



*City of Bristol
Transportation Commission*

*INFORMATION TO ACCESS THIS
MEETING*

*[https://bristolct-
gov.zoom.us/TransportationCommission](https://bristolct-gov.zoom.us/TransportationCommission)*

*Meeting ID: 864 1955 2858
Passcode: 760959*

The regular meeting of the Transportation Commission will be held on Tuesday, September 24, 2024, at 6:00 PM in Meeting Room 1-3, City Hall, 111 North Main Street, Bristol, CT.

AGENDA

1. Call to Order
2. Public Participation
3. Approval of Minutes
 - a. Regular Meeting -
4. Committee Reports
 - a. City Council Liaison Report
5. New Business
 - a. West End Association Request
6. Old Business
 - a. Transportation Commission Chair
 - b. Ordinance Committee Public Hearing on Membership (City Planner)
 - c. Survey
 - d. Board of Public Works Roundabout Presentation
 - e. RT. 72 Updates

7. Any other matter to come before said meeting

8. Adjournment

PER ORDER OF THE CHAIRPERSON



**City of Bristol
Transportation Commission
Tuesday August 27, 2024
6:00 p.m.**

Meeting Room 1-3, Bristol City Hall, 111 North Main Street, Bristol, CT 06010

Attendance: Bruce Lindsley
David Rooks
Ramon Peters
Stephen Coan
Lt. Krajewski (PD Liaison)

Absent: Cheryl Thibeault (City Council Liaison)
Craig Minor
Robert Flanagan, City Planner

Ramon Peters

1. Call to Order

Acting Chair Rooks called the meeting to order at 6:01 p.m.

2. Public Participation

No Public Participation

3. Approval of Minutes

a. Regular Meeting July 23, 2024

Motion made by Commissioner Lindsley and seconded by Commissioner Coan to accept the minutes as presented and place on file. All in favor, Motion passed.

4. Public Participation

No Public Participation

5. Committee Reports

Council Member Thibeault was absent no report.

6. New Business

a. Board of Public Works Roundabout Presentation

Motion made by Commissioner Lindsley and seconded by Commissioner Coan to place on File. All in Favor Motion Passes.

b. NVCOG Workshop-Complete Streets

Motion made by Commissioner Coan and seconded by Commissioner Lindsley to place on File. All in Favor Motion Passes.

b. New Commissioner-Steve Coan

Acting Chair Rooks welcomes the new commissioner.

Motion made by Commissioner Lindsley and seconded by Commissioner Coan to place on File. All in Favor Motion Passes.

7. Old Business

a. Route 72 Update

Motion made by Commissioner Coan and seconded by Commissioner Lindsley to table this until the next meeting. All in Favor, Motion Passes.

b. Survey

Commissioner Rooks shared that Council Member Thibeault has completed the Survey and will be sending the link to get the Commissions opinion on the survey before posting it publicly

c. City Planner change in ordinance for Transportation Commission

Commissioner Rooks shared that Council Member Thibeault brought up the change of role of City Planner in the Transportation Commission to the Ordinance Committee and received some pushback, she would like to have a vote on the matter and have Robert Flanagan attend the next Ordinance Meeting on September 3rd at 5:00pm.

Motion made by Commissioner Coan and seconded by Commissioner Lindsley to Table this until the next meeting when we have all Commissioners present, All in favor, Motion Passes.

8. Any other matter to come before said meeting

None

9. Adjournment

Motion made by Commissioner Lindsley and seconded by Commissioner Coan to adjourn at 6:14 p.m. Motion Passed. Meeting Adjourned

Respectfully Submitted,

Janet Little
Recording Secretary



To: Jeff Caggiano – Mayor
Ray Rogozinski – Director of Public Works City of Bristol, CT
111 North Main St.
Bristol, CT 06010

9/6/24

The West End Association would like to put in a formal request to remove the Bus Shelter that has been installed at the corner of West St and School St as part of the overall realignment project. While we are very sympathetic to actual bus riders and we want to encourage “walkable” neighborhoods, the reality of this is that the physical shelter is an invitation to graffiti, vandalism, posting of notices, and general vagrancy. This is shown to be true by seeing the existing new shelters that were placed on North Main St. Both the one in front of the new Wheeler Clinic location and the one in front of the Police Station have been targets of vandalism and are already in disarray. It is only a matter of time before the newly installed shelter in the West End finds itself the target. In addition, we disagree with the new location for the bus stop being moved approximately 50 feet north on West St from its previous location. The intention of the new realignment project is to make the intersection safer for pedestrians and vehicles. The long history of accidents at this intersection is one of the main reasons for the project.

We feel that the bus stop being moved to its current new location creates more of a traffic tie up than its previous location. From the prior location, the bus has ample opportunity to move away from traffic flows both when entering the bus stop area and upon re-entering the flow of traffic. The new location creates a much shorter entrance point and the buses will have to make a dramatic entrance in order to avoid the extended sidewalk area that is now in place. This will go against the intention of a safer intersection.

It is our recommendation that the bus stop be returned to its previous location in front of 148 West St and that the physical shelter not be used. We would welcome having a bench at the bus stop for the comfort of bus riders but the shelter itself will do more harm than good and be a detriment to all that the West End Association has accomplished in our efforts to clean up the neighborhood. We respectfully request the removal of the shelter and the movement of the bus stop back to its original location.

Sincerely,

Hilary Stoudt - President
Jesse Jablon – Vice President
David Haberkfeld – Vice President
Sammy Vasile - Treasurer
David Hamelin - Secretary



Department of Public Works | 860.584.6125

MEMORANDUM

DATE: March 11, 2024

TO: Mayor Jeffrey Caggiano
Board of Public Works

FROM: Raymond A. Rogozinski, P.E., Director of Public Works

RE: TRAFFIC ROUNDABOUTS (Benefits & Challenges/Concerns)

The Department of Public Works has scheduled representatives from the UCONN T2 Center to provide a presentation on traffic roundabouts to the Board of Public Works. The UCONN T2 Center provides technical assistance and education programs to municipalities for safety and traffic signals. **The Department of Public Works is not proposing a project that includes a traffic roundabout at this time**, however, DPW's intent is to provide the Board with information associated with the both the pros and cons of a traffic roundabout.

Public Works wants to present the Board with the benefits and challenges of traffic roundabouts, without a specific proposal to install a roundabout within the City. The traffic engineering community including the FHWA and the CT DOT has promoted and increased the use of roundabouts within the last 5 years, and as a result, the number of roundabouts located within the state has increased, and will continue to increase.

The installation of traffic roundabouts have benefited traffic flow at intersections within the state, however, they are not the best solution for most intersections, and must be designed and located to ensure they are large enough to prevent safety concerns, or if they increase traffic concerns at adjacent signalized intersections. The primary advantages of roundabouts includes a reduction of traffic conflict points from at least 24 to 8 for a four leg intersection by the elimination of left turns. As traffic roundabouts become increasingly common in the state's roadway network, one of my primary concerns regarding safety have been mitigated. As Director of Public Works, I strongly believe that roadway design safety is, in large part, a function of driver expectation. Since roundabouts have not typically been installed in Connecticut, and Connecticut drivers have not previously encountered traffic roundabouts, it was previously my opinion that new traffic roundabouts could pose a safety concern. However, with the number of roundabouts increasing throughout the State of Connecticut, drivers are becoming more accustomed to roundabouts, and my safety concerns have diminished.

As indicated, although the Department of Public Works is currently not proposing the installation of a roundabout within the City, future consideration should be given to their installation. Installation should be based on traffic engineering standards and guidelines to improve traffic intersection conditions. Traffic roundabouts improve traffic flow. However, it is critical that they are large enough (often requiring additional right of way), do not impact traffic signals within a corridor, do not reduce pedestrian safety, and support truck movements. It is also important to consider the traffic flow through an intersection prior to recommending the installation of a roundabout. Factors to consider include traffic flow and intersection geometry. Is the intersection in question currently experiencing extended periods of congested, moderate, or free flow? Will the roundabout function as a traffic calming measures? Are the intersections street approaches perpendicular or skewed? Based on my personal experience, the roundabouts installed on CT Route 79 & 80 in North Madison and the roundabouts in Manchester, Vermont work well, whereas, the roundabouts on Hebron Ave & New London Turnpike in Glastonbury do not function well.

Please feel free to contact me with any questions at 860-584-6113.



Training and Technical Assistance Center

**Connecticut
Transportation
Institute**

CT T2 Center Roundabouts – An Overview

t2center.uconn.edu

What is a
roundabout?



A roundabout...



- Is an intersection with a circular configuration
 - Features channelized, curved approaches that reduce vehicle speed
 - Has entry yield control that gives right-of-way to circulating traffic
 - Has counterclockwise flow around a central island that minimizes conflict points
- Is NOT a traffic circle or rotary
 - Does not have stop sign or traffic signal control
 - Does not provide right-of-way to incoming traffic

So what is a mini- roundabout...

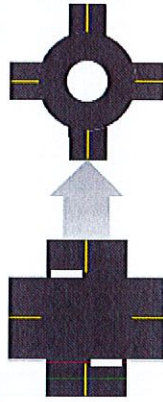
- A smaller version of a roundabout, mostly used in more residential areas
- **Still** has entry yield control that gives right-of-way to circulating traffic
- **Still** has counterclockwise flow around a central island that minimizes conflict points

Where to use a roundabout

- Intersections with angle and turning crashes
- Intersections experiencing congestion due to existing traffic control (signal, stop signs)
- Intersections with operational issues related to turning movements
- Intersections experiencing speeding issues

Safety Benefits:

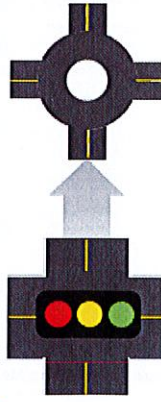
Two-Way Stop-Controlled
Intersection to a Roundabout



82%

reduction in fatal
and injury crashes.¹

Signalized Intersection to a
Roundabout



78%

reduction in fatal
and injury crashes.¹

Benefits of roundabouts

- Lower speeds
- Reduced conflicts
- Reduced delay and congestion
- Improved air quality
- More suitable environment for walking and cycling*

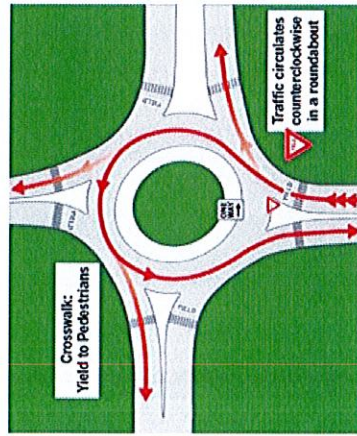
[Roundabouts | FHWA \(dot.gov\)](https://www.fhwa.dot.gov/roundabouts/)

Considerations

- Right-size the roundabout – does it fit?
- Large vehicle traffic
- Materials, landscaping, lighting
- Maintenance – have this conversation early and often!
- Walking and cycling – include appropriate features
- What happens during construction?

Don't forget education!

Navigating the Two Mile Road / South Road Roundabout



Is it a Roundabout? A Rotary? A Traffic Circle? YES!

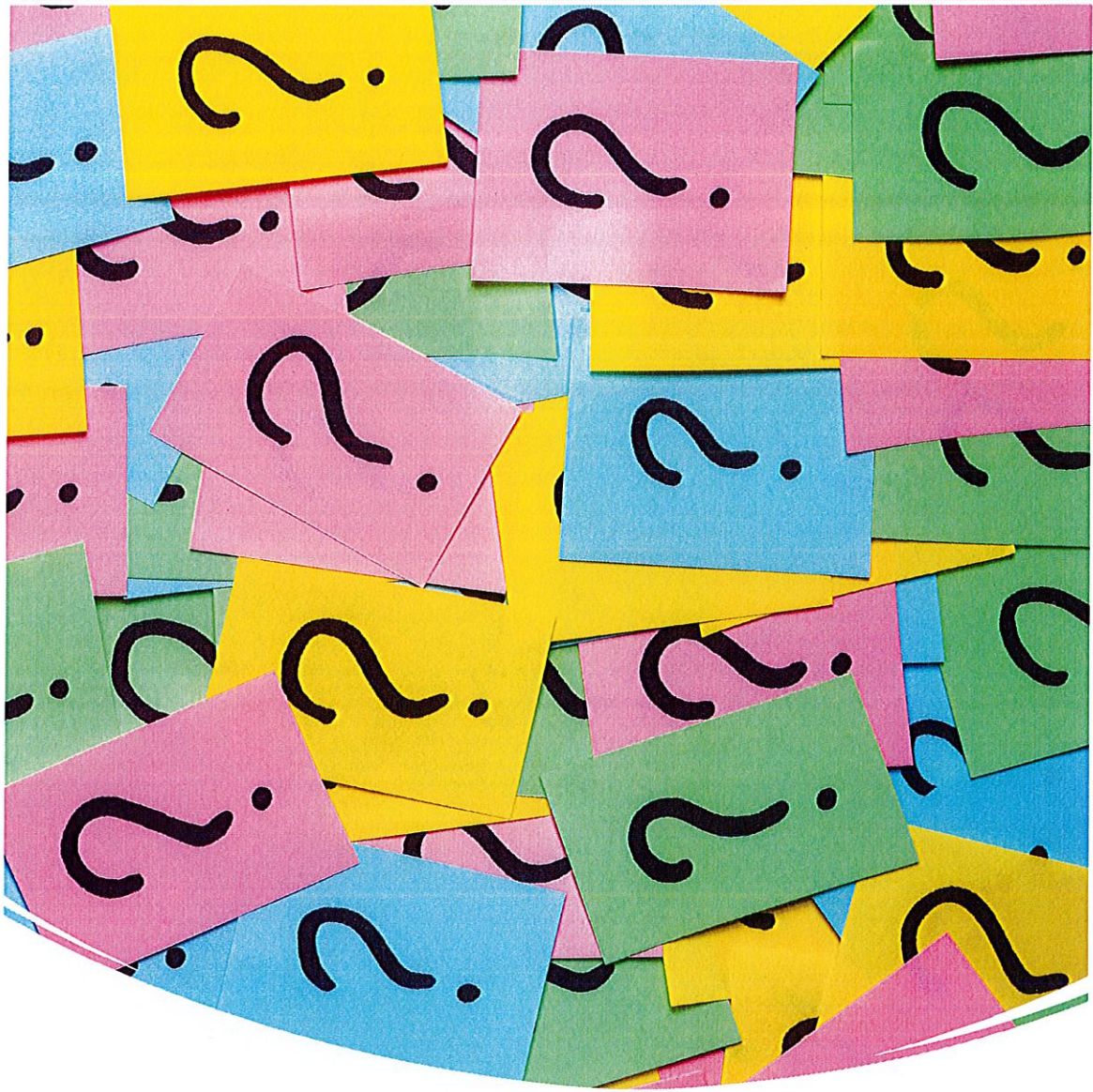
You have probably seen these in other Connecticut communities and now we have our first one here in Farmington! For some it's exciting, others it's a nuisance and for others it's confusing. Here's some basic information for navigating roundabouts:

The graphic above demonstrates how to move through the roundabout. Traffic proceeds to the right, yielding to vehicles coming from the left and to pedestrians in the crosswalk. Roundabouts are considered safer than traditional intersections and result in fewer vehicle to vehicle conflict points and fewer vehicle to pedestrian conflict points.



A long, thin, reddish-brown object, possibly a piece of wood or a stick, oriented vertically. It has a slightly textured surface and a few small, dark spots.

-



Questions?



For additional information, please contact:

Melissa Evans

Safety Circuit Rider

CT T2 Center

melissa.evans@uconn.edu

203-898-0977

Jason Hughes

Safety Technical Associate

CT T2 Center

jason.hughes@uconn.edu

860-486-0303



**Streetscape Improvements
Park Street (CT Route 72)
Bristol, CT
Project No. 40968**

Preliminary Design Statement



Prepared for:
City of Bristol
111 North Main Street
Bristol, CT 06010

Prepared by:
GM2 Associates Inc.

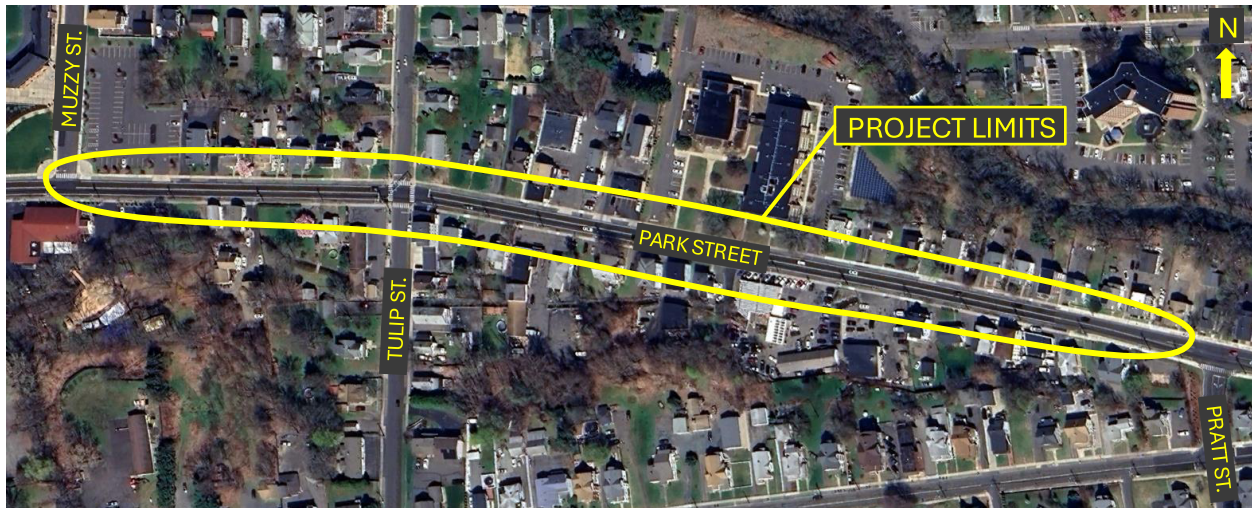
115 Glastonbury Boulevard
Glastonbury, CT 06033
860.659.1415 | gm2inc.com

Date: June 27, 2024

PRELIMINARY DESIGN STATEMENT
PROJECT NO. 40968
STREETSCAPE IMPROVEMENTS ON PARK STREET
CITY OF BRISTOL

Project Location:

This project is located on Park Street (State Route 72) between its intersection with Muzzy Street and intersection with Pratt Street for a total Project length of 1740 feet.



Existing Conditions:

Park Street is classified as an Urban Principal Arterial, running in the west-east direction and all other cross streets within the project limits (Muzzy Street, Tulip Street, and Pratt Street) are classified as local roads, running in the north-south direction. The 2018 ADT on Park Street was reported to be 9,400 vehicles per day and the posted speed limits ranges between 25 mph and 30 mph. Through the project corridor, Park Street is part of the State-owned right-of-way along Connecticut State Route 72. The right-of-way varies from 45 to 50 feet in width. The road was recently repaved with a mill and overlay in 2023 and the State of Connecticut completed an adjacent project at the Pratt Street intersection in Spring 2024, which is the eastern limit of the Park Street streetscape.

The typical roadway width on Park Street is approximately 26 feet, consisting of two 11-foot travel lanes and 2-foot painted shoulders. There are 4 – 5-foot-wide concrete sidewalks with grass buffer strips present along both sides of the roadway for the entire length of the project. There is one mid-block crossing at the historic Clara T. O’Connell School apartment building. Although Park Street has grass buffers fronting residential properties, the streetscape is considered low-quality and there are no other streetscaping elements such as street trees and pedestrian luminaires. Street lighting is provided by “cobra head” style luminaires that are mounted on utility poles.

Overhead utilities are present predominantly along the south side of the street, with the lowest wires at approximately 12’ to 14’ above grade and three-phase power located on triple cross bars at heights ranging from 20’ to 30’. The spacing of the poles varies along the corridor, but in general they are roughly 100 feet apart. There are multiple service crossings to poles and properties long the north side of the street. Within the roadway, underground water, sanitary



sewer, natural gas and storm drainage are present, with supporting structures such as manholes and gate valves at various locations. Service laterals are present from all buildings along the project limits on both sides of the street.

The uses along the corridor vary but are primarily multi-family house and light commercial along both sides of Park Street. Existing driveway aprons are present at all properties, though some access is shared between properties.

Project Purpose & Need:

The purpose of this project is to improve pedestrian accommodations and aesthetic qualities along Park Street between Muzzy Street and Pratt Street.

The project is needed because Park Street is primarily a residential street that also carries heavily travelled State Route 72. The existing sidewalk system provide access to Downtown businesses, employment centers, and other important services. Rockwell Park and Muzzy Field are destinations within the project limits that are well served by the sidewalk system. It is important to maintain and enhance pedestrian accommodation, comfort and safety along Park Street.

Proposed Improvements:

The 2022 study on which this project is based identified the need for pedestrian improvements and aesthetic improvements through this portion of Route 72. However, it did not assess adequacy of the existing roadway from a CTDOT criteria standpoint. It was assumed during that study that the roadway met CTDOT criteria for an Urban Principal Arterial. The base project was identified by the City of Bristol as replacing all curb, apron and walk from existing face of curb to ROW limits. This scope of work is represented by Alternative 1.

However, following the survey phase of this project and subsequent review of existing conditions, it was identified that the existing roadway width, which varies from west to east 26' to 29', is deficient and should be 30'. As part of this preliminary design phase, GM2 is providing an alternative design (Alternative 2), which would widen the roadway to a standard 30' wide along the corridor.

State of Connecticut General Statutes and CTDOT's Complete Streets guidance requires bicycle accommodations be incorporated into all roadway projects. There are currently no accommodations for bicycles along Park Street within the project limits and none are currently proposed as part of this project.

Alternative 1: Match Existing Curb Line

Proposed improvements include upgrading the existing curbing to Granite Stone Curbing and replacing all driveway aprons throughout the project limits to create a uniform cohesive look and further define the edge of road. Additionally, the existing grass buffer will be replaced with a standard 4-foot-wide brick paver apron. All Sidewalk and sidewalk ramps will replace and designed to meet current CTDOT and ADA requirements, Rectangular Rapid Flashing Beacons are proposed at the midblock crossing and pedestrian lighting is proposed within the brick paver shelf to improve pedestrian safety.

Alternative 2: Park Street Minor Widening



Proposed improvements under this alternative include minor widening of Park Street to bring the roadway up to criteria for an Urban Principal Arterial, which would accommodate 11-foot travel lanes and 4-foot shoulders, and the existing curbing will be upgraded to Granite Stone Curbing. This option would reduce the width of the brick paver buffer in order to keep the streetscape improvements within the ROW limits. Because of this, the cost of this alternative will be slightly lower since pavement is less expensive than brick pavers. Additionally, all driveway aprons will be replaced to create a uniform cohesive look and further define the edge of road. The existing grass buffer will be replaced with a 3-foot-wide brick paver shelf. All sidewalks and sidewalk ramps will be replaced and designed to meet ADA requirements, Rectangular Rapid Flashing Beacons are proposed at the midblock crossing, and pedestrian lighting is proposed within the brick paver shelf to improve pedestrian safety. The narrower brick paver shelf would barely accommodate a 3'x3' tree grate and could reduce the aesthetic of the streetscape.

There would be additional cost for this option for drainage improvements required to relocate existing catch basins to the new edge of road and extend existing pipes. Given that this widening would be localized to just within the project limits, this alternative may not be feasible if CTDOT does not have future plans to widen the roadway to the east and west of the project. Additional coordination with CTDOT regarding this alternative is necessary should the City choose to move forward with it.

Crash Data Analysis:

The Connecticut Roadway Safety Management System was used to collect and analyze the following crash data which falls within the proposed project limits on Park Street. From January 1, 2021, to December 31, 2023 (3 years) there were a total of 23 crashes with 7 injuries. None of the crashes involved pedestrians or bicyclists.

Crash Severity (7 injuries in 23 Crashes)

<u>Crash Severity</u>	<u>Total</u>	<u>Percentage</u>
B (Minor Injury)	4	17%
C (Possible Injury)	3	13%
O (Property Damage Only)	16	70%

Crash Type (23 Crashes)

<u>Crash Severity</u>	<u>Total</u>	<u>Percentage</u>
Sideswipe (opposite direction)	1	4%
Front to Front	2	9%
Non-Fixed Object	1	4%
Fixed Object	4	17%
Angle	7	30%
Front to Rear	8	35%

Contributing Factors

<u>Contributing Factor</u>	<u>Total</u>	<u>Percentage</u>
Following too Closely	7	30%
Failure to Grant Right-of-Way	6	26%
Failure to Obey Traffic Signal	2	9%



There were five crashes between January 1, 2021, and December 31, 2023, that involved a vehicle striking a fixed or non-fixed object within the project limits. The non-fixed object crash was the result of a vehicle and animal collision. A variety of contributing factors led to the occurrence of fixed object crashes. However, it is important to note that all fixed object crashes were a result of operators departing the roadway. The first incident involved an operator who fell asleep behind the wheel, leading to a collision with a fire hydrant. The second incident was caused by the operator's foot slipping off the brake pedal, resulting in a collision with a utility pole. In the third case, an operator with medical issues and a suspended license collided with a fire hydrant. Lastly, the fourth fixed object crash occurred when a tractor trailer attempted to turn right onto Park Street from Tulip Street, causing the trailer portion of the truck to collide with a crosswalk signal support.

Design Controls:

Park Street:

- Function Classification: Urban Principal Arterial
- Area Type: Intermediate

Local Roads:

- Function Classification: Urban Local Roads
- Area Type: Intermediate

Recorded Usage Data:

Average Daily Traffic (ADT):

	2018 ADT (vpd)	2021 ADT (vpd)
Park Street	9,400	10,450

Posted Speed Limit:

The posted speed limits are as follows:

Park Street	25 m.p.h.
Muzzy Street	30 m.p.h.
Tulip Street	25 m.p.h.
Pratt Street	25 m.p.h.

Design Standards:

The following Design Standards are used:

- CTDOT's Highway Design Manual, 2003 Edition (including Revisions to January 2023) (HDM)

As Park Street is a State Route and is part of the National Highway System Connection Department of Transportation (CTDOT) Design Standards were used to determine the design criteria for Park Street. CTDOT has developed criteria for the design of existing roadways under



different geometric constraints. More Specifically, Chapter Two (Geometric Design of Existing Highways for 3R Non-Freeway Projects) was used to develop the design criteria for Park Street.

Park Street: Two Lane Principal Urban Arterial

<u>Design Element</u>	<u>Design Value</u>
Type of Area	Intermediate
Travel Lane Width	11' – 12'
Shoulder Width (NHS)	4' – 8'
Parking Lane Width	N/A
Sidewalk Width	5' Minimum
Bicycle Lane Width	5'
Bicycle Lane Cross Slope	2%

Rights-of-Way:

Right-of-Way impacts include minor regrading of slopes and driveways to blend the proposed worked onto private properties. As Park Street is a State Route, the installation of RRFB at the mid-block crossing will require an Encroachment Permit to be submitted.

Pavement Composition:

Full-depth reconstruction is proposed throughout the project limits in the areas where the existing curbing will be upgraded to granite stone curbing. The following pavement composition will be installed within those limits:

- 2" HMA S0.375
- 2" HMA S0.5
- 6" Processed Aggregate
- 8" Subbase

Environmental Considerations/Permits:

There are no anticipated impacts to regulated areas along the Park Street corridor.

Bicycle & Pedestrians:

In 2017, the CTDOT and the Statewide Bicycle and Pedestrian Plan Update Steering Committee, developed a bicycle planning network for bicycle travel on state roads in Connecticut. Park Street was identified to be part of the on-road bicycle planning network. However, as Park Street has narrow shoulders in its existing condition any improvements for a bicycle network would require widening the roadway and/or the elimination of this existing buffer. Additionally, the Pequabuck River Trail Project is proposed in the City of Bristol, parallel with Park Street approximately 500' to the north. This project will provide a safe and comfortable network for bicyclist in the area and eliminate the need for such improvements on Park Street.



Utilities:

The following companies have utility facilities within the project limits:

- Eversource Energy – Electric Distribution
- Eversource Energy - Gas
- City of Bristol Water and Sewer Department
- Frontier Communications
- Comcast Cable
- Verizon Fios

Utility coordination has been initiated by GM2 for the Park Street project and is ongoing. Project notification letters and requests for mapping files has been sent to all utility owners listed in the CTDOT utility coordination guide as having facilities in Bristol, asking to confirm the locations of any facilities within the project limits. To date, four utility owners have confirmed their receipt of the notification. Once preliminary design plans have been reviewed by the City and an alternative has been chosen, additional information such as plans will be sent to the utility owners to review potential impacts to facilities. This will be followed by a field utility meeting to identify those impacts and determine options for designing to avoid the impact or relocating the utility.

There are limited known utility impacts for Alternative A, which would reconstruct the curbing and walk generally in their current locations. Installation of pedestrian lighting and street trees along the south side of the street could potentially conflict with overhead wires for both alternatives. Alternative B would move the curbing approximately 2' closer to the utility poles along the south side of the street, which could potentially lead to conflicts with the poles.

Maintenance Agreements:

Further coordination with the Department of Transportation will be required to establish a Maintenance Agreement that identifies the Town's responsibilities. It is anticipated the City of Bristol will be responsible for the following:

- Maintenance and operation of Rectangular Flashing Beacons
- Maintenance, operation and cost of decorative lighting
- Maintenance of decorative paver apron.

Schedule:

- Encroachment Permit: December 2024
- Contract Documents: December 2024
- Advertising: January 2025
- Construction: April 2025 to December 2025



Estimated Project Cost:

Alternative 1: \$3.6 Million (Recommended Alternative)

Alternative 2: \$3.11 Million

See attached cost estimate breakdowns and back up information for each alternative for additional information.



PROJECT NO. 40968
STREETSCAPE IMPROVEMENTS ON PARK STREET
CITY OF BRISTOL
ALTERNATIVE #1 PRELIMINARY DESIGN ELEMENT

Anticipated year of expenditure

2025

Base year (cost based on expenditure in this year):

2024

Phase of Development:

Preliminary Design (30%)

Construction Cost Summary					
			ROADWAY	\$	1,807,576
			STRUCTURES	\$	-
			TRAFFIC	\$	-
			ENV. COMPLIANCE/LANDSCAPE/ILLUMINATION	\$	-
Subtotal of Known Items =				70%	\$ 1,807,576
% of Base Estimate					
			Equivalent % of Known Items		
15%			MINOR ITEMS	21%	\$ 387,338
3%	0201001		CLEARING AND GRUBBING	4%	\$ 77,468
4%	0971001	MAINTENANCE AND PROTECTION OF TRAFFIC		6%	\$ 103,290
1%	0980020	A	CONSTRUCTION SURVEYING	1%	\$ 25,823
7%	0975004	A	MOBILIZATION AND PROJECT CLOSEOUT	10%	\$ 180,758
Contract Items (Base Estimate) =					\$ 2,582,252
				INFLATION FACTOR	4%
				YEARS TO OBLIGATION	1
Contract Items Corrected for Inflation =					\$ 2,686,000
				CONTINGENCIES	10% \$ 268,600
				INCIDENTALS	25% \$ 671,500
TOTAL CONSTRUCTION COST				\$	3,626,100



PROJECT NO. 40968
PARK STREET STREETSCAPE IMPROVEMENTS
CITY OF BRISTOL
ALTERNATIVE #2 PRELIMINARY DESIGN ESTIMATE

Anticipated year of expenditure

2025

Base year (cost based on expenditure in this year):

2024

Phase of Development:

Preliminary Design (30%)

Construction Cost Summary					
			ROADWAY	\$	1,554,092
			STRUCTURES	\$	-
			TRAFFIC	\$	-
			ENV. COMPLIANCE/LANDSCAPE/ILLUMINATION	\$	-
Subtotal of Known Items =				70%	\$ 1,554,092
% of Base Estimate					
			Equivalent % of Known Items		
15%			MINOR ITEMS	21%	\$ 333,019.76
3%	0201001		CLEARING AND GRUBBING	4%	\$ 66,604
4%	0971001		MAINTENANCE AND PROTECTION OF TRAFFIC	6%	\$ 88,805
1%	0980020	A	CONSTRUCTION SURVEYING	1%	\$ 22,201
7%	0975004	A	MOBILIZATION AND PROJECT CLOSEOUT	10%	\$ 155,409
Contract Items (Base Estimate) =					\$ 2,220,132
				INFLATION FACTOR	4%
				YEARS TO OBLIGATION	1
Contract Items Corrected for Inflation =					\$ 2,309,000
				CONTINGENCIES	10% \$ 230,900
				INCIDENTALS	25% \$ 577,250
TOTAL CONSTRUCTION COST				\$	3,117,150

[illegible]

REV.	DATE	REVISION DESCRIPTION

DESIGNER/DRAFTER: NAB
CHECKED BY: PMB

HORIZONTAL SCALE
1" = 20'

SIGNATURE/ BLOCK:

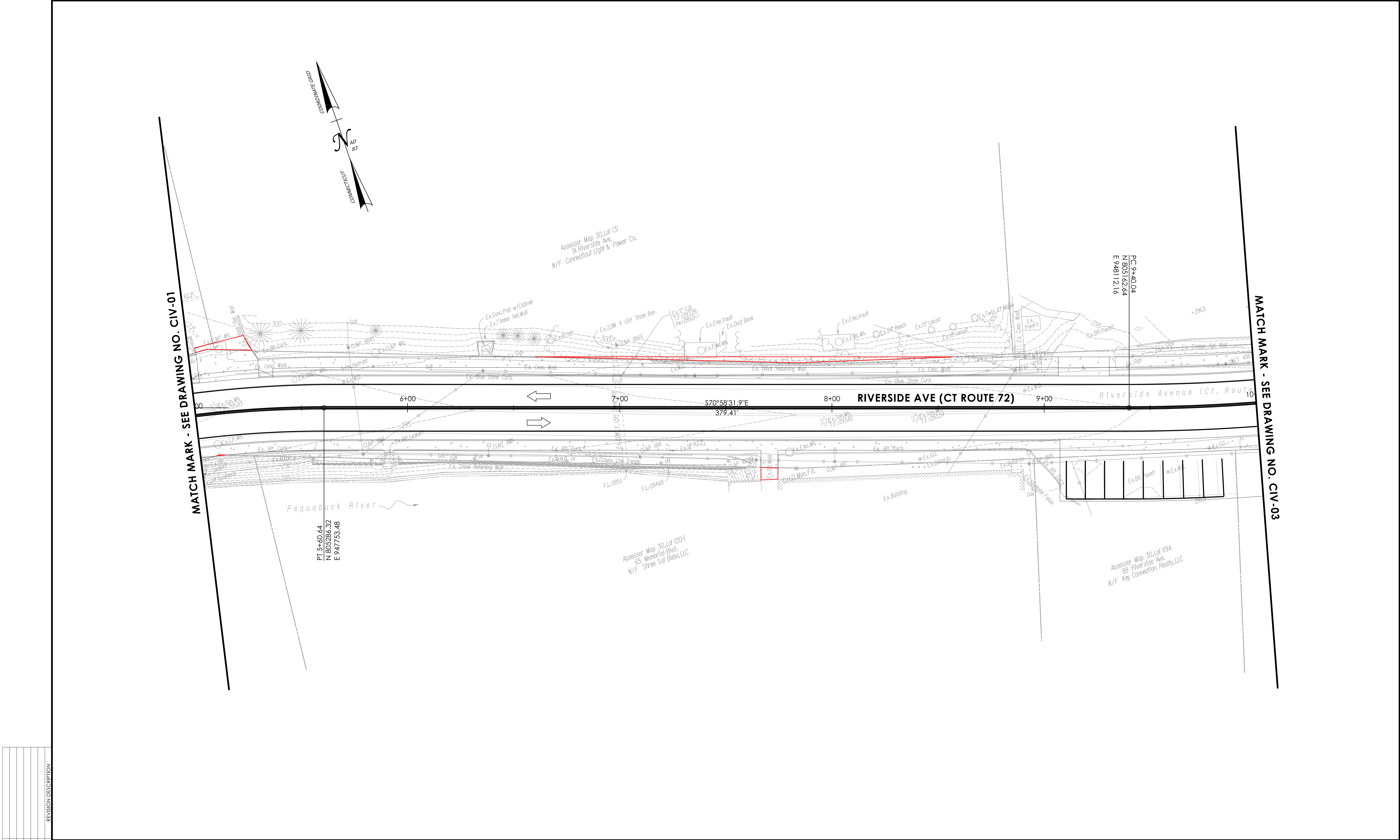
GM2 ASSOCIATES, INC.
115 GLASTONBURY BLVD.
GLASTONBURY, CT 06033

STATE OF CONNECTICUT
DEPARTMENT
OF
TRANSPORTATION

PROJECT NUMBER: 40968
PROJECT DESCRIPTION: STREETSCAPE IMPROVEMENTS OF RIVERSIDE AVE AND PARK STREET
TOWN(S): BRISTOL
DRAWING TITLE: CIVIL PLANS

DRAWING NO.
CIV-02
SHEET NO.

LASTED SAVED BY: NBibeau
FILE NAME: C:\Users\NBibeau\GM2 Associates, Inc\40968 - Riverside Ave Bristol - Documents\330_Design_Data\Highways\Contract_Plans\HW_CP_40968_CIV-02.dgn
PLOTTED DATE: 2/22/2024



REV.	DATE	REVISION DESCRIPTION

DESIGNER/DRAFTER: NAB
CHECKED BY: PMB

0 20' 40'

HORIZONTAL SCALE
1" = 20'

SIGNATURE/
BLOCK:

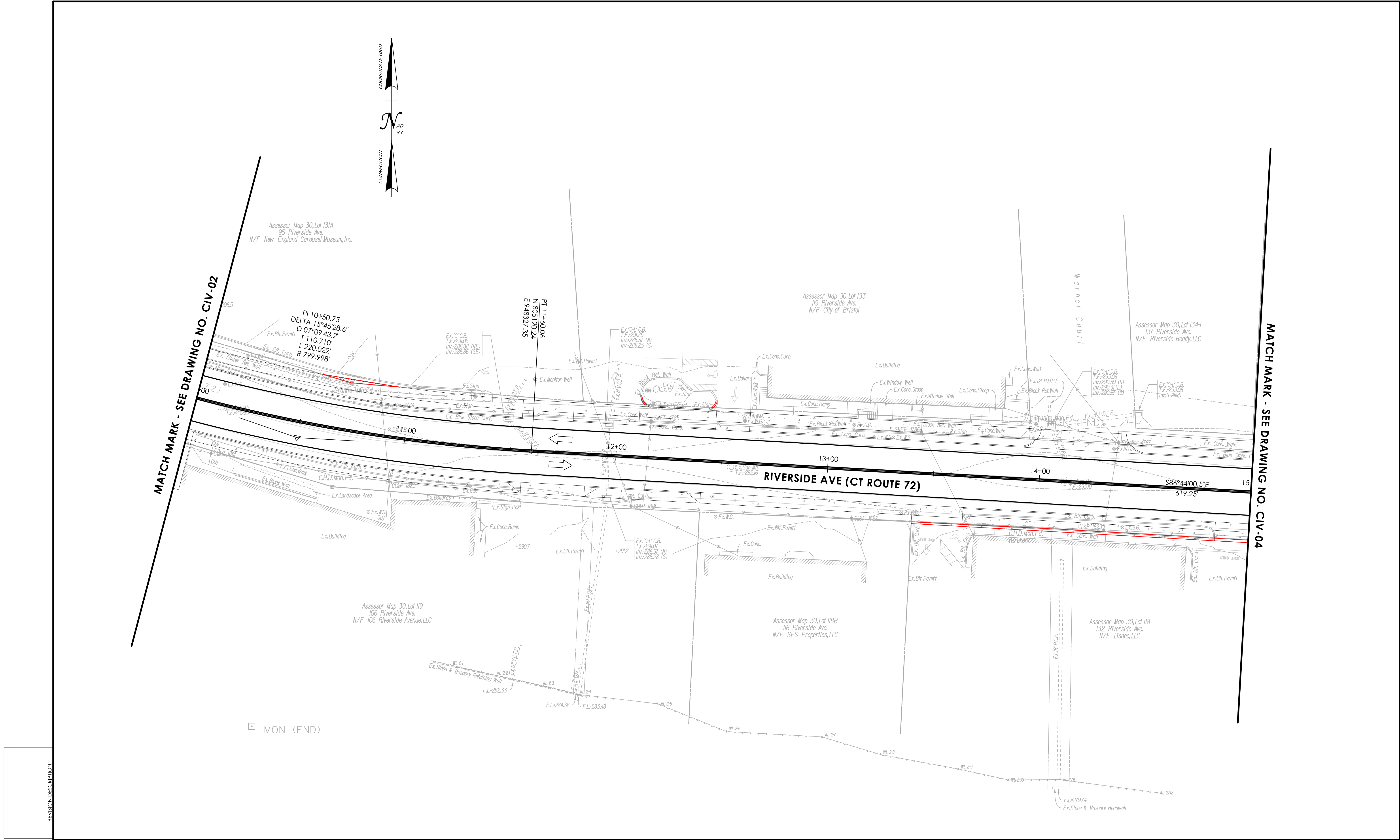
GM2 ASSOCIATES, INC.
115 GLASTONBURY BLVD.
GLASTONBURY, CT 06033

STATE OF CONNECTICUT
DEPARTMENT
OF
TRANSPORTATION

PROJECT NUMBER: 40968
PROJECT DESCRIPTION: STREETSCAPE IMPROVEMENTS OF RIVERSIDE AVE AND PARK STREET
TOWN(S): BRISTOL
DRAWING TITLE: CIVIL PLANS

DRAWING NO.
CIV-03
SHEET NO.

LASTED SAVED BY: NBibeau
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PLOTTED DATE: 2/22/2024



DESIGNER/DRAFTER: NAB CHECKED BY: PMB		SIGNATURE/ BLOCK:  GM2 ASSOCIATES, INC. 115 GLASTONBURY BLVD. GLASTONBURY, CT 06033		PROJECT NUMBER: 40968 PROJECT DESCRIPTION: STREETScape IMPROVEMENTS OF RIVERSIDE AVE AND PARK STREET TOWN(S): BRISTOL DRAWING TITLE: CIVIL PLANS	DRAWING NO. CIV-04 SHEET NO.
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REV.	DATE	REVISION DESCRIPTION

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GM2 ASSOCIATES, INC.
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STATE OF CONNECTICUT
DEPARTMENT
OF
TRANSPORTATION



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DRAWING TITLE: CIVIL PLANS

DRAWING NO.
CIV-05
SHEET NO.

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Page 35

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DRAWING TITLE: CIVIL PLANS

DRAWING NO.
CIV-06

SHEET NO.

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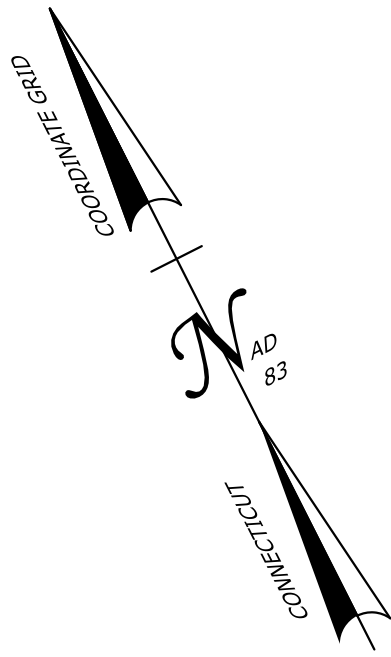


PROJECT NUMBER: 40968
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TOWN(S): BRISTOL
DRAWING TITLE: CIVIL PLANS

DRAWING NO.
CIV-08
SHEET NO.

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PLOTTED DATE: 2/22/2024

Page 38



Assessor Map 30A Lot RR-12
N/F Pan Am Southern, LLC

Assessor Map 30A Lot 15C
398 Riverside Avenue
N/F Bryan Wojnarowski

Assessor Map 30A Lot 16
450 Riverside Avenue
N/F WC Enterprises LLP

PI 43+04.95
N 805488.01
E 951357.63
DELTA 83°37'46.1"
R 515.00'
L 751.70'
T 460.70'
D 11°07'31.5"

MATCH MARK - SEE DRAWING NO. CIV-08

MATCH MARK - SEE DRAWING NO. CIV-10

REV.	DATE	REVISION DESCRIPTION

DESIGNER/DRAFTER: NAB

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HORIZONTAL SCALE
1" = 20'

SIGNATURE/
BLOCK:

GM2
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GLASTONBURY, CT 06033



STATE OF CONNECTICUT
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PROJECT NUMBER: 40968

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TOWN(S): BRISTOL

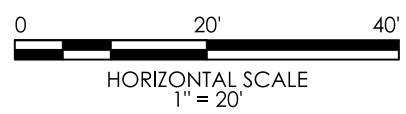
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DRAWING NO.
CIV-09

SHEET NO.

REV.	DATE	REVISION DESCRIPTION

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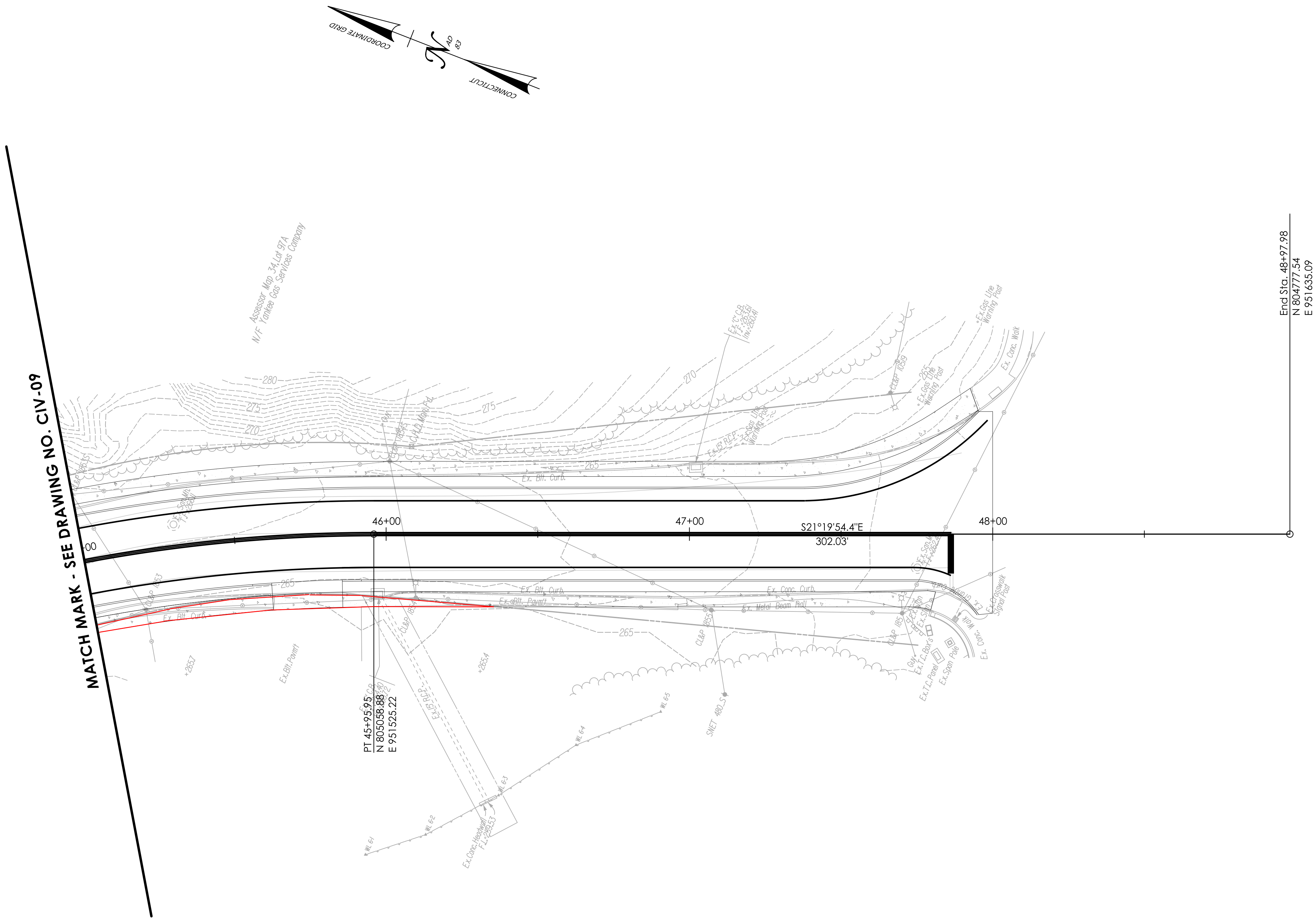


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TOWN(S): BRISTOL
DRAWING TITLE: CIVIL PLANS

DRAWING NO. CIV-10
SHEET NO.



End Sta. 48+97.98
N 80°47'17.54"
E 95°16'35.09"