:

A summary of responses to DPW's online survey shows that only 56% of respondents viewed speeding as "not a problem" with the speed bumps installed, while 47% already did not think speeding was a problem. This is contrary to DPW's traffic data collection which showed about a 10mph reduction in speed on streets with the speed bumps installed.

4. Did you think speeding was a problem before these were installed?

[More Details](#)

Major problem	52
Minor problem	60
Not a problem	98



5. Do you think speeding is a problem with these installed?

[More Details](#)

Major problem	26
Minor problem	65
Not a problem	117
Other	1



In addition, 45% of respondents said that the speed humps had a negative impact of safety on their street, while a combined 32% said that there was either a major or minor improvement in safety.

6. Do you think the rubber speed humps have improved safety on the street?

[More Details](#)

Major improvement	24
Minor improvement	44
No improvement	47
Made it worse	94



Open-ended responses to the installation of the rubber speed humps were mixed and varied between locations and offer some explanation for why online survey responses do not necessarily match the traffic data collected.

Elmwood Ave generally received the most positive feedback, with some residents of the neighborhood expressing appreciation about the decrease in speeds along the roadway. Some respondents suggested permanent speed humps or alternative traffic calming measures along Elmwood Ave instead. Five different survey respondents reported a cyclist falling due to the rubber

speed humps. It was noted that the speed humps are difficult to see and are not placed in well-lit areas on the roadway. Noise was also a concern of residents.

On Gosse Ct, many of the negative responses surrounded their need to slow down to pass over the speed humps, and some reported others taking alternative routes to avoid slowing their speed. Several individuals also noted that some drivers were avoiding the speed humps by driving in the parking areas next to the curb since the speed bumps did not span the entirety of the road because of how wide it is.

Grove St received by far the most survey responses and the most negative feedback of any of the three roads where rubber speed humps were installed. As mentioned above, noise was the primary concern for residents of the neighborhood, with some reporting being woken up early in the morning when large trucks passed over the speed humps. Many individuals suggested that the speed humps on Grove St should have been placed farther south near Schmanska Park or in front of Bayberry Commons, where speeding issues were perceived to be more acute. Many survey responses suggested that parked cars on the northern end of Grove St limited speeds enough that speed humps were not warranted. Although this was consistent across at locations public feedback on Grove St strongly suggested that the speed humps were too large and jarring.

Condition:

The rubber speed humps on Elmwood Ave and Gosse Ct sustained minimal levels of damage over their duration on the roads from the beginning of July to the end of October. However, on Grove St, the speed humps sustained much higher levels of damage, with several large gauges cut into the tops of both speed humps. This was due to construction activities in response to a water main break near the speed hump, not regular wear and tear.

In addition, DPW crews have to store the rubber speed humps in their garages during the winter months, which have limited storage space. Technical Services should continue to coordinate with DPW crews so that we do not end up with more products than we can store.

Conclusions:

Rubber speed humps are an effective way to slow down vehicle speeds, but are not a “one size fits all” solution for traffic calming throughout the City. DPW will consider several factors when installing Tree Top rubber speed humps in the future, including:

- If heavy vehicles make up more than 2% of vehicles or along bus routes, especially where there are houses within 20 feet of the edge of the street
- If they raise noise levels to above 65 dB on average and should not exceed a peak of 80 dB
- If there are parallel alternative routes with no traffic calming
- Space available for storage of the rubber speed humps during winter months
- Locate speed humps in well-lit areas to increase visibility of the speed humps for all modes of travel

Noise data and public feedback suggests that a wider, less abrupt speed hump profile (such as the ones offered by Traffic Logix) may be preferable on arterial roadways such as Grove St or bus routes like Elmwood Ave. DPW will consider testing these in future years.

Attachments:

1. Public Comment – Emails and Phone Calls
2. Public Comment – Survey Response Summary

Attachment 1: Public Comment - Emails, Phone Calls

2024 Rubber Speed Hump Public Input Correspondence Emails

Wednesday, July 17, 2024

Collin O'Leary

Hi,

As a homeowner on Gosse Ct for over 7yrs and a teacher at Hunt MS, I am thrilled to see the speed hump pilot on our street. I've had numerous conversations with our local city council members over the years about how unsafe Gosse Ct is, and I am glad to see that, finally, something is being done. Besides the high rate of speed and unsafe passing on the street, I've witnessed many near accidents involving kids being struck while trying to walk across the road at the entrance of Hunt on Gosse at the poorly marked crosswalk. This crosswalk is blocked by residents' cars and needs signals like on the avenue. It is only a matter of time before a child is seriously injured.

Is this something that can be fixed? Either signals or push outs like downtown or in the ONE would help slow the traffic at this location and encourage drivers to survey their surroundings more than now. Lastly, I read that speed humps are not being put in because of snowplowing. If this is the case, why have other speed humps been put in elsewhere in the city, including the large hump near Scout? These humps don't seem to cause a problem for the snowplows. When the speed humps are removed after the fall, as mentioned, we are going to be back to where we started--- as the roads become more slick and result in more unsafe driving.

I'm looking forward to hearing back from you about my worries.

Thanks for all you do for our great city and for reading this.

--

Collin O'Leary

Monday, July 22, 2024

Sharon Brown

Dear Mr. Peterson:

This morning we met Calvin Wuthrich, DPW Engineering Intern, who was marking the curbs for placement of a speed hump on Gosse Court.

As we said to Calvin, we support the idea of traffic calming on our street. We have lived here for about 20 years (retired for the last 10), and have observed many instances of cars and motorcycles speeding near the entrance of Hunt Middle School.

In speaking with Calvin, we offered suggestions that the planned speed hump would be more effective if it were placed on the northeast side of the existing school crosswalk. It has been our experience that speeding traffic originates from Farrington Pkwy the Miller Center and Schifilliti Park onto Gosse Court much more often than it does from North Avenue. Although there is speeding in both directions, the much more frequent lead-footed drivers enter Gosse Court from Farrington Pkwy. having come up Ethan Allen Pkwy - often running the Stop sign at Heineberg Rd. Forcing these speeders to slow down BEFORE the crosswalk could avoid a tragedy.

We would like to ask you to consider locating the new speed hump on the other side of the crosswalk.

Please contact me/us to discuss this issue further. We hope to hear from you.

Highest Regards,

Sharon Brown 802-922-2958

69 Gosse Court

Dear Ms. Brown,

Thank you for your input regarding the speed hump placement on Gosse Court. We understand your concerns about traffic from North Avenue and the importance of slowing vehicles down before the crosswalk and driveway. This is precisely why we initiated this project.

We have carefully considered your suggestion to relocate the speed hump to the northeast side of the crosswalk. While we appreciate your experience and the time you've invested in this issue, we have determined the proposed location is the most effective in achieving our overall traffic calming goals for the street. This placement effectively slows traffic near the school driveway and crosswalk while maintaining a consistent spacing between speed humps.

Evenly spaced speed humps, as recommended by NACTO and FHWA, create a consistent speed reduction pattern and are more effective in calming traffic overall. While we understand your desire to target specific areas, a series of speed humps is designed to address speeding throughout the entire street. Furthermore, the proposed configuration targets the vehicle behavior you described. Lastly, relocating the speed hump to the northeast side of the crosswalk would not adequately address the safety concerns for vehicles entering the school driveway.

We appreciate your passion for improving safety on Gosse Court and will continue to monitor the situation closely.

Regards,

Phillip Peterson P.E.

Senior Transportation Planner

Tuesday, July 30, 2024

Owen Robinson

Dear Mr. Peterson and DPW (and cc'ing our neighborhood city councilors),

I'm writing because I live at 50 Grove St, directly adjacent to where one of the two rubber speed humps was recently installed. First let me say that I really appreciate all of you for your focus on slowing traffic on Grove, which I agree has been a major problem.

I do, though, have to give some feedback on the noise impact of the humps – obviously some noise is to be expected with any speed hump, what I didn't expect was just how frequently there would be LOUD crashing or clanging sounds coming from the road – these mostly seem to be from tow-behind open trailers, pickup trucks with loose material in the back, flatbed trucks, etc. This isn't minor-annoyance level - these are jarring, high-decibel metallic crashing noises that reverberate through the entire house

and at their loudest even cause the house to vibrate. The frequency comes and goes throughout the day, but it's around the clock – in fact, every single night since the speed humps were installed, without exception, I've been woken up in the middle of the night at least once by a loud crashing/clanging sound coming from them and making me think my house was getting broken into.

I don't want to just be a complainer, so could I make a couple of suggestions:

--so you're not just taking my word for it, do you have the ability to come over and do some sound metering to track decibel levels over a period of time and assess these crashing noises for yourself? You're welcome to access my property anytime if helpful.

--would you please consider, for next year if not sooner, moving the install points to be next to Schmanska Park (between or next to the crosswalks) instead of among the houses? This would both do more to help protect kids and pedestrians, and keep the center of the noise impact further away from residences.

I'm available at 617 447 7288 if it would be helpful to talk further. Again, I really appreciate the overall intent here, but I think the sound landscape around the speed humps changed a lot more dramatically for the worse than what was probably intended.

Thank you,

Owen Robinson

Hey all –

Just looping in Chapin, because Phillip may be on vacation currently.

Chapin, see below - wondering if you can provide some more context and if moving these a bit further down the road away from homes is feasible.

With Appreciation,
Carter Neubieser(*he/him*)
City Councilor for Ward 1

Hi Owen,

Thank you very much for your feedback, I appreciate your suggestions and input.

The full installation of these rubber speed bumps is still underway. They still need yellow panels installed and "speed bump" and 10mph advisory speed limit signage. As they are currently, we know that they do not give much warning to drivers and we are not sure that people are slowing down as much as they need to before they go over the speed bumps.

A major benefit of the rubber speed bumps is that they are movable, and we would like to give this pilot a chance before moving them. Our DPW crews are extremely busy this time of year but hope to install the yellow panels and signage by the end of the week. Following the installation being complete, we intend to do a week-long traffic count to see how effective the bumps are at slowing people down.

We did receive a traffic calming request for this section of Grove Street through our traffic calming program, and after reviewing the existing speeds and crash history, determined this street has a safety need to reduce vehicle speeds. With limited budgets and staff resources, these rubber speed humps are a safety intervention that while not perfect, can help address this need.

Once we have the traffic data we can take a closer look to understand the impacts of the rubber speed humps, then we will make an informed decision about moving them. We need to balance this safety need with the other needs of the neighborhood – like quietness and quality of life. In addition we will work to get decibel measurements of the noise impacts.

Best,
Julia

Julia,

Thanks very much for the thoughtful reply - I agree it's fair to treat this year as a data-gathering experiment and see how things go especially with coloring and signage. I just wanted to flag for your team that the noise increase is really a major issue (I imagine it was expected to be a minor issue) and I'd encourage you to get your own data on the sound impact, including have folks come over here and spend some time listening themselves (from my front porch if they'd like!). As I mentioned to Carter, the worst times aren't even morning/evening rush hour, when the volume of traffic tends to slow everyone down, but for example like 6:30-7:30am when a lot of commercial construction/landscaping traffic comes through and crashes hard over the bumps. This morning I counted five loud crashes between 6:30 and 7, any of which would have been loud enough to wake me.

Again I know this project is in response to a very legitimate safety need and absolutely respect and agree with that. Thanks again for being in touch, and let's perhaps revisit the conversation once the signage has been in place for a bit.

Best,

Owen

Greetings Julia, Phillip and all,

(Phillip I know you were away the other week but hope you might have seen our correspondence below)

I just wanted to loop back on this, now that the signage and coloring are in place, as unfortunately this is just feeling increasingly unsustainable. Just a timeline from this morning: I was awakened at 5:45am by the first loud clang over the bump (which has happened most weekdays since installation), and then from 6:40am to 7:40am I sat with my coffee and a notebook and logged 13 (!) metallic clanging or crashing noises during that time period, all clearly audible from my kitchen which is at the back of my house, farthest away from the speed humps through several doors and walls.

Might I request a short in-person meeting with you at DPW to discuss? (I promise I'll be pleasant/professional.) I can be available most of tomorrow (Fri), and also next Mon-Wed 8/12 to 8/14, if this is a possibility.

Thank you in advance,

Owen Robinson
50 Grove St

Dear Owen,

Thank you for sharing your concerns about the noise from the recently installed rubber speed humps. I understand how disruptive the noise can be, and I appreciate your patience as we work through this pilot project. Attached for your information is the presentation we gave at the June Public Works Commission discussing this project.

I would be happy to meet with you to discuss this further. I can come out tomorrow at 10 AM if that works for you. During our meeting, we can walk through your observations and discuss the noise levels in more detail.

I do want to set realistic expectations. As this is a pilot project, our decisions are driven by data. We are currently looking into collecting noise data to better understand the impact. The likelihood of moving the speed humps at this stage is low because we need to see the full effects of this installation, including its impact on traffic speeds and safety.

This process will take some time, and I appreciate your understanding as we gather the necessary data to make an informed decision. I look forward to our meeting and hope we can work together to address your concerns.

Regards,

Phillip Peterson P.E.
Senior Transportation Planner

Phillip,

Thank you for your quick response and your willingness to come out – tomorrow at 10am sounds great. Feel free to park in my driveway, and I'm at 617 447 7288 if you need to reach me.

Best,

Owen

Hi all -

Thanks Phillip and all for connecting on this and Owen thank you for the productive feedback!

I'd love to join this meeting - if folks prefer I not that is also alright too, just want to make sure I can be as helpful as possible in my role.

If that sounds good, I will see folks at 10am as well.

- Carter

With Appreciation,

Carter Neubieser(*he/him*)

City Councilor for Ward 1

Friday, August 9, 2024

Hi Philip. I received your email from a neighbor that suggested I reach out.

Just wanted to let you know the new speed bumps on Grove are awful. I'm no expert but I don't think they are necessary. I've got 2 kids and I'm not worried about the traffic. It's a tight road and they just

add to the annoyance of getting through that stretch. But beyond that they are incredibly noisy. Every trailer and box truck that comes through makes a lot of noise. It's hard to sleep. Between that and the F35's I'm going to lose it.

My neighbor says they are going away in November for the winter. Please add my vote to not reinstalling them in the spring.

Thank you. I appreciate you guys. You do a fantastic job.

-Matt 25 Grove.

Hi Matt,

Thank you for sharing your concerns about the noise from the recently installed rubber speed humps. I understand how disruptive the noise can be, and I appreciate your patience as we navigate this pilot project. For your reference, I've attached the presentation we gave at the June Public Works Commission meeting, which discusses this project.

One of the key advantages of these rubber speed bumps is their movability, and we'd like to give this pilot a fair chance before considering any adjustments. After the installation is complete, we plan to conduct a week-long traffic count to assess how effective the bumps are at reducing speeds. We'll also be collecting noise data during this period.

This section of Grove Street was identified as a safety concern through our traffic calming program, following a review of existing speeds and crash history. Given our limited budgets and staff resources, these rubber speed humps, while not perfect, offer a safety solution which addresses the need to slow down traffic.

Once we have the traffic and noise data, we'll be able to take a closer look at the impact of the rubber speed humps and make an informed decision about whether or not to move them. It's important to balance this safety need with the neighborhood's other priorities, like maintaining quietness and quality of life. We'll also work on obtaining decibel measurements to better understand the noise impact.

Happy to chat about this over the phone as well.

Best,

Phillip Peterson P.E.

Senior Transportation Planner

Tuesday, October 1, 2024

Matt Porter

Hey Phillip,

Thanks for allowing an outlet to discuss these abominations!

That said, even the methodology of contact, like these rubber humps, is extremely flawed. QR codes are great, having said QR code so small you can't scan it when driving by, and create further distractions to driving than the humps set out to eliminate in the first place, is a major loss. I tried numerous times to scan that while rolling by at 2-4MPH (1800GotJunk work truck), and I was unable. The concept of having people use their phone while driving to scan that code is questionable already, but it needs to be about 4x larger to safely allow someone to scan it while on the move.

Secondly, the QR code link is dead - next time have yourself / IT use a PERMANENT URL that redirects, so that the link never goes down, simple oversight, equally simple solution (relative to IT).

As for the hump itself, I'm referring to the one right at the bottom of Patchen Road, heading to the Domino's in Winooski / Colchester Ave. This locations has been GARBAGE since I was a kid, and I'm 36 now (born and raised here, left for Seattle / Idaho for a bit, rest of my life here). It's been bad this entire time. That said, I have always found drivers go through there slowly anyways, because of the street parked cars that leave absolutely no room for 2 lanes. this hump didn't slow things down, it just added another crappy element to an already crappy road, 30 years in the making. I have zero doubts cars parked there have been dinged, grazed, etc, but speed wasn't a factor, and never will be - it's not a good place for street parking, there isn't space for vehicles (let alone trucks like the one at my work), and the location needs to be addressed, not spruced up with counter-productive solutions.

That hump, at roughly 2MPH, sent my truck cabin so vertical an error code went off - they're ridiculous. I have a completely clean driving record, have never had a speed ticket, follow the rules of the road, etc, and those humps straight up suck. Perhaps they are viable on flat ground in an urban area with children, but in this one spot, remove it it November as you intend, and never bring it back.

In short, the hump feels less safe than not, QR codes meant to be scanned while driving (passenger or otherwise) need to be WAY bigger (do it right, or don't bother at all), check the data vs emotional responses of constituents, and thanks for caring enough to give me a way to let you know my thoughts.

--

Matt Porter

2024 Rubber Speed Hump Public Input Correspondence Phone Calls

Monday, July 22, 2024

Sharon Brown

Shared interest in discussing the placement of the rubber speed humps on Gosse Ct.

Monday, October 28, 2024

A resident of Elmwood Ave inquired about the reasoning behind the removal of the rubber speed humps at the end of October. They reported that the rubber speed humps were very helpful in slowing vehicle speeds on Elmwood Avenue, and that roadway conditions without them in place are unsafe. Asked whether speed humps have been taken out permanently or temporarily.

Attachment 2: Public Comment - Survey Response Summary

	Elmwood Ave		Gosse Court		Grove St	
	In favor	Against	In favor	Against	In favor	Not favored
	17	15	13	36	44	78
Open Comment	Occurrences		Occurrences		Occurrences	
Too large/severe	14		6		56	lack of warning, large enough trucks just blast through
Jarring (even at slow speeds) (bikes/vehicles)	17		19	complaints about having to slow down...	36	resident noted material on lawn from unsecured truck loads x2
safer/bumps help slow traffic	9		10		21	
concern for car health	14		22		36	
caused biker fall/injury	5				1	
alternative traffic calming	4	(bump outs, lower grade asphalt bumps)	2		8	asphalt bumps, speed tables x2, narrow lanes, mixed used paths, brick/tactile surface, stop signs at Schmanska park crossing
avoid travel/alternative route	5		9	many detour through th	4	bump closest to stop sign is redundant
too many	3				7	
not large enough	2					
will increase biker injury	4		1		2	
additional Speed Bump	1	(Northern end)				
too extreme for street	1		1			
street itself is too wide	1					
spend money on other needs	1		4		5	
slippery when wet	1					
reduce speed limits	1					speed limit is too high for speed 5 humps that require 10mph
rather these than nothing	1					
protected bike lanes	1					
must be marked/painted	1				1	
more speed bumps/relocation	1					by the park x2, bayberry commons, speeding occurs more coming from Patchen road going around blind curve before bayberry commons, 11 closer to park is where people speed
make permanent	1					
install on Manhattan Dr	1					
hard to see in dark	1					
fixing potholes	1					
expand public transit	1					
creates too much noise	1		1			both from vehicles travelling over, 8 and honking
create fully protected bike lanes	1					
:(	1					
speeding was not significant	3		3		22	parked cars decrease speeding already
speeding is a significant problem	1		1		3	more so near bayberry commons
portable speed indicator	1		1		2	
drivers navigate around bumps			9	widen to avoid this	8	
slows emergency vehicles			4		4	
add to more streets			1	EA Parkway	1	Chase St
increase ticketing of speeding			3		11	speed cameras, mail tickets
drivers speed up after bumps			7		17	
increases congestion					1	
decreases congestion					1	
complaining about being pro-pedestrian/bike					3	
lack of signage						
				*Favorable responses often mention increase of safety for children, especially when schools are let out in the area		
increases difficulty of navigation			1		18	narrows road
wrong place to prevent speeding					34	*see "more speed bumps" row
reevaluate thru-traffic					1	
eliminate street parking					7	
distract drivers, too much going on					10	



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Memorandum

Date: November 20th, 2024
To: Public Works Commission
From: Calvin Wuthrich, Engineer Intern
CC: Phillip Peterson P.E., Senior Transportation Planner
Subject: Tactical Traffic Calming Initiatives: Stanbury Rd Pedestrian Zone Pilot Project

Purpose & Need:

The purpose of this memorandum is to report on the effectiveness, safety, and public input surrounding the Stanbury Rd Pedestrian Zone pilot project. This strategic traffic calming initiative is connected to the ongoing NNE Sidewalk Scoping Study, in which Stanbury Rd is under consideration.

Background:

In collaboration with the Chittenden County Regional Planning Commission (CCRPC) and our consultant Hoyle & Tanner, the Department of Public Works is conducting the ongoing NNE Sidewalk Scoping study in an effort to enhance the connectivity of active transportation networks throughout Burlington's New North End. On Stanbury Rd-Dale Rd, the sidewalk on the east side of the roadway abruptly ends for pedestrians traveling north between the crossing streets of Brierwood Ln and Woodlawn Rd. Northbound pedestrians on Stanbury Rd-Dale Rd must then share the roadway with vehicles in order to reach Woodlawn Rd, Woodbury Rd, or Staniford Rd where sidewalks are present. This project is working through design alternatives for pedestrian infrastructure changes to Stanbury Rd.

The Department of Public Works is testing one of these designs, a designated pedestrian zone, as a pilot project for Stanbury Rd. Pilot projects are an inexpensive way to test out the benefits and potential drawbacks of adding features to roadways around the City before these features are permanently installed. The pilot pedestrian zone was approved by the Public Works Commission this past June. Essentially, the pedestrian zone is delineated by tall cones arranged in a line 8ft from the curb, which allow for both pedestrians and cyclists to have protected access to the roadway. Utilizing this space for active transportation also creates a yield condition for motor vehicles which, by design, limits traffic speeds.

Outreach:

Flyers were distributed to residents of Stanbury Rd-Dale Rd, letting residents know about plans to remove parking along the east side of Stanbury Rd and create the pedestrian zone pilot project. Contact information was provided for questions, comments and concerns. Plans for the pedestrian zone were presented to the Public Works Commission on June 19, 2024. When the pedestrian zone was established, signs with information about the pilot project and a QR code

linked to the project webpage were placed along the length of the pedestrian zone. The webpage featured a survey about the project, which included questions about perceived changes in safety resulting from the project and a space for comments and/or suggestions. All relevant public emails, calls, and survey responses since the project's installment have been recorded and compiled.

Public Feedback:

155 people responded to the online survey. A large majority of respondents live in the neighborhood, but only 6 of the respondents live on Stanbury Road itself. The number of respondents who walk, bike, or drive on Stanbury Road was almost equal.

There were mixed responses to the safety impact of the pedestrian zone, with 45% of respondents saying the pedestrian zone made either a major or minor safety improvement on the street, but 48% saying it made it worse.

4. Do you think the pedestrian zone improved safety on the street?

[More Details](#)

Major improvement	46
Minor improvement	23
No improvement	12
Made it worse	74



Most people (66%) did not think that the pedestrian zone should be re-installed every summer, and 55% of people want a traditional sidewalk installed instead.

5. Do you think this should be re-installed every summer?

[More Details](#)

Definitely	42
Maybe	11
No	101



6. Do you want traditional concrete sidewalks installed instead?

[More Details](#)

Definitely	84
Maybe	44
No	25



In the open-ended survey responses, emails, and calls, individuals who expressed support for the project shared that they felt safer when walking and biking on Stanbury Rd, with some requesting re-installations of the protected pedestrian zone. Other responses were partially supportive but more nuanced, requesting that the Department of Public Works instead install a sidewalk along Stanbury Rd, rather than a pedestrian zone.

However, this pilot project also faced strong opposition from many individuals. The most common open-ended response from our survey was that the road was too narrow with the pilot project in place, which many respondents felt had created more dangerous conditions on the roadway. Several individuals mentioned that during rain events, the pedestrian pathway consistently filled with water, making this area unusable for cyclists or pedestrians.

Ultimately, by narrowing the available road space, the intention was to encourage lower speeds, thus promoting safer conditions for all users. Ironically, some complaints reflected frustrations with this very outcome; respondents felt that the narrower roadway made it more difficult to navigate. However, these challenges highlight the project's goal: to slow traffic and prioritize active transportation over vehicle speed. This feedback reinforces the yield street condition design; that reducing speeds on certain streets by narrowing the vehicle travel width may feel inconvenient to drivers initially, yet can reduce speeds, which create safer, more equitable transportation spaces for all road users.

Traffic Data:

Table 1. Traffic Data on Stanbury Road

	Average Daily Traffic Volume	85th Percentile Speed	% Vehicles Over 25mph
Before Installation	541	26mph	27.3%
During Installation	535	24mph	16.1%

No crashes were reported during the duration of the Stanbury Rd pilot project.

This data shows that there was not a big change in traffic volume on Stanbury Rd while the pedestrian zone was in place. In addition, more vehicles complied with the street’s posted speed limit of 25mph during the installation.

Conclusions:

Although many individuals responded negatively to this pilot project, many of the survey responses, calls, and emails were concerned with the need to slow down or stop to allow other cars to pass. As already discussed, the resulting reductions in vehicle speeds were an intended consequence of the Stanbury Rd pedestrian zone, which saw a decrease in the 85th percentile speed from 26 to 24mph, while maintaining regular traffic volumes. Yield conditions like the one created by this pedestrian zone exist permanently on other residential streets in Burlington and have been proven to be a safe, effective method for limiting vehicle speeds in cases where traffic volumes and parking utilization are low.

The Department of Public Works will continue outreach efforts and analysis as part of the New North End Sidewalk Scoping Study, in order to best determine next steps.

Attachments:

1. Public Comment - Emails, Phone Calls
2. Public Comment - Survey Response Summary

Attachment 1: Public Comment

Stanbury Rd Pedestrian Zone Public Input Correspondence Emails

Wednesday, July 17, 2024

Pete Curialle

Hi Phillip,

I don't want to be a pest and genuinely love the idea of making the neighborhood more pedestrian friendly, I don't feel as if these cones are effective in this case. For instance, see the attached image of how the walkway looks after it rains. There always seems to be puddles there forcing pedestrians either on lawns or the middle of the road.

I walk this stretch nearly everyday with my dog to access the bike path and see cars fly by me while I am forced to walk in the street. There also aren't any stop signs at the crossroads with Stanbury/Dale and cars tend to just roll through the intersections. If you walk this stretch, you will see worn down grass from people walking through the yards of the houses since walking on the street can feel unsafe. I think a sidewalk would be more beneficial here.

Thanks for listening to my rant!

-Pete



Friday, July 19, 2024

Ann Hathaway

Have lived on Western Ave since 1963 , I have walked almost daily on Stanbury Rd .the past 20 years. I have never witnessed a problem in that time.,if I encounter anything maybe 1 person walking usually with dog. Now the cones are in place driving is risky, not enough room if you meet a car, more dangerous for all. Stanbury is parallel to the bike path for pedestrians and bikers! This project makes the road unsafe and not necessary.

Saturday, July 20, 2024

Sam Ayres

Hello!

I wanted to let you know I'm loving the protected lane for pedestrians on Stanbury. Anyway we can add in more traffic calming/slowly methods. People go 30+ down this road making it unsafe for pedestrians and kids on the road.

Thanks!

- Sam

Wednesday, July 31, 2024

Renee Lauber

It's my hope that the pop-up project has proven that people like having a dedicated space for pedestrians, and hopefully has also confirmed that the sidewalk should be OFF the street, inline with the sidewalk that ends at the start of Dale Rd. The street is way too narrow with the cones, especially with large trucks, boats and cars parked along the street. It's like a dangerous game of leapfrog driving down Stanbury right now.

With that said, I think it's incredibly important to have a safe space for walkers, especially given that Stanbury is a feeder street for many kids traveling to Hunt (and CP Smith, to an extent). But the cone situation is definitely not ideal!

Thanks,

Renee

Monday, October 13, 2024

Bradd Rubmann

Hi Peter,

After several months of living with the trial bike lane on Stanbury Road I believe it is now time to comment. At first I was confused to see the bike lane added since the well traveled bike path is less than 100 yards west of the Stanbury Road bike lane. I assumed the City must have some expertise on this stretch of road so I thought it's best to observe.

I travel this road regularly, and it's the exception that I see pedestrians using this bike lane. And why would they use it, but the bike path is so much more pleasant of an experience? What I encounter almost every time traveling on Stanbury is a cat and mouse game with the cars going opposite directions trying to figure out who will be stopping for the other since the road is no longer wide enough for 2-way traffic while vehicles are parked on the west side of the road. In all my years of driving Stanbury I never considered it dangerous though the bike lane adds unnecessary dangers.

My conclusion is that this bike lane should be permanently eliminated for the safety of all that travel this stretch of roadway.

Thanks,

Bradd Rubman

Stanbury Rd Pedestrian Zone Public Input Correspondence Phone Calls

Friday, July 19, 2024

Christopher Davies

Really appreciates the project. He is a healthcare worker, and takes one of his patients walking. His patient is an older gentleman who uses a walker and finds the sidewalks to be too bumpy. Providing a designated area in the road is perfect for him and his patient's needs.

Monday, July 29, 2024

Samantha Poquette

Reported seeing two near misses of head-on accidents, considers Stanbury Rd to have created "dangerous one-way road" conditions that have cause drivers to avoid the road entirely.

Friday, August 2, 2024
Samantha Poquette

Following up on prior message, requesting that the cones be moved closer to the curb. Reported seeing unsafe conditions for vehicles and pedestrians while walking her dogs at night.

Attachment 2: Public Comment - Survey Response Summary

	In favor	Not in favor
General	41	78

Open Comments	Occurrences	
		* many mention cones moving further out than originally placed, making the zone too wide. also respondents note that increased width creates a dangerous one-way street, with the pedestrian zone, road, and street parking creating unsafe road sharing
road is too narrow (lack of space)	61	
Needs a permanent sidewalk	31	
zone increases danger	23	
		**joseph.krupa@gmail : included extensive ideas for improvements1 - Extend the westside sidewalk on Stanbury. 2- on the westside install roadway chicanes for traffic calming and to better manage parallel parking. These chicanes could also house tree boxes for drainage improvements since every intersection has flooding issues. They could also be placed to narrow the pedestrian crossings to woodbury and woodlawn where currently none exist. 3- establish a 2-way bike lane on the east side and prohibit eastside parallel parking. This should leave enough room for road lanes in both directions. 4- Install a crosswalk from Stanbury to Staniford on the west side to help with line of sight and pedestrian safety.
allows safe travel on foot/bike	12	
sidewalk expansion (not using road space)	10	
bike lane close enough to not warrant	10	
road was never unsafe	7	
Make permanent	6	
pedestrians still walk in road	6	
speed bumps/curb bump outs/speed tables	6	
crosswalk at Staniford Rd	5	
rain puddles on side of road after rain	5	
remove street parking	4	
no room for emergency vehicles	4	
focus other projects	4	
make street one-way	4	*this suggestion was to turn the street into a one-way. seperate from many concerns that the street turned into a one-way due to reduction of space.
fix potholes on Staniford	3	
bike/walking path instead of sidewalk	3	
ugly, distracting	2	
reinstall light-up speed sign/ slow down turns	2	
no sidewalks at all	2	
design streets to discourage driving	2	
zone helps slow traffic	1	
sidewalks with street parking	1	
should tax bikes	1	
several residents need to park on street	1	
original width of cones more reasonable	1	
multiuse bike/ped (seasonal)	1	
more speed bumps on Staniford	1	
implement Year-round	1	
no traffic calming implemented wanted	1	



Memo

Date: November 20th, 2024

To: Public Works Commission

From: Phillip Peterson P.E., Senior Transportation Planner

CC: Chapin Spencer, Director of Public Works
Laura Wheelock P.E., Division Director of Tech Services/City Engineer
Erik Ramakrishnan, Assistant City Attorney

Subject: Proposed Changes to Traffic Regulation Amendment Approval Process

Overview:

Staff is providing an overview of proposed changes to the traffic regulation amendment approval process. At this stage, we are not seeking formal approval; rather, we aim to outline our intended approach for streamlining the process for future Appendix-C Traffic Regulation amendments.

Purpose & Need:

The goal of these proposed changes is to simplify and expedite the approval process for traffic regulation amendments, which currently involves multiple steps and stakeholder reviews. This change is necessary to enhance efficiency and responsiveness to community needs, particularly regarding safety and accessibility improvements.

1. **Improving Accessibility:** Streamlined processes will enable quicker responses to requests for changes that enhance accessibility, such as ADA parking spaces and school zones.
2. **Efficiency in Safety-Related Amendments:** With an expedited approval process, safety-related changes can be implemented faster, reducing risks associated with delayed action on critical traffic issues.
3. **Alignment with Current Guidelines:** These proposed amendments will ensure that our processes align with the latest recommendations from the Public Rights-of-Way Accessibility Guidelines (PROWAG) and the Manual on Uniform Traffic Control Devices (MUTCD).

Project Checklist:

	N/A	Yes	No	Reference
Aligns with MUTCD standards and/or established City Policy?		x		PROWAG, MUTCD, ADA, VTrans, Established DPW Policies
Aligns with City plans?		x		City Transportation Plan, planBTV Walk Bike, BSD School Travel Plan
Followed Public Engagement Plan?		x		These Traffic Regulation changes are defined as an INVOLVE project in the Public Engagement Plan (PEP).

Key Components of the Proposed Changes:

- **Delegation of Authority:** The regulations will specify which officer has the power to make certain decisions (like signing for parking spaces) and clearly state who has this responsibility (for example, the City Engineer, Director of the Department of Public Works, or someone they appoint).
- **Application of Tests & Standards:** The rules will explain the specific criteria that the designated officer must use when making decisions. For example, they might need to ensure a decision is "reasonably necessary" to meet ADA (Americans with Disabilities Act) requirements.
- **Promulgation of Staff-Level Regulations:** The means by which staff-level regulations will be made available to the public will be outlined, such as posting online at a designated location. The regulations will still follow the current rules for publishing periods of traffic regulation changes.
- **Public Notification:** We will utilize the Public Engagement Plan to guide the notification process, ensuring that the public is informed of the regulations through appropriate outreach efforts.

Proposed Standards for Traffic Regulation Amendments:**Amendments Requiring City Engineer Approval Only**

1. **ADA Parking Spaces**
 - Creation or modification of ADA-compliant parking areas.
2. **New School Zones**
 - Establishment of new school zones or changes to existing ones.
3. **School Crossing Guards Implementation**
 - Establishing or modifying crossing guard placements at school zones.
4. **Permanent Safety-Related Parking Removals**
 - Removals that are necessitated by safety assessments (e.g., sightline issues at intersections or commercial driveways).
5. **No Right Turn on Red Signs**
 - Implementing or modifying restrictions on right turns at intersections.
6. **Any Regulation Conflicting with Standard Guidelines**

- Traffic regulations that deviate from established standards set by relevant guidelines (ADA, MUTCD, PROWAG).+
- If there are significant conflicts between our regulations and established standards or guidelines (e.g., AASHTO, FHWA, MUTCD, VTrans), the Commission should be engaged to ensure full consideration and input before moving forward with changes.

Summary and Conclusion:

This memo serves to inform the Public Works Commission about the proposed changes to the traffic regulation amendment approval process without seeking immediate approval. The intention is to present these changes at upcoming meetings, including the November PWC and TEUC, for informational purposes and to gather feedback.

The proposed changes are designed to create a more efficient and effective framework for addressing traffic regulations in our community. Staff will continue to assess public input and refine the process accordingly. The aim is to enhance our responsiveness to community needs and maintain our commitment to public safety and accessibility.

Public Engagement:

As part of our commitment to transparency and community engagement, staff plans to present the proposed changes at the November PWC and TEUC meetings. Stakeholders are invited to provide input, ensuring that the community's voice is heard in the decision-making process.