

# COMMUNITY CONNECTIVITY GRANT FOR SAFE AND ACCESSIBLE BRISTOL ADA SIDEWALK RAMP UPGRADES

BRISTOL, CONNECTICUT  
STATE PROJECT NO. 0170-3513GR

BOARD OF PUBLIC WORKS  
**MAYOR JEFFREY CAGGIANO, CHAIRMAN**

DIRECTOR OF PUBLIC WORKS  
**RAYMOND A. ROGOZINSKI, P.E.**

CITY ENGINEER  
**NANCY LEVESQUE, P.E.**

JULY 3, 2023

Contract : 2024-002



City of Bristol  
Department of Public Works  
111 North Main Street  
Bristol, Connecticut 06010  
Tel. 860-584-6125  
Fax 860-584-3838  
ci.bristol.ct.us

PREPARED BY:

COMMENTS:

DATE:

No.

DESIGN BY: WRS  
DRAFTED BY: WRS  
CHECKED BY: ---  
SCALE: -  
DATE: JULY 3, 2023  
PROJECT No.: 0170-3513

**COMMUNITY  
CONNECTIVITY PROGRAM**  
Bristol, Connecticut  
TITLE SHEET

DRAWING NO.:

TITLE



# GENERAL NOTES

1. ALL METHODS AND MATERIALS OF CONSTRUCTION SHALL COMPLY WITH THE STANDARD SPECIFICATIONS OF THE CITY OF BRISTOL.
2. CONTRACTORS SHALL CALL-BEFORE-U DIG AT 1-800-922-4455 FOR THE MARK OUT OF UTILITIES 72 HOURS PRIOR TO ANY EXCAVATION.
3. DIMENSIONS OF THE EXISTING CONDITIONS INDICATED ON THESE PLANS ARE FOR GENERAL REFERENCE ONLY. THEY HAVE BEEN TAKEN FROM APPROXIMATE FIELD MEASUREMENTS AND ARE NOT GUARANTEED. THE CONTRACTOR SHALL TAKE ALL FIELD MEASUREMENTS NECESSARY TO ASSURE PROPER FIT OF THE FINISHED WORK AND SHALL ASSUME FULL RESPONSIBILITY FOR THEIR ACCURACY. IF AND WHEN SHOP DRAWINGS BASED ON FIELD MEASUREMENTS ARE SUBMITTED FOR REVIEW, THE FIELD MEASUREMENTS SHALL ALSO BE SUBMITTED FOR REFERENCE BY THE REVIEWER.
4. SCHEMATIC DETAILS INDICATED ON PLAN SHEETS ARE FOR INFORMATIONAL PURPOSES ONLY. THE CONTRACTOR SHALL REFER TO THE ATTACHED STANDARD DETAIL SHEETS FOR ALL DIMENSIONAL SPECIFICATIONS OF THE PROPOSED WORK.
5. SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED AS DIRECTED BY THE ENGINEER. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE IMPLEMENTED AND MAINTAINED UNTIL PERMANENT COVER AND STABILIZATION IS ESTABLISHED. ALL CONSTRUCTION ACTIVITIES SHALL PROCEED IN SUCH A MANNER SO AS NOT TO POLLUTE ANY WETLANDS, WATERCOURSE, WATERBODY, AND CONDUIT CARRYING WATER, ETC. THE CONTRACTOR SHALL LIMIT, INsofar AS POSSIBLE, THE SURFACE AREA OF EARTH MATERIALS EXPOSED BY CONSTRUCTION METHODS AND IMMEDIATELY PROVIDE PERMANENT AND TEMPORARY POLLUTION CONTROL MEASURES TO PREVENT CONTAMINATION OF ADJACENT WETLANDS, WATERCOURSES, AND WATERBODIES, AND TO PREVENT, INsofar AS POSSIBLE, EROSION ON THE SITE.
6. ALL RAMPS ALONG SOUTH STREET, KELLEY STREET, CHURCH STREET, JACOBS STREET, AND HAVILAND STREET SHALL BE PAID FOR UNDER THE ITEM, "REMOVE AND REPLACE SIDEWALK RAMP WITH ADA COMPLIANT RAMP (CITY)".
7. ALL RAMPS LOCATED ALONG WEST STREET (ROUTE 69) AND PARK STREET (ROUTE 72) ARE TO BE PAID FOR UNDER THE ITEM, "REMOVE AND REPLACE SIDEWALK RAMP WITH ADA COMPLIANT RAMP (STATE)".
8. CONCRETE SIDEWALK SHALL BE PAID FOR UNDER THE ITEM "FIVE-INCH-THICK CONCRETE SIDEWALK ON EXISTING BASE" OR AS NOTED ON THE PLANS.
9. MAINTENANCE AND PROTECTION OF TRAFFIC SHALL BE IN ACCORDANCE WITH THE MUTCD. CITY POLICE ARE REQUIRED ON CHURCH STREET, PARK STREET, SOUTH STREET, WEST STREET PER MUNICIPAL ORDINANCE.



**City of Bristol**  
 Department of Public Works  
 Tel. 860-584-6125  
 Fax 860-584-3838  
 ci.bristol.ct.us  
 111 North Main Street  
 Bristol, Connecticut 06010

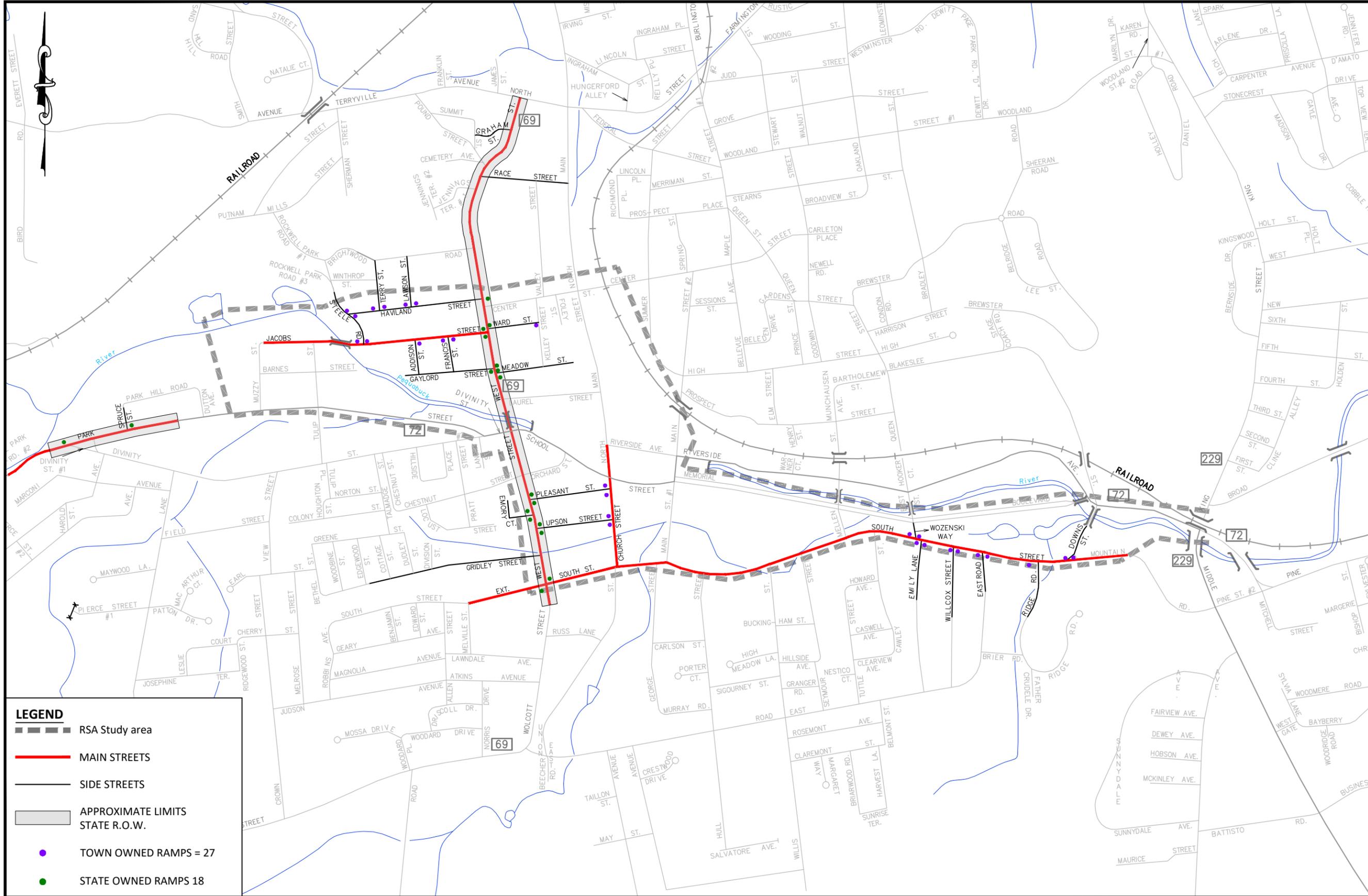
PREPARED BY:

No.	DATE	COMMENTS

DESIGN BY: WRS  
 DRAFTED BY: WRS  
 CHECKED BY: ---  
 SCALE: -  
 DATE: JULY 3, 2023  
 PROJECT No.: 0170-3513

**COMMUNITY  
 CONNECTIVITY PROGRAM**  
 Bristol, Connecticut  
**GENERAL NOTES**

DRAWING NO.:  
**IND-02**



**City of Bristol**  
 Department of Public Works  
 111 North Main Street  
 Bristol, Connecticut 06010  
 Tel. 860-584-6125  
 Fax 860-584-3838  
 ci.bristol.ct.us

PREPARED BY:

No.	DATE	COMMENTS:

DESIGN BY: WRS  
 DRAFTED BY: WRS  
 CHECKED BY: ---  
 SCALE: 1" = 1000'  
 DATE: JULY 3, 2023  
 PROJECT No.: 0170-3513

**COMMUNITY  
 CONNECTIVITY PROGRAM**  
 Bristol, Connecticut  
**LOCATION PLAN**

DRAWING NO.:  
**IND-03**

ITEM NUMBER	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
ITEM	GENERAL WORK	FIVE-INCH-THICK CONCRETE SIDEWALK ON EXISTING BASE	FIVE-INCH-THICK CONCRETE SIDEWALK ON NEW PROCESSED GRAVEL BASE	EIGHT-INCH-THICK CONCRETE SIDEWALK ON EXISTING BASE	CONCRETE SIDEWALK WITH MONOLITHIC CURB (STATE)	CONCRETE SIDEWALK RAMP (CITY)	CONCRETE SIDEWALK RAMP (STATE)	THREE-INCH-THICK BITUMINOUS CONCRETE PAVEMENT	TWO-INCH-THICK BITUMINOUS CONCRETE DRIVEWAY	TOPSOIL & TURF ESTABLISHMENT	SIX-INCH-HIGH BITUMINOUS LIP CURBING	PRECAST CONCRETE CURB	GRANITE CURB (CITY SUPPLIED)	GRANITE CURB (CONTRACTOR SUPPLIED)	SIGNS	RESET SIGNS	REMOVE EXISTING SIGN	EPOXY RESIN PAVEMENT MARKINGS (BIKE SYMBOLS) (WHITE)	EPOXY RESIN PAVEMENT MARKINGS (12" STOP BAR) (WHITE)	EPOXY RESIN PAVEMENT MARKINGS (16" CROSSWALK) (WHITE)	REMOVAL OF EPOXY RESIN PAVEMENT MARKINGS	UNIFORMED TRAFFIC PROTECTION	COMPACTION AND SIEVE ANALYSIS
UNIT	LS	SF	SF	SF	SF	EA	EA	SY	SY	SY	LF	LF	LF	LF	SF	EA	EA	SF	SF	SF	SF	ALLOW	ALLOW
	LS	15,900	360	1,840	670	27	18	225	84	1,500	220	390	-	230	41	1	2	970	262	2,480	1,440	ALLOW	ALLOW
TOTAL	LS	15,900	360	1,840	670	27	18	225	84	1,500	220	390	-	230	41	1	2	970	262	2,480	1,440	ALLOW	ALLOW

**COMMUNITY CONNECTIVITY PROGRAM**  
 Bristol, Connecticut  
 DETAILED ESTIMATE SHEET

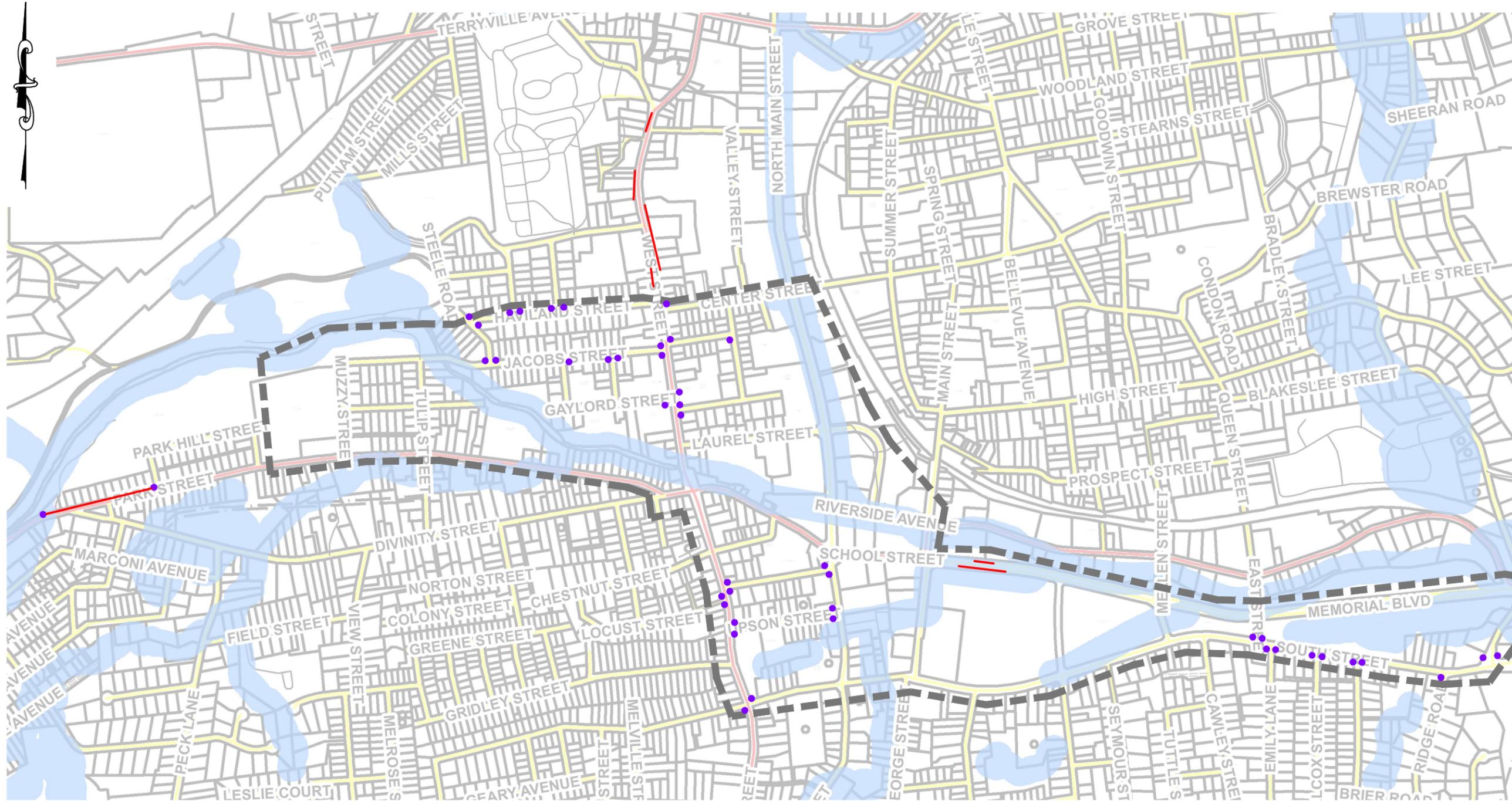
DRAWING NO.:  
 DET-01

DESIGN BY: WRS  
 DRAFTED BY: WRS  
 CHECKED BY: ---  
 SCALE: 1" = 100'  
 DATE: JULY 3, 2023  
 PROJECT No.: 0170-3513

No.	DATE	COMMENTS

PREPARED BY:  
 City of Bristol  
 Department of Public Works  
 111 North Main Street  
 Bristol, Connecticut 06010  
 Tel. 860-584-6125  
 Fax 860-584-3838  
 ci.bristol.ct.us





**RSA STUDY AREA - BRISTOL CT -  
VICINITY MAP (2021)**  
SCALE = 1" = 2000'

**LEGEND:**

- UPLAND REVIEW AREA
- CONCRETE SIDEWALK

RSA COMMUNITY CONNECTIVITY PROJECTS (2021)		
SYMBOL	QTYS	DESCRIPTION
•	45	RAMP INTERSECTION LOCATIONS

  
 City of Bristol  
 Department of Public Works  
 Tel. 860-584-6125  
 Fax 860-584-3838  
 ci.bristol.ct.us  
 111 North Main Street  
 Bristol, Connecticut 06010

No.	DATE	COMMENTS

DESIGN BY: WRS  
 DRAFTED BY: WRS  
 CHECKED BY: ---  
 SCALE: 1" = 2000'  
 DATE: JULY 3, 2023  
 PROJECT No.: 0170-3513

**COMMUNITY CONNECTIVITY PROGRAM**  
 Bristol, Connecticut  
 UPLAND REVIEW AREA

DRAWING NO.:  
**ENV-01**

## NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevation (BFEs)** and/or **floodways** have been determined, users are encouraged to consult the **Flood Profiles and Floodway Data** tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

**Coastal Base Flood Elevation (BFEs)** shown on this map apply only landward of 0.0' North American Vertical Datum (NAVD). Users of this FIRM should be aware that coastal flood elevations may also be provided in the Summary of Stillwater Elevations table in the Flood Insurance Study report for this community. Elevations shown in the Summary of Stillwater Elevations table should be used for construction, and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures in this jurisdiction.

The **projection** used in the preparation of this map is Universal Transverse Mercator (UTM) zone 18. The **horizontal datum** is NAD83, GRS1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of the FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at [www.ngs.noaa.gov](http://www.ngs.noaa.gov) or contact the National Geodetic Survey at the following address:

Spatial Reference System Division  
National Geodetic Survey, NOAA  
Silver Spring Metro Center  
1315 East-West Highway  
Silver Spring, Maryland 20910  
(301) 713-3242

To obtain current elevation, description, and/or location information for **benchmarks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit their website at [www.ngs.noaa.gov](http://www.ngs.noaa.gov).

**Base map** information shown on this FIRM was provided in digital format by CT DEP.

**Corporate limits** shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

An accompanying Flood Insurance Study report, Letters of Map Revision or Letters of Map Amendment revising portions of this panel, and digital versions of this PANEL may be available. Contact the **FEMA Map Service Center** at the following phone numbers and Internet address for information on all related products available from FEMA:

Phone: 800-358-9616  
FAX: 800-358-9620  
<http://fmap.fema.gov/>

If you have **questions about this map** or questions concerning the National Flood Insurance Program in general, please call **1-877-FEMA-MAP** (1-877-336-2627) or visit the FEMA website at <http://www.fema.gov/business/nfip/>

This map reflects more detailed and up-to-date stream channel configurations than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study report may reflect stream channel distances that differ from what is shown on this map.



### LEGEND

**SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD EVENT**

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AD, AR, A99, V, and VE. The Base Flood Elevation is the water surface elevation of the 1% annual chance flood.

**ZONE A** No base flood elevations determined.

**ZONE AE** Base flood elevations determined.

**ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.

**ZONE AD** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of abutment flooding, velocities also determined.

**ZONE AR** Area of special flood hazard formerly protected from the 1% annual chance flood event by a flood control system that was subsequently deactivated. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood event.

**ZONE A99** Area to be protected from 1% annual chance flood event by a Federal flood protection system under construction; no base flood elevations determined.

**ZONE V** Coastal flood zone with velocity hazard (wave action); no base flood elevations determined.

**ZONE VE** Coastal flood zone with velocity hazard (wave action); base flood elevations determined.

**FLOODWAY AREAS IN ZONE AE**

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

**OTHER FLOOD AREAS**

**ZONE X** Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

**OTHER AREAS**

**ZONE X** Areas determined to be outside the 0.2% annual chance floodplain.

**ZONE D** Areas in which flood hazards are undetermined, but possible.

**COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS**

**OTHERWISE PROTECTED AREAS (OPAs)**

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

1% annual chance floodplain boundary  
0.2% annual chance floodplain boundary  
Floodway boundary  
Zone D boundary  
Zone X boundary  
CBRS and OPA boundary  
Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or velocities.  
Base Flood Elevation line and value; elevation in 0'  
Base Flood Elevation value where uniform within zone; elevation in 0'  
Elevation in 0'

\*Referenced to the North American Vertical Datum of 1988

— A — A — Cross Section Line  
— 25 — 25 — Transect Line  
57°02'30", 33°22'30" Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)  
4276988 1000-meter Universal Transverse Mercator grid values, zone 18  
600000 FT 5000-foot grid ticks  
DX5510 X Bench mark (see explanation in Notes to Users section of this FIRM panel).  
M1.5 River Mile

**MAP REPOSITORY**  
Refer to Repository Listing on Index Map  
**EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP**  
SEPTEMBER 26, 2006  
**EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL**

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.  
To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at (800) 638-6620.

**NATIONAL FLOOD INSURANCE PROGRAM**

PANEL 0402F

**FIRM FLOOD INSURANCE RATE MAP**  
HARTFORD COUNTY,  
CONNECTICUT  
(ALL JURISDICTIONS)

PANEL 462 OF 675

8 1/2" MAP SCALE FOR THIS PANEL LAYOUT

COMMUNITY	NUMBER	PANEL	DATE
WATERLOO	1000	462	1

MAP NUMBER 0900C0402F  
EFFECTIVE DATE: SEPTEMBER 26, 2006  
Federal Emergency Management Agency

# FEMA FLOOD INSURANCE MAP - 1 OF 2

1" = 1000'

**Bristol**  
CONNECTICUT  
Public Works

Department of Public Works  
Tel: 860-584-6125  
Fax: 860-584-3838  
ci.bristol.ct.us

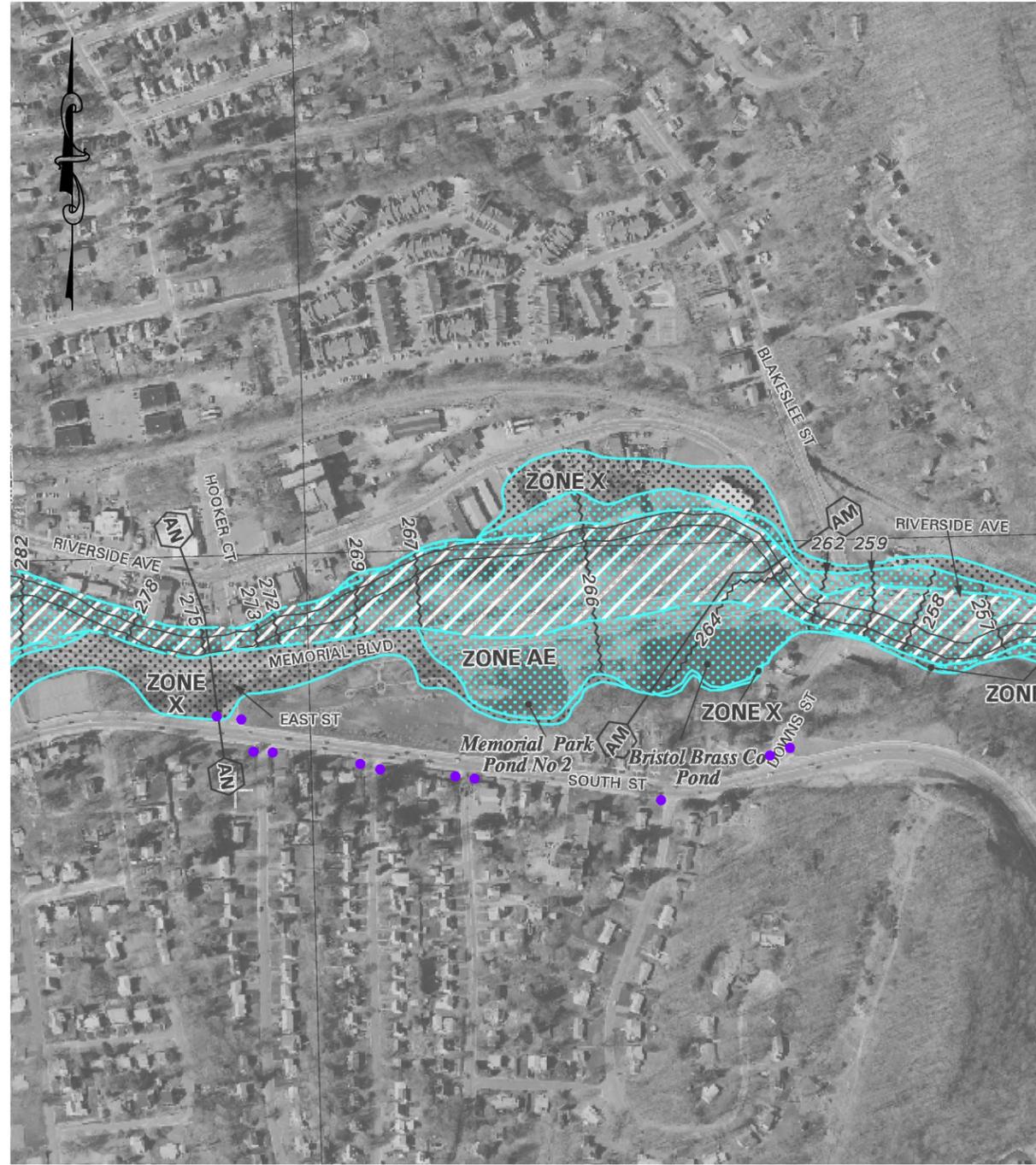
111 North Main Street  
Bristol, Connecticut 06010

DESIGN BY: WRS  
DRAFTED BY: WRS  
CHECKED BY: ---  
SCALE: 1" = 1000'  
DATE: JULY 3, 2023  
PROJECT No.: 0170-3513

No.	DATE	COMMENTS:

**COMMUNITY CONNECTIVITY PROGRAM**  
Bristol, Connecticut  
FEMA FLOOD MAP

DRAWING NO.:  
ENV-02



**FEMA FLOOD INSURANCE MAP - 2 OF 2**  
 1" = 500'

**COMMUNITY  
 CONNECTIVITY PROGRAM**  
 Bristol, Connecticut  
 FEMA FLOOD MAP

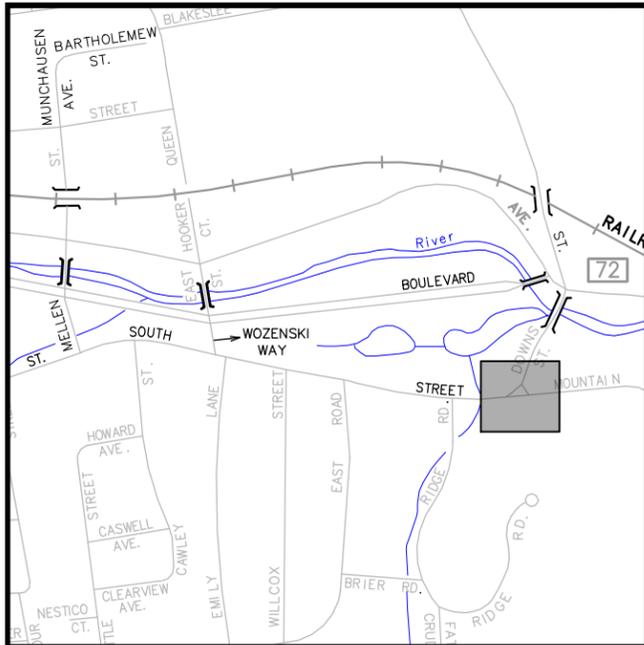
DRAWING NO.:  
**ENV-03**

DESIGN BY: WRS  
 DRAFTED BY: WRS  
 CHECKED BY: ---  
 SCALE: 1" = 500'  
 DATE: JULY 3, 2023  
 PROJECT No.: 0170-3513

No.	DATE	COMMENTS:

PREPARED BY:  
**City of Bristol**  
 Department of Public Works  
 111 North Main Street  
 Bristol, Connecticut 06010  
 Tel: 860-584-6125  
 Fax: 860-584-3838  
 ci.bristol.ct.us

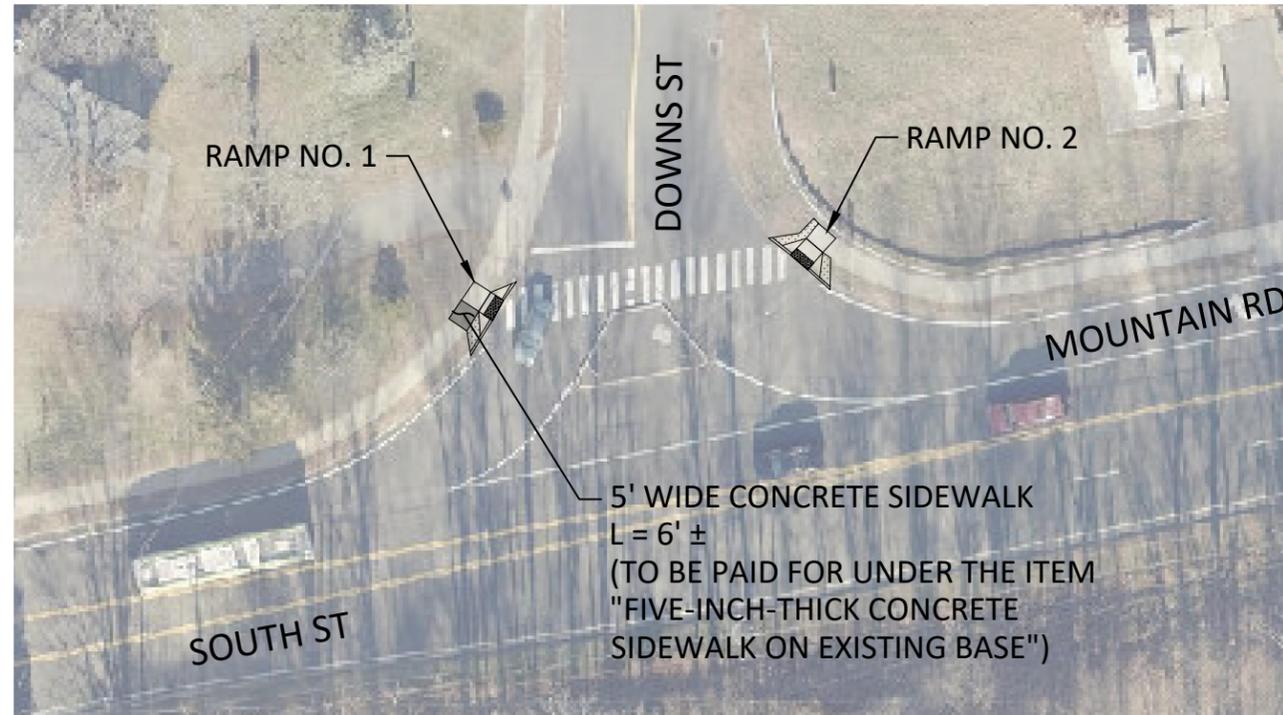




**LOCATION MAP**

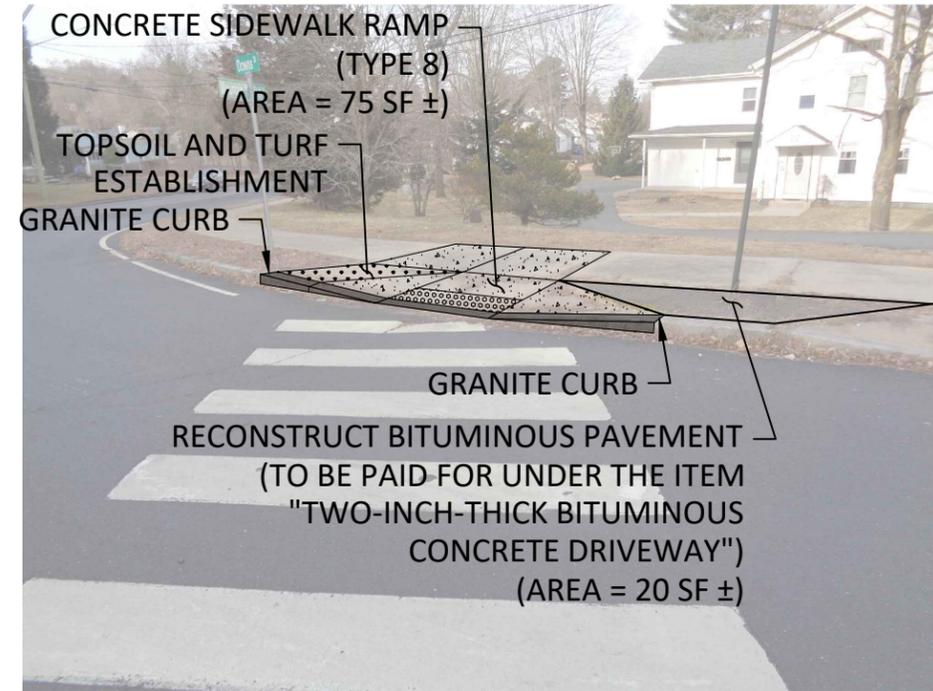
SCALE: 1" = 1000'

**NOTE:**  
SIDEWALK RAMPS ALONG SOUTH STREET TO BE PAID FOR UNDER ITEM "CONCRETE SIDEWALK RAMP (CITY)".



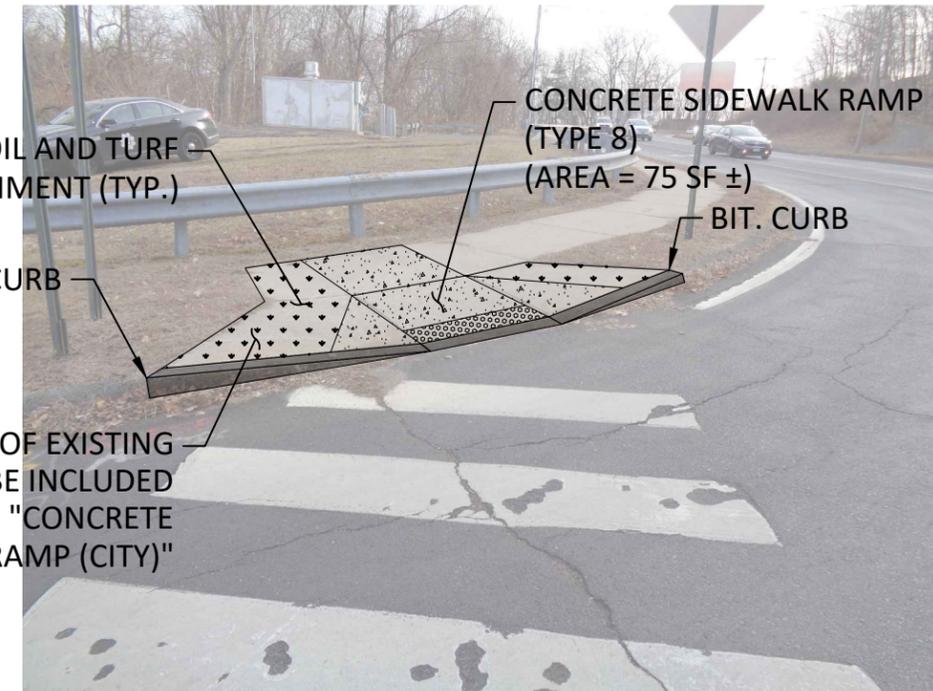
**PLAN VIEW**

SCALE: 1" = 40'



**RAMP NO. 1**

NOT TO SCALE



**RAMP NO. 2**

NOT TO SCALE



City of Bristol  
Department of Public Works  
Tel: 860-584-6125  
Fax: 860-584-3838  
111 North Main Street  
Bristol, Connecticut 06010

PREPARED BY:

COMMENTS:

DATE:

DESIGN BY: WRS

DRAFTED BY: WRS

CHECKED BY: ---

SCALE: -

DATE: JULY 3, 2023

PROJECT No.: 0170-3513

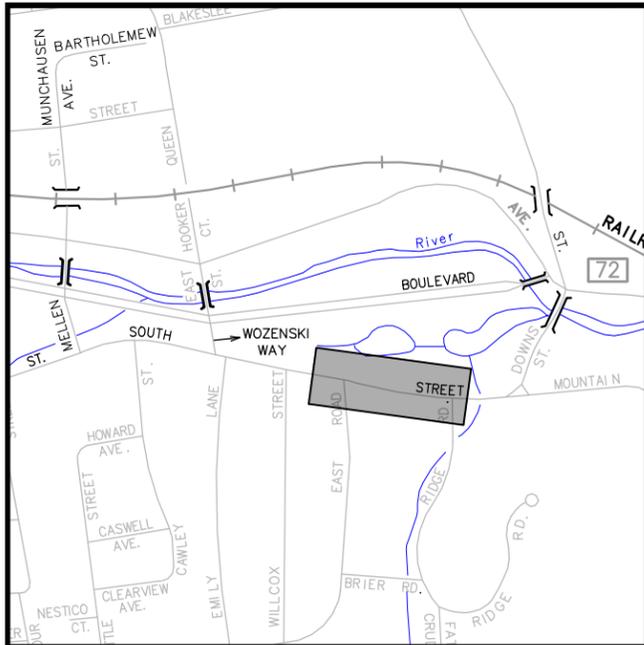
COMMUNITY CONNECTIVITY PROGRAM

Bristol, Connecticut

SOUTH STREET

DRAWING NO.:

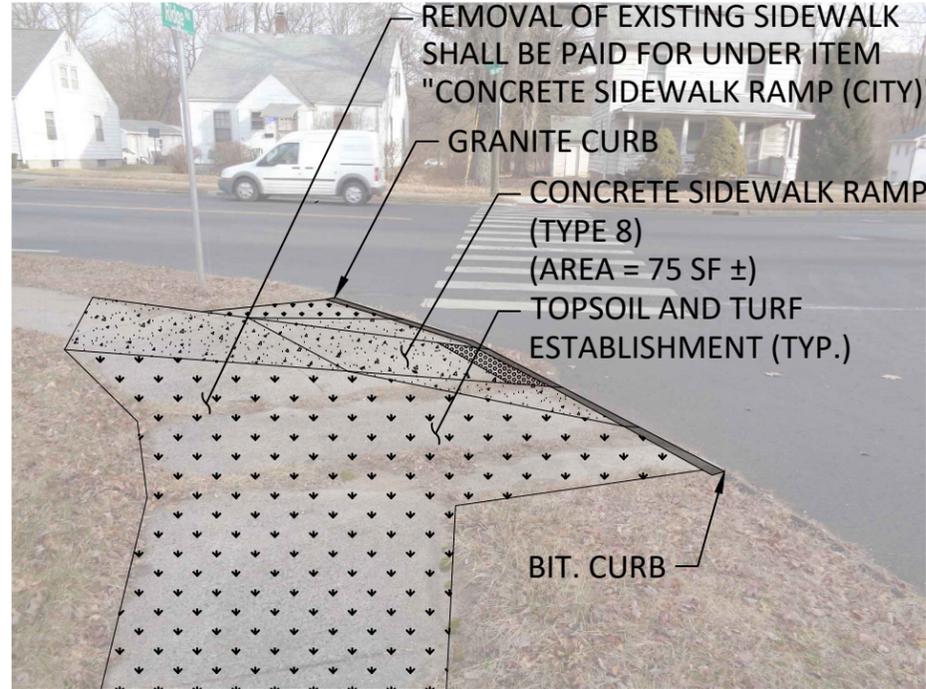
PLN-01



**LOCATION MAP**

SCALE: 1" = 1000'

**NOTE:**  
SIDEWALK RAMPS ALONG SOUTH STREET TO BE PAID FOR UNDER ITEM "CONCRETE SIDEWALK RAMP (CITY)".



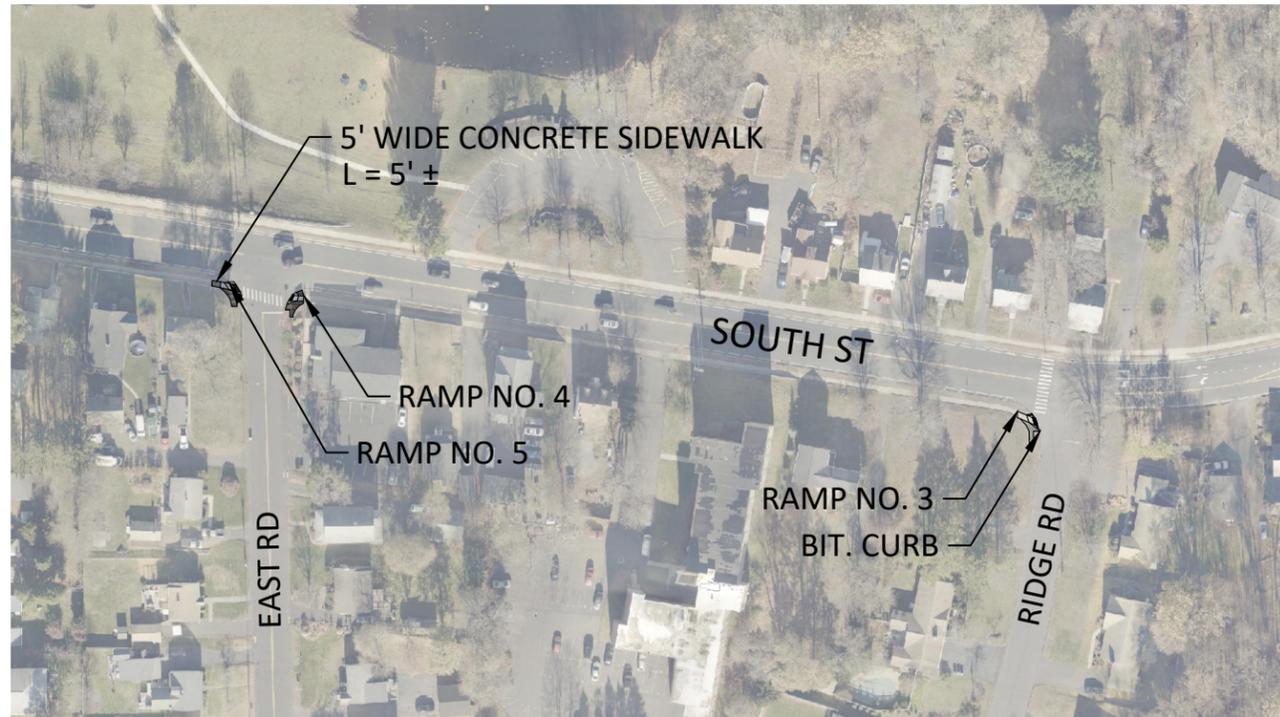
**RAMP NO. 3**

NOT TO SCALE



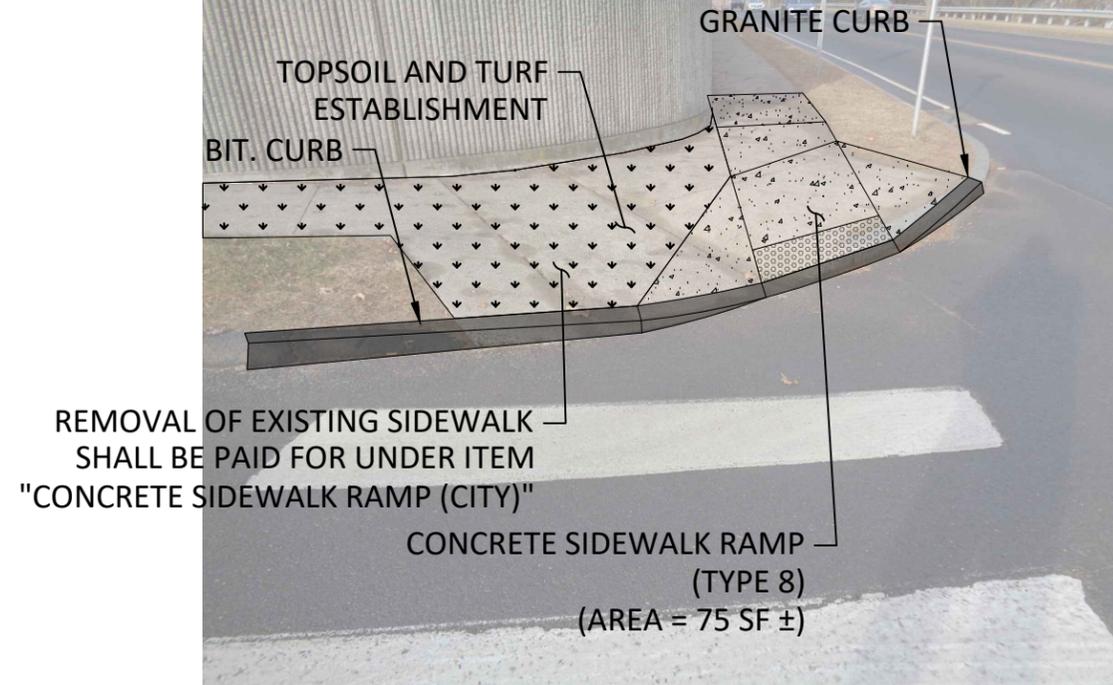
**RAMP NO. 4**

NOT TO SCALE



**PLAN VIEW**

SCALE: 1" = 40'



**RAMP NO. 5**

NOT TO SCALE



City of Bristol  
Department of Public Works  
Tel: 860-584-6125  
Fax: 860-584-3838  
ci.bristol.ct.us

PREPARED BY:

COMMENTS:

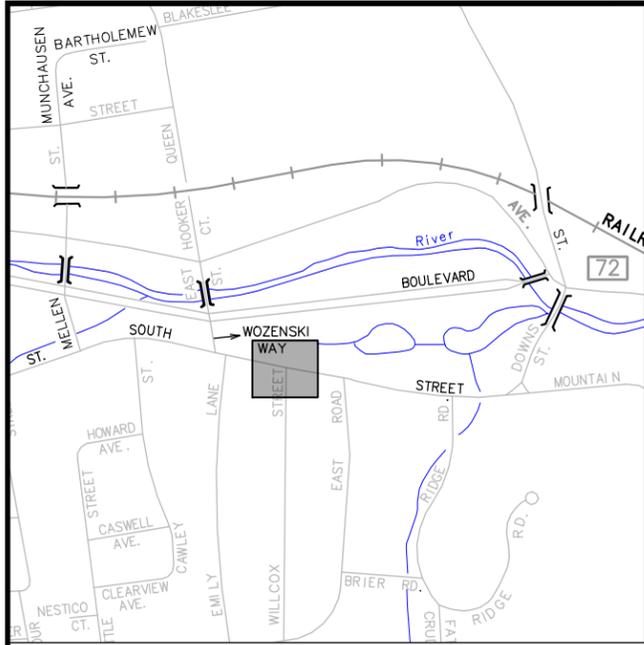
DATE:

DESIGN BY: WRS  
DRAFTED BY: WRS  
CHECKED BY: ---  
SCALE: -  
DATE: JULY 3, 2023  
PROJECT No.: 0170-3513

**COMMUNITY  
CONNECTIVITY PROGRAM**  
Bristol, Connecticut  
SOUTH STREET

DRAWING NO.:

PLN-02



**LOCATION MAP**

SCALE: 1" = 1000'

**NOTE:**  
SIDEWALK RAMPS ALONG SOUTH STREET TO BE PAID FOR UNDER ITEM "CONCRETE SIDEWALK RAMP (CITY)".



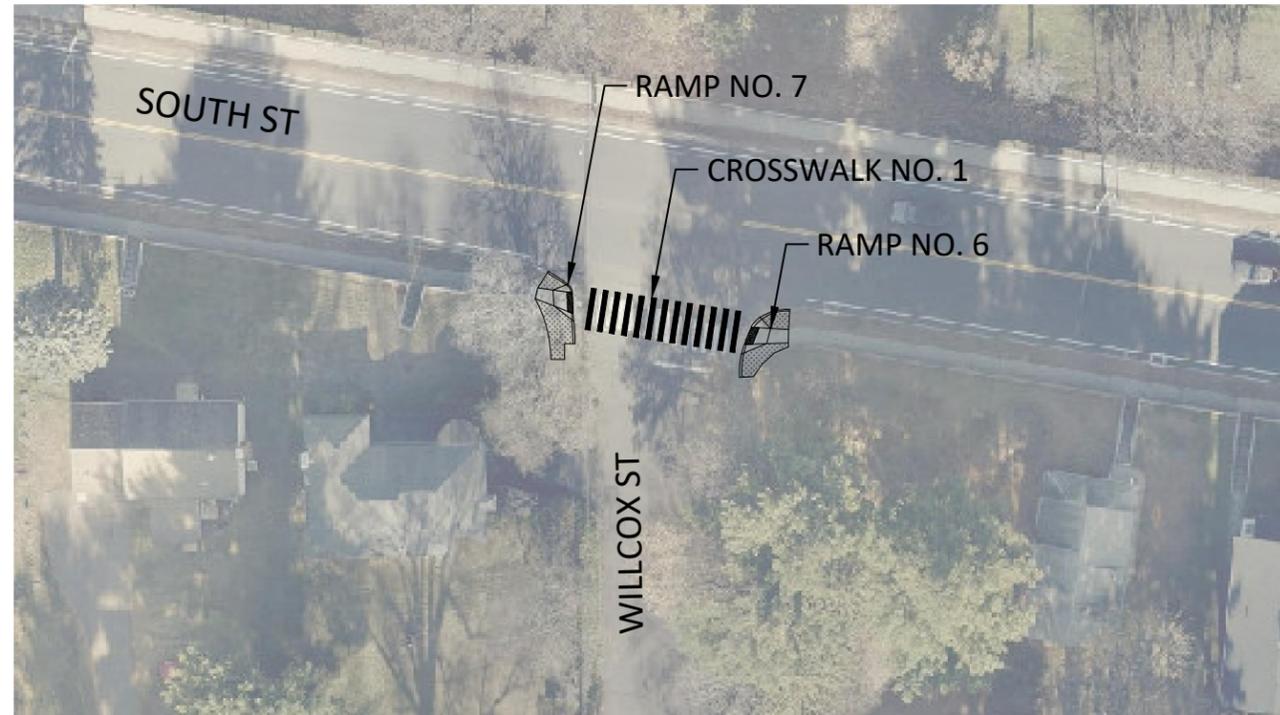
**CROSSWALK NO. 1**

NOT TO SCALE



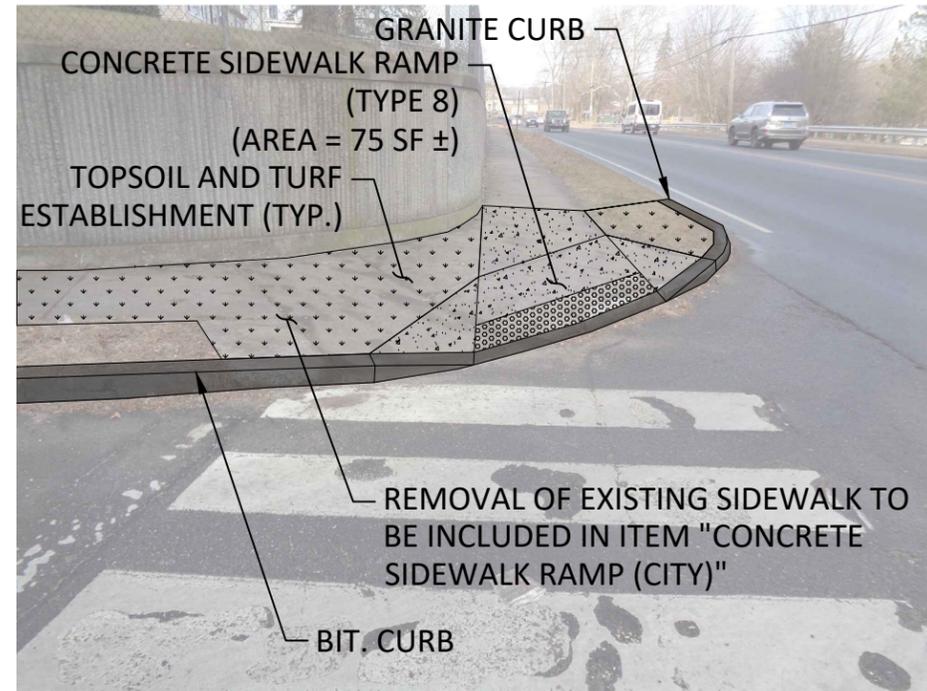
**RAMP NO. 6**

NOT TO SCALE



**PLAN VIEW**

SCALE: 1" = 50'



**RAMP NO. 7**

NOT TO SCALE



City of Bristol  
Department of Public Works  
111 North Main Street  
Bristol, Connecticut 06010  
Tel. 860-584-6125  
Fax 860-584-3838  
ci.bristol.ct.us

PREPARED BY:

COMMENTS:

DATE:

No.:

DESIGN BY: WRS

DRAFTED BY: WRS

CHECKED BY: ---

SCALE: -

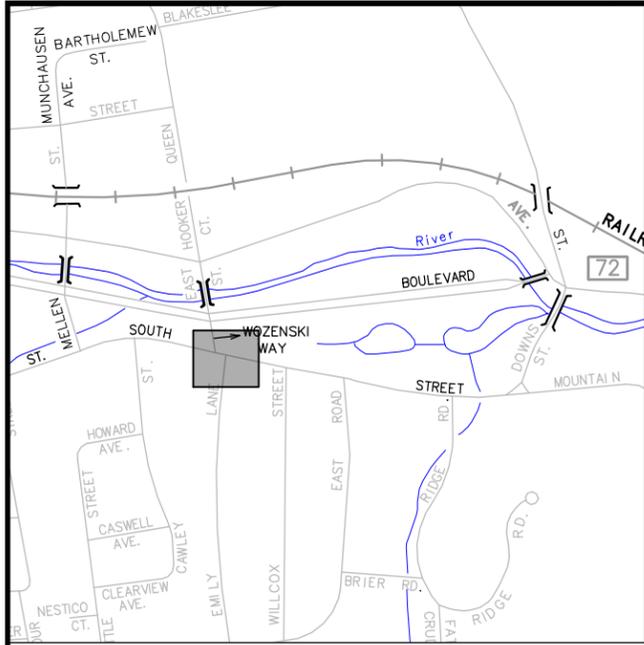
DATE: JULY 3, 2023

PROJECT No.: 0170-3513

**COMMUNITY CONNECTIVITY PROGRAM**  
Bristol, Connecticut  
SOUTH STREET

DRAWING NO.:

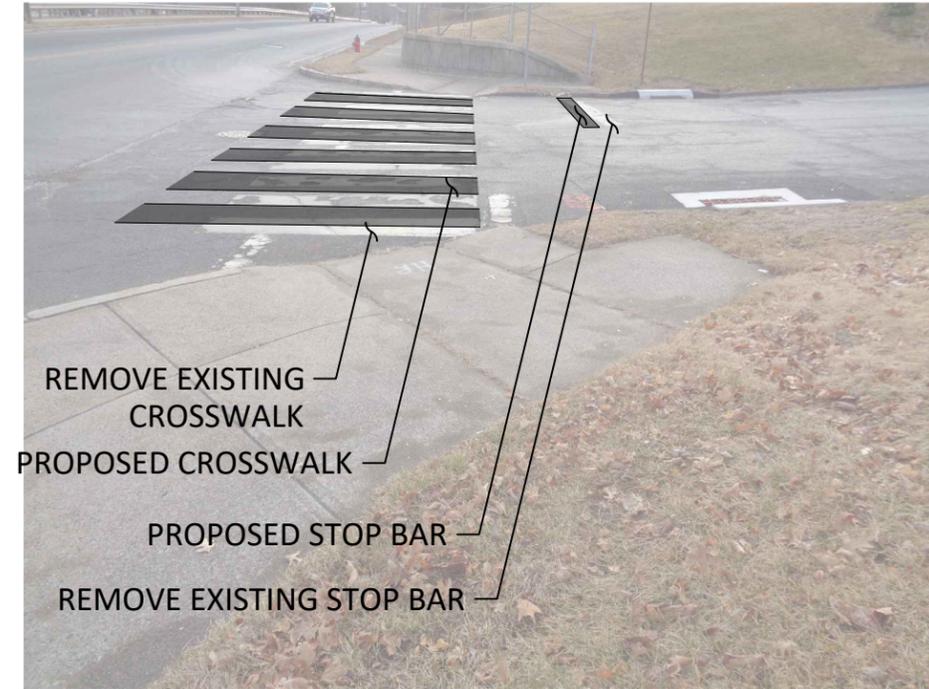
PLN-03



**LOCATION MAP**

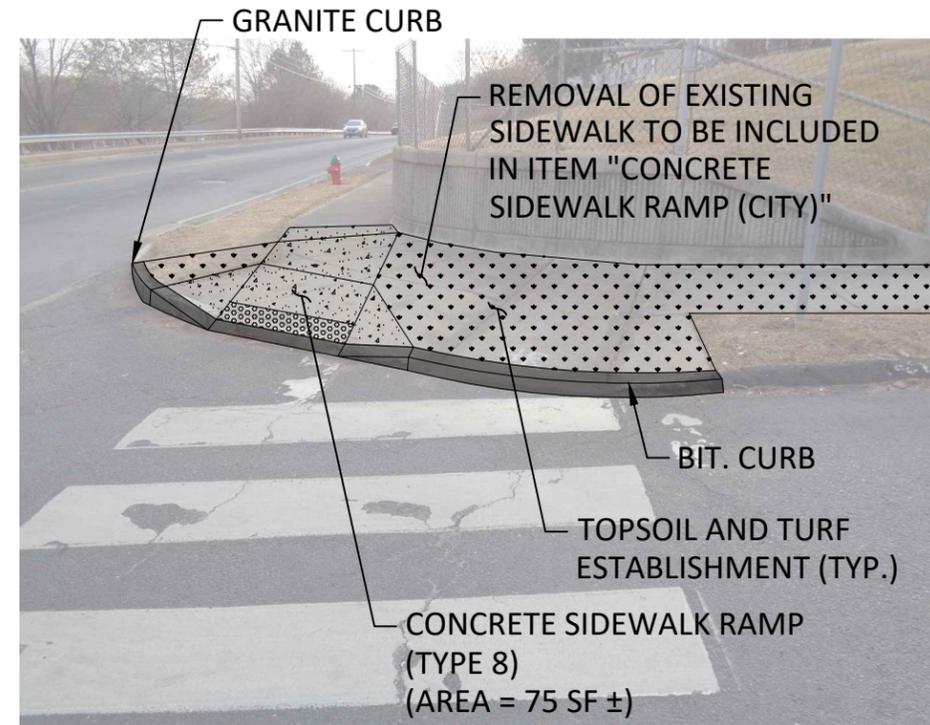
SCALE: 1" = 1000'

**NOTE:**  
SIDEWALK RAMPS ALONG SOUTH STREET TO BE PAID FOR UNDER ITEM "CONCRETE SIDEWALK RAMP (CITY)".



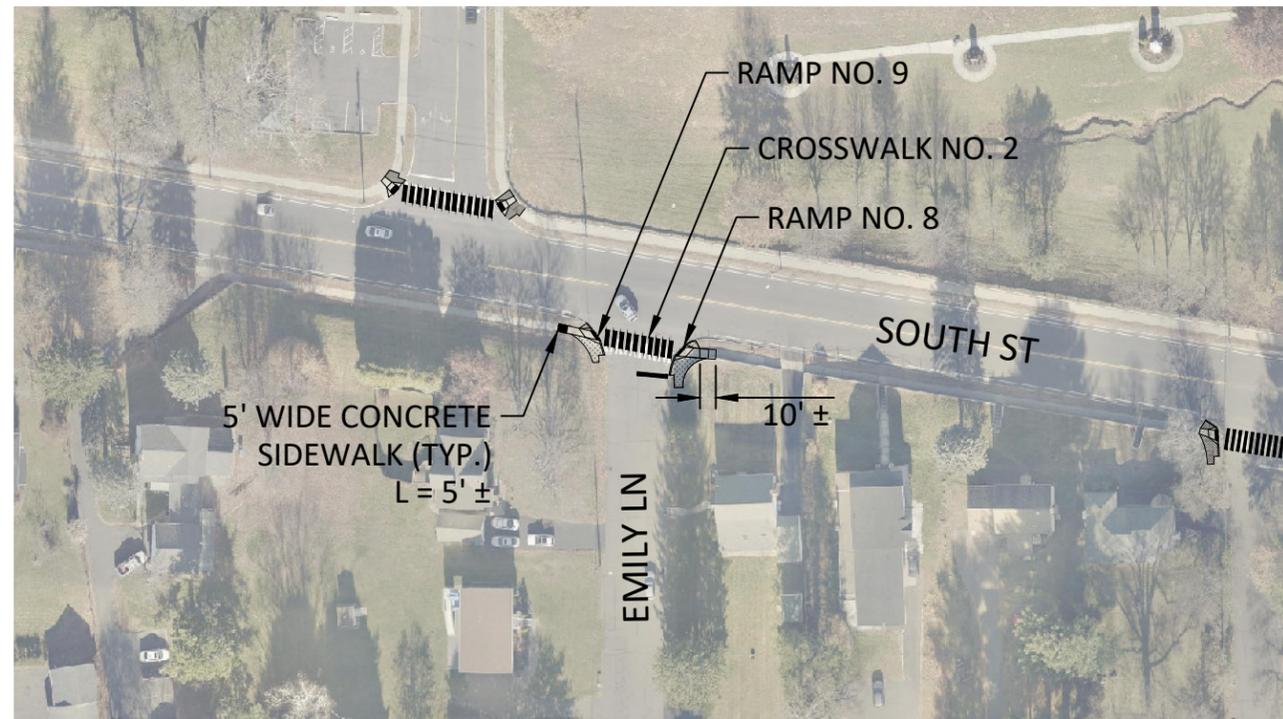
**CROSSWALK NO. 2**

NOT TO SCALE



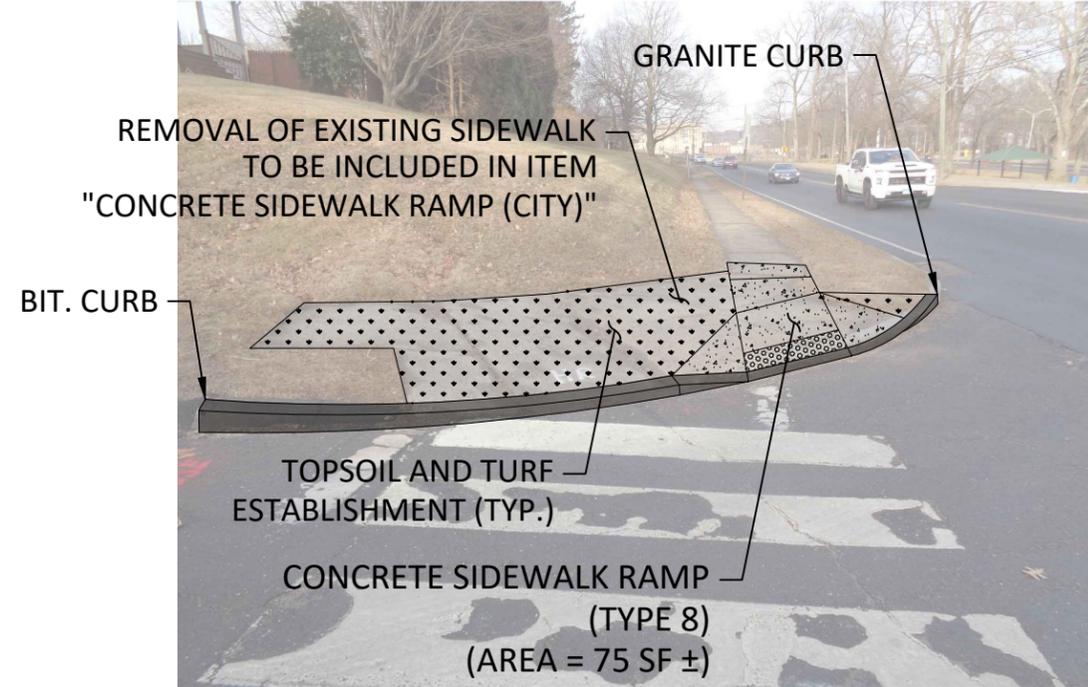
**RAMP NO. 8**

NOT TO SCALE



**PLAN VIEW**

SCALE: 1" = 100'



**RAMP NO. 9**

NOT TO SCALE



City of Bristol  
Department of Public Works  
Tel: 860-584-6125  
Fax: 860-584-3838  
ci.bristol.ct.us

PREPARED BY:

COMMENTS:

DATE:

DESIGN BY: WRS

DRAFTED BY: WRS

CHECKED BY: ---

SCALE: -

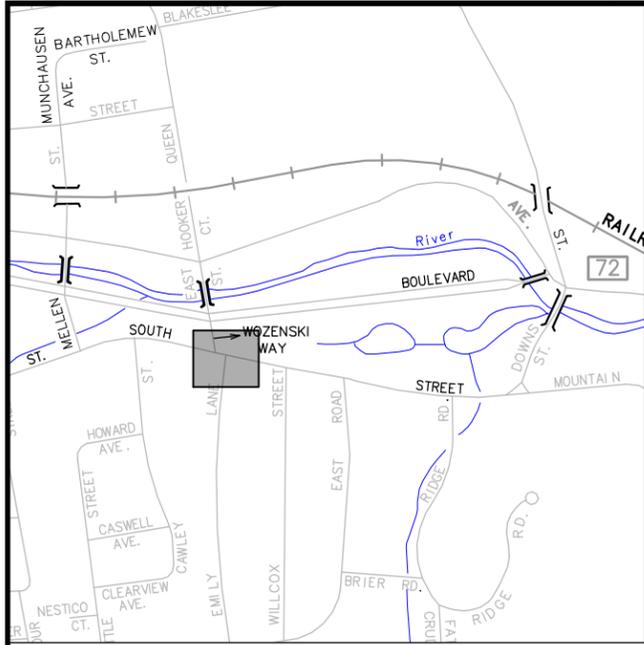
DATE: JULY 3, 2023

PROJECT No.: 0170-3513

DRAWING NO.:

PLN-04

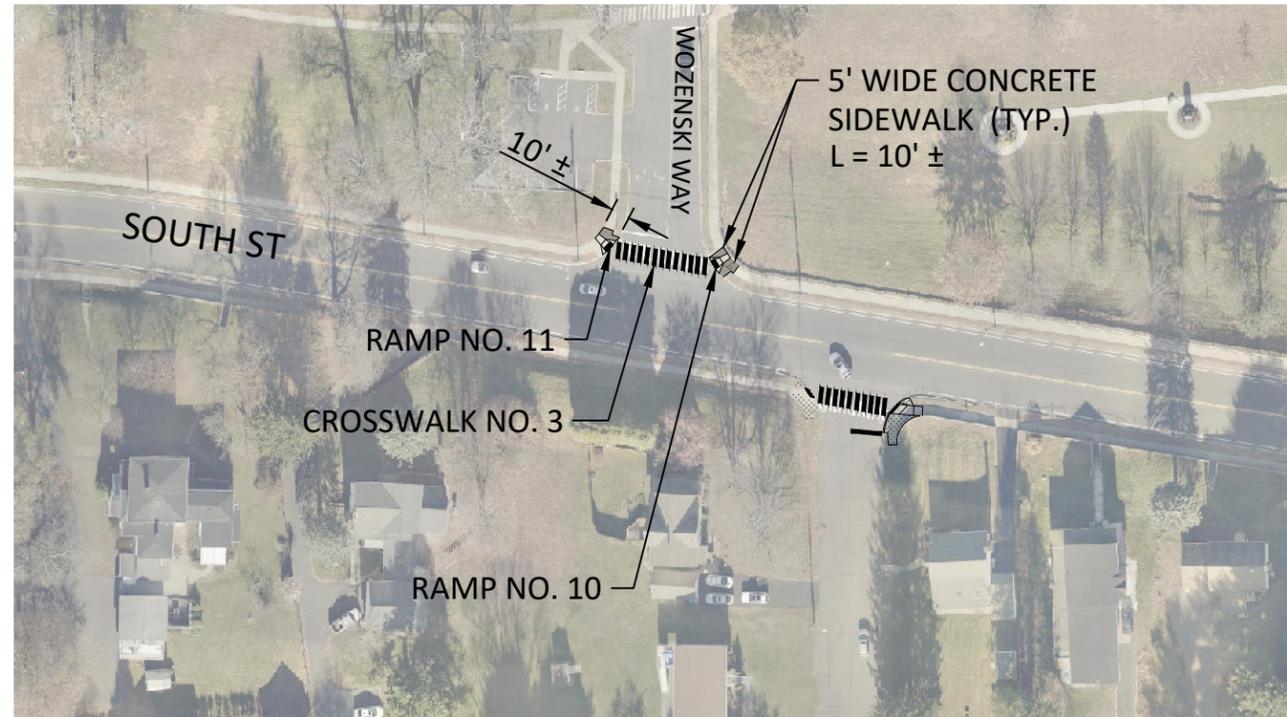
**COMMUNITY CONNECTIVITY PROGRAM**  
Bristol, Connecticut  
SOUTH STREET



**LOCATION MAP**

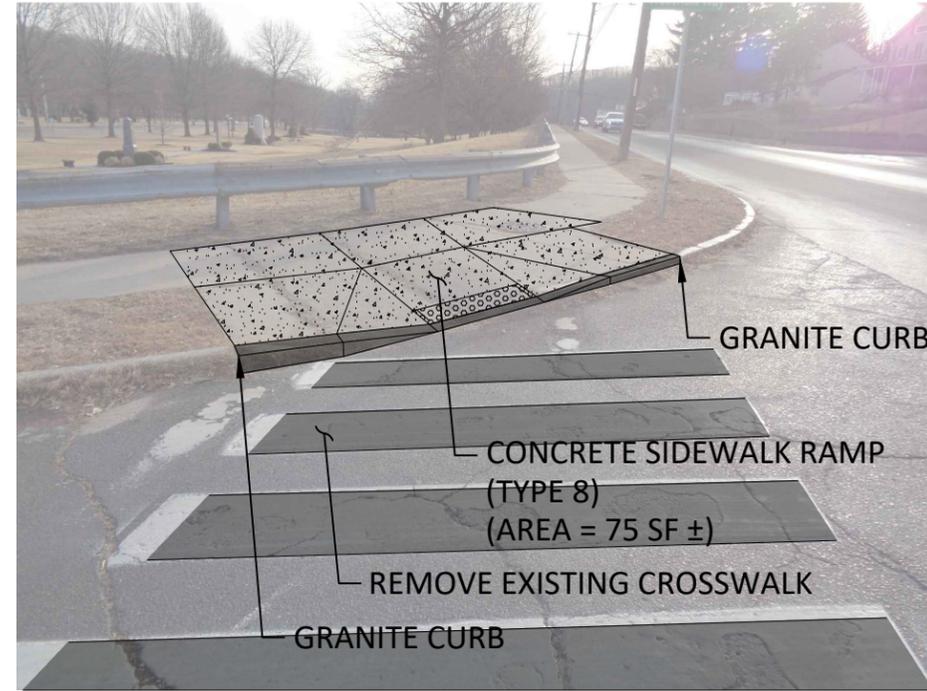
SCALE: 1" = 1000'

**NOTE:**  
SIDEWALK RAMPS ALONG SOUTH STREET TO BE PAID FOR UNDER ITEM "CONCRETE SIDEWALK RAMP (CITY)".



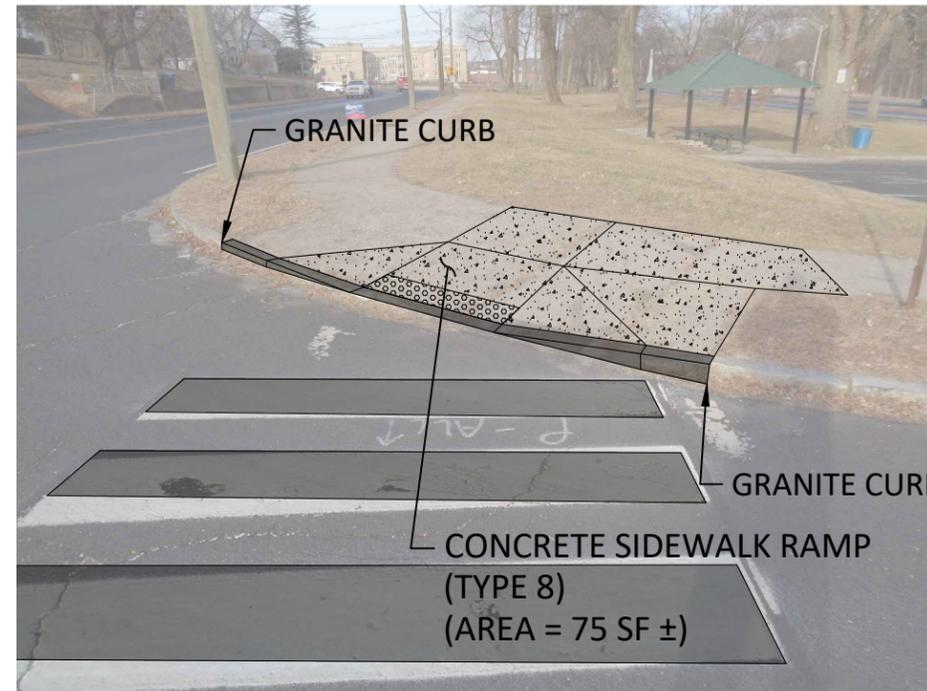
**PLAN VIEW**

SCALE: 1" = 100'



**RAMP NO. 10**

NOT TO SCALE



**RAMP NO. 11 & CROSSWALK NO.3**

NOT TO SCALE



City of Bristol  
Department of Public Works  
Tel: 860-584-6125  
Fax: 860-584-3838  
111 North Main Street  
Bristol, Connecticut 06010  
ci.bristol.ct.us

PREPARED BY:

COMMENTS:

DATE:

No.:

DESIGN BY: WRS

DRAFTED BY: WRS

CHECKED BY: ---

SCALE: -

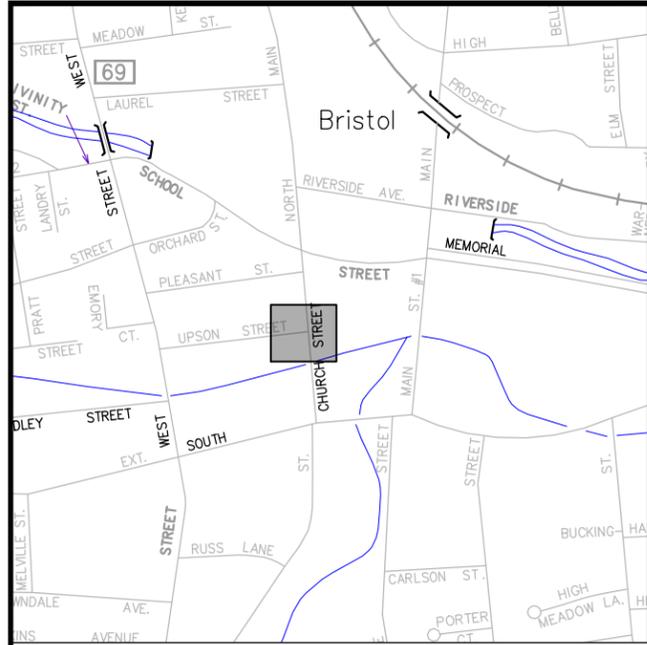
DATE: JULY 3, 2023

PROJECT No.: 0170-3513

**COMMUNITY CONNECTIVITY PROGRAM**  
Bristol, Connecticut  
SOUTH STREET

DRAWING NO.:

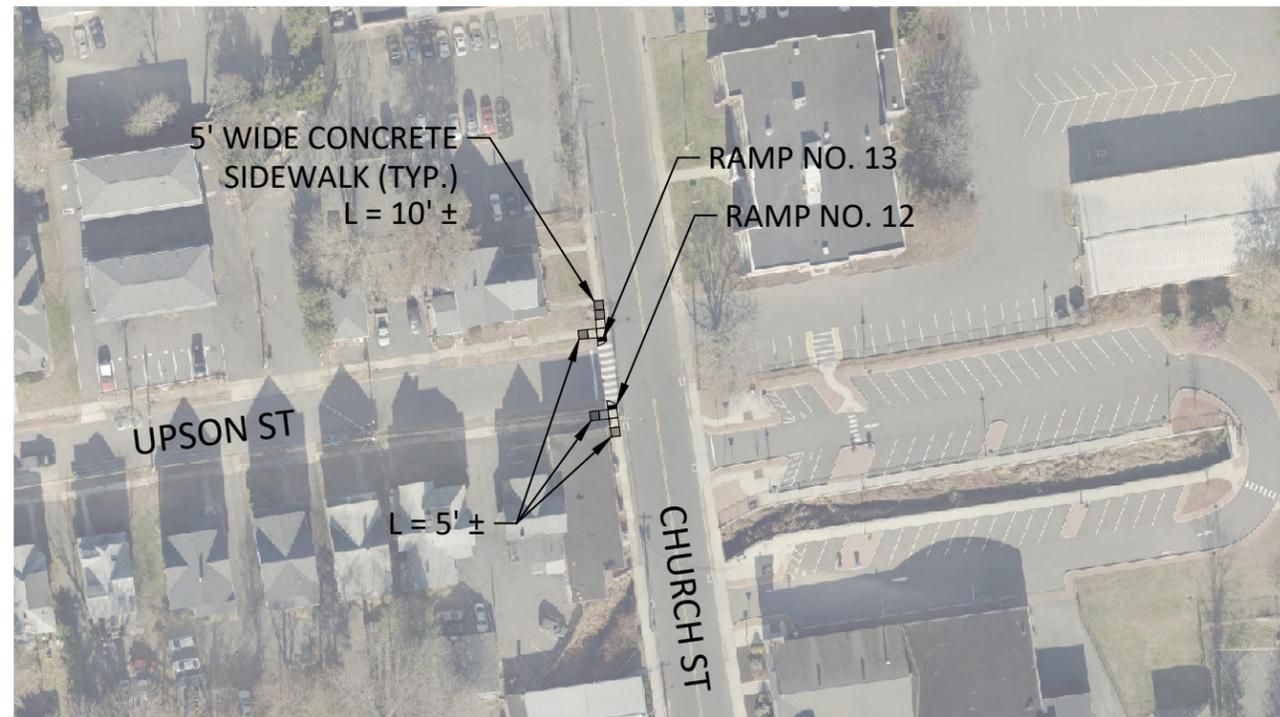
PLN-05



**LOCATION MAP**

SCALE: 1" = 1000'

**NOTE:**  
SIDEWALK RAMPS ALONG CHURCH STREET TO BE PAID FOR UNDER ITEM "CONCRETE SIDEWALK RAMP (CITY)".



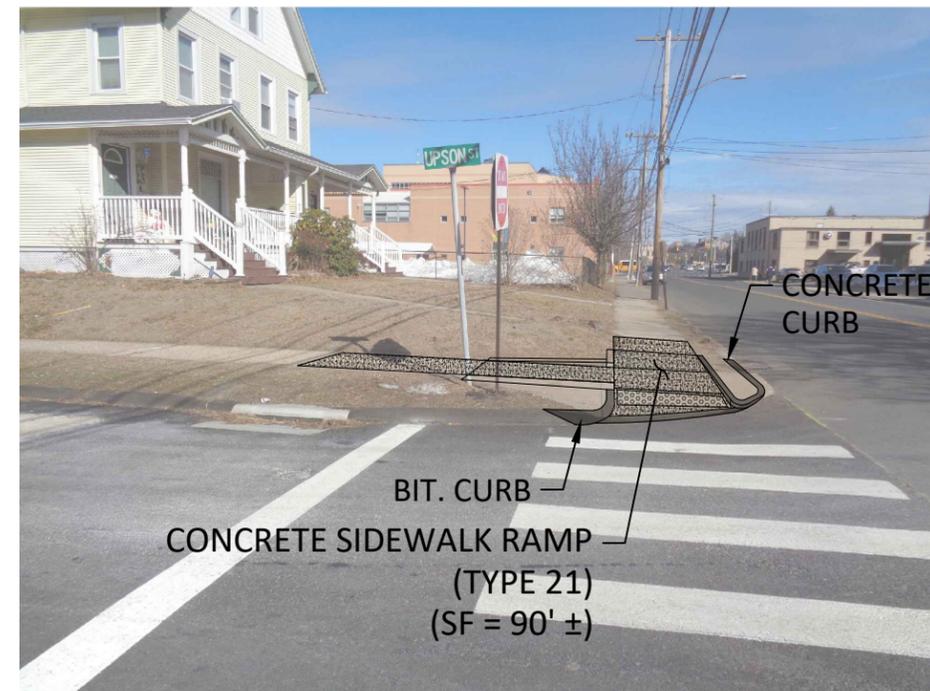
**PLAN VIEW**

SCALE: 1" = 100'



**RAMP NO. 12**

NOT TO SCALE



**RAMP NO. 13**

NOT TO SCALE



City of Bristol  
Department of Public Works  
Tel. 860-584-6125  
Fax 860-584-3838  
111 North Main Street  
Bristol, Connecticut 06010  
ci.bristol.ct.us

PREPARED BY:

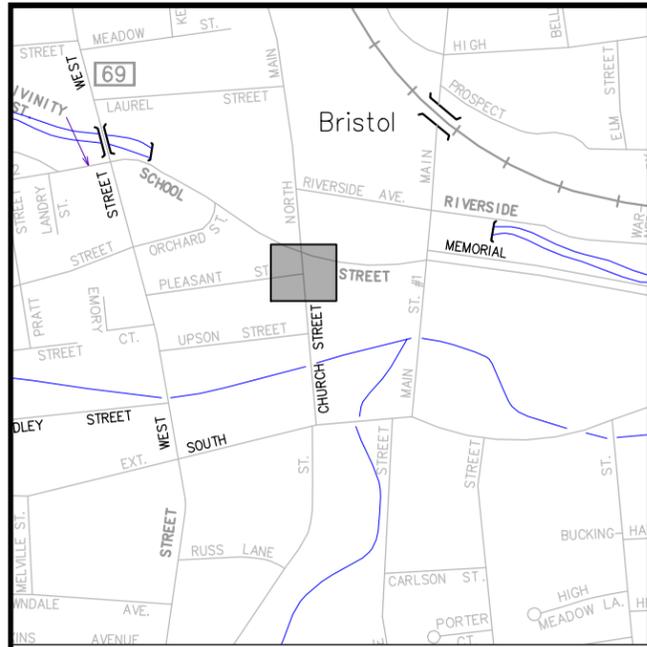
COMMENTS:

No.

DESIGN BY: WRS  
DRAFTED BY: WRS  
CHECKED BY: ---  
SCALE: -  
DATE: JULY 3, 2023  
PROJECT No.: 0170-3513

**COMMUNITY CONNECTIVITY PROGRAM**  
Bristol, Connecticut  
CHURCH STREET

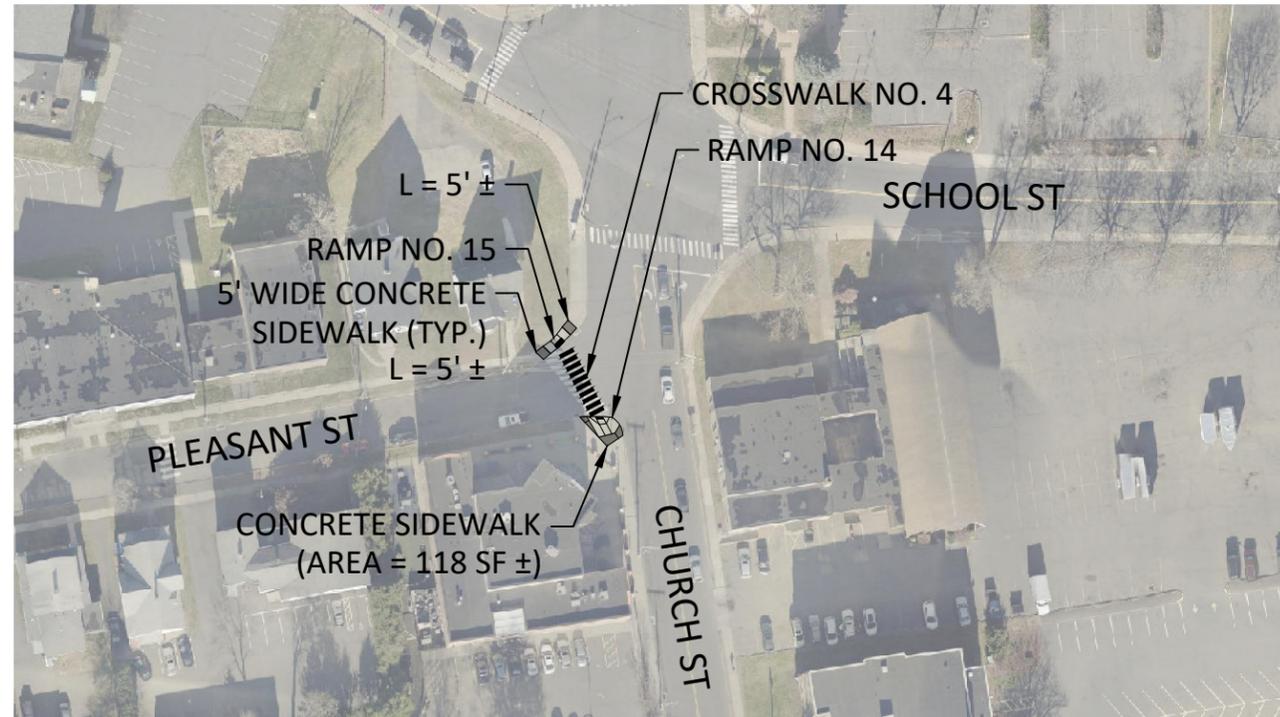
DRAWING NO.:  
**PLN-06**



**LOCATION MAP**

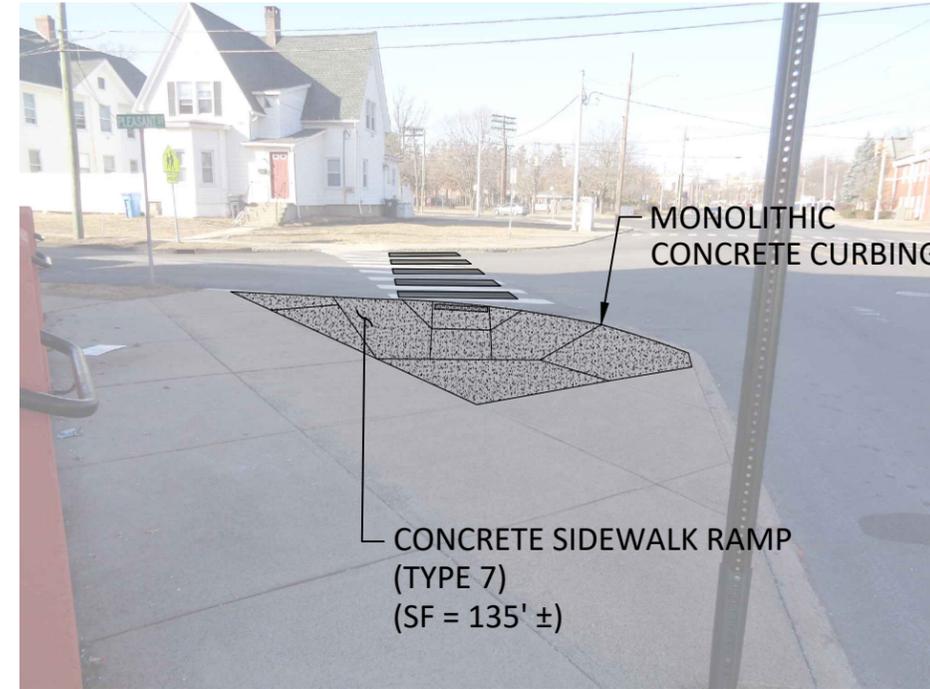
SCALE: 1" = 1000'

**NOTE:**  
 SIDEWALK RAMPS ALONG CHURCH STREET TO BE PAID FOR UNDER ITEM "CONCRETE SIDEWALK RAMP (CITY)".



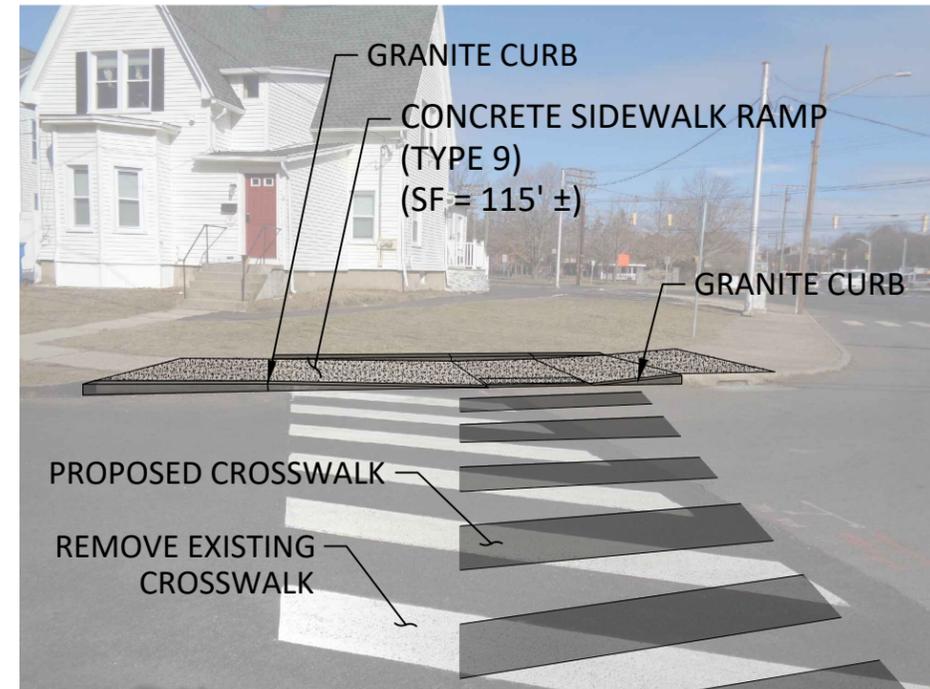
**PLAN VIEW**

SCALE: 1" = 100'



**RAMP NO. 14**

NOT TO SCALE



**RAMP NO. 15 & CROSSWALK NO. 4**

NOT TO SCALE



City of Bristol  
 Department of Public Works  
 Tel: 860-584-6125  
 Fax: 860-584-3838  
 111 North Main Street  
 Bristol, Connecticut 06010  
 ci.bristol.ct.us

PREPARED BY:

COMMENTS:

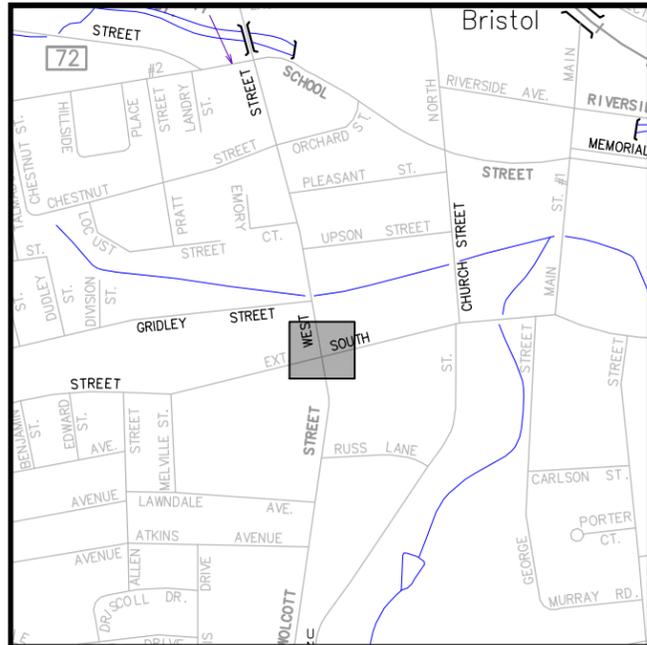
DATE:

DESIGN BY: WRS  
 DRAFTED BY: WRS  
 CHECKED BY: ---  
 SCALE: -  
 DATE: JULY 3, 2023  
 PROJECT No.: 0170-3513

**COMMUNITY CONNECTIVITY PROGRAM**  
 Bristol, Connecticut  
 CHURCH STREET

DRAWING NO.:

PLN-07

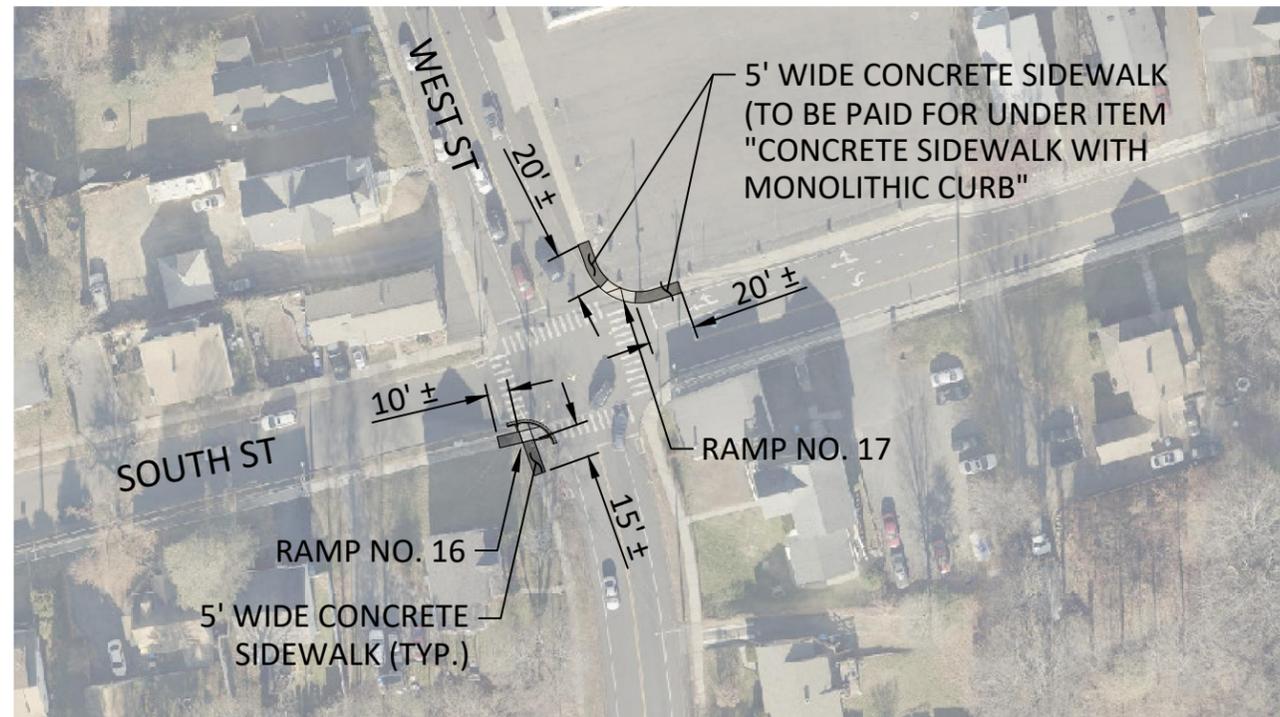


**LOCATION MAP**

SCALE: 1" = 1000'

**NOTE:**

SIDEWALK RAMPS ALONG WEST STREET (RTE. 69) TO BE PAID FOR UNDER ITEM "CONCRETE SIDEWALK RAMP (STATE)".

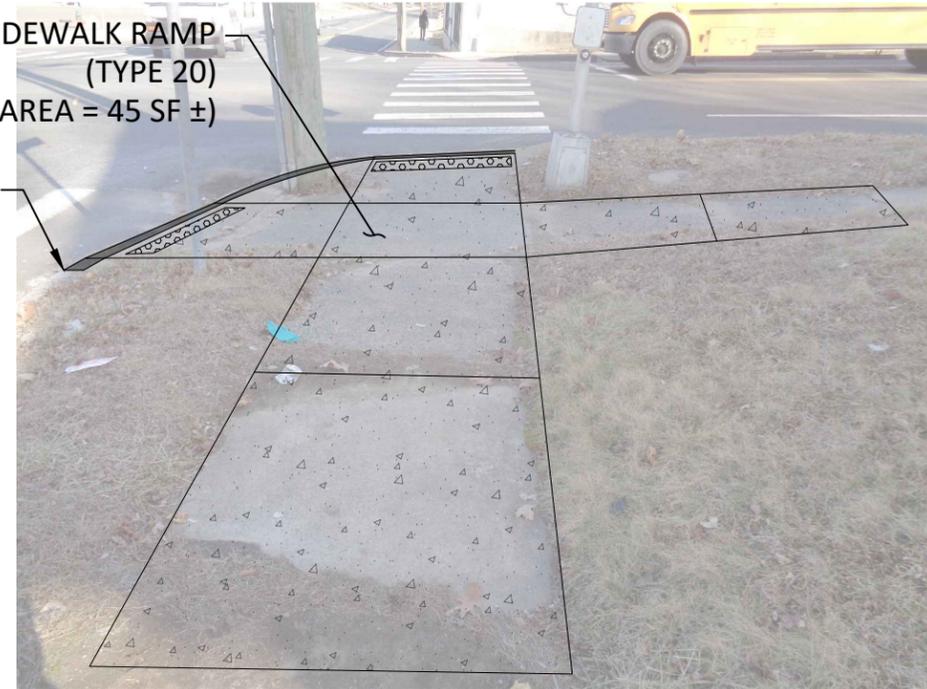


**PLAN VIEW**

SCALE: 1" = 80'

CONCRETE SIDEWALK RAMP  
(TYPE 20)  
(AREA = 45 SF ±)

BIT. CURB



**RAMP NO. 16**

NOT TO SCALE

CONCRETE SIDEWALK RAMP  
(TYPE 2)  
(AREA = 100 SF ±)



**RAMP NO. 17**

NOT TO SCALE



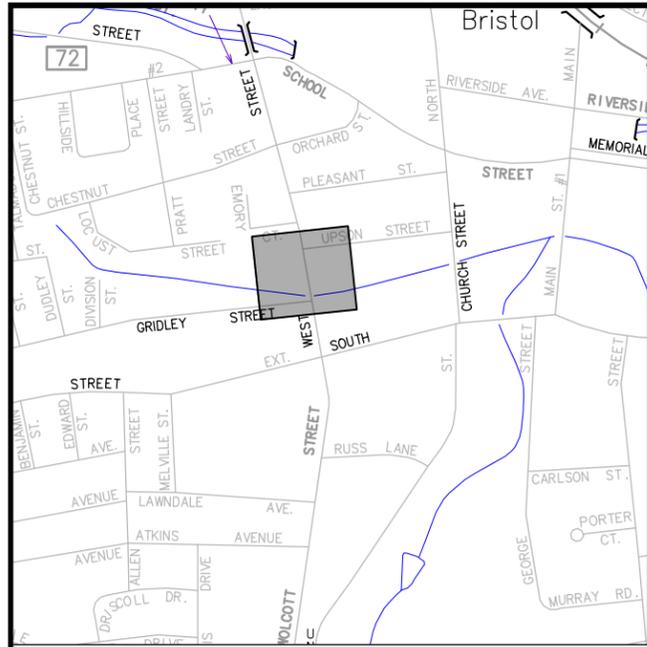
PREPARED BY:  
City of Bristol  
Department of Public Works  
Tel: 860-584-6125  
Fax: 860-584-3838  
ci.bristol.ct.us

No.	DATE	COMMENTS

DESIGN BY: WRS  
DRAFTED BY: WRS  
CHECKED BY: ---  
SCALE: -  
DATE: JULY 3, 2023  
PROJECT No.: 0170-3513

**COMMUNITY  
CONNECTIVITY PROGRAM**  
Bristol, Connecticut  
WEST STREET (RTE. 69)

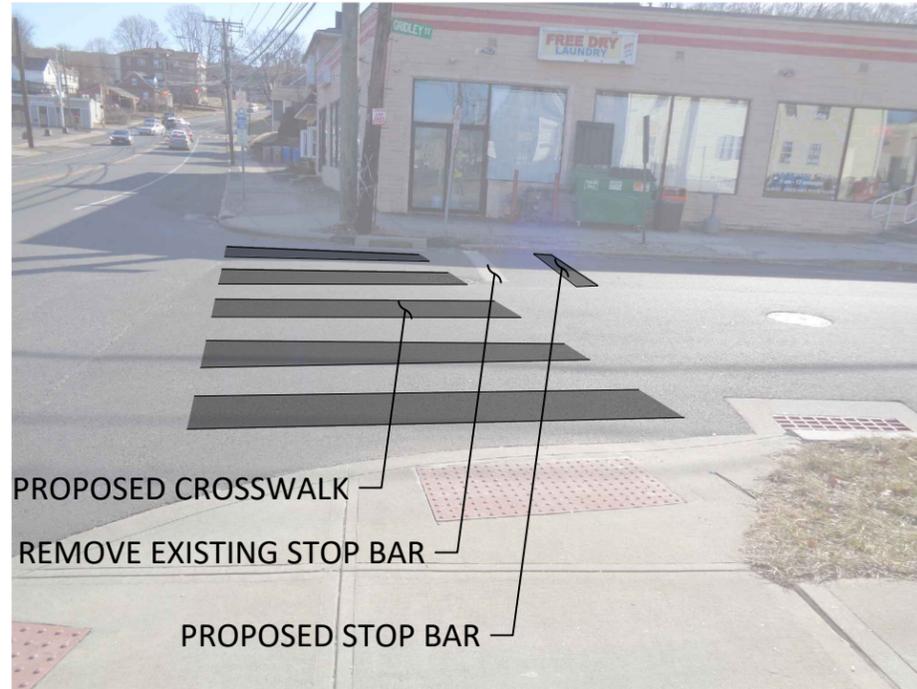
DRAWING NO.:  
**PLN-08**



**LOCATION MAP**

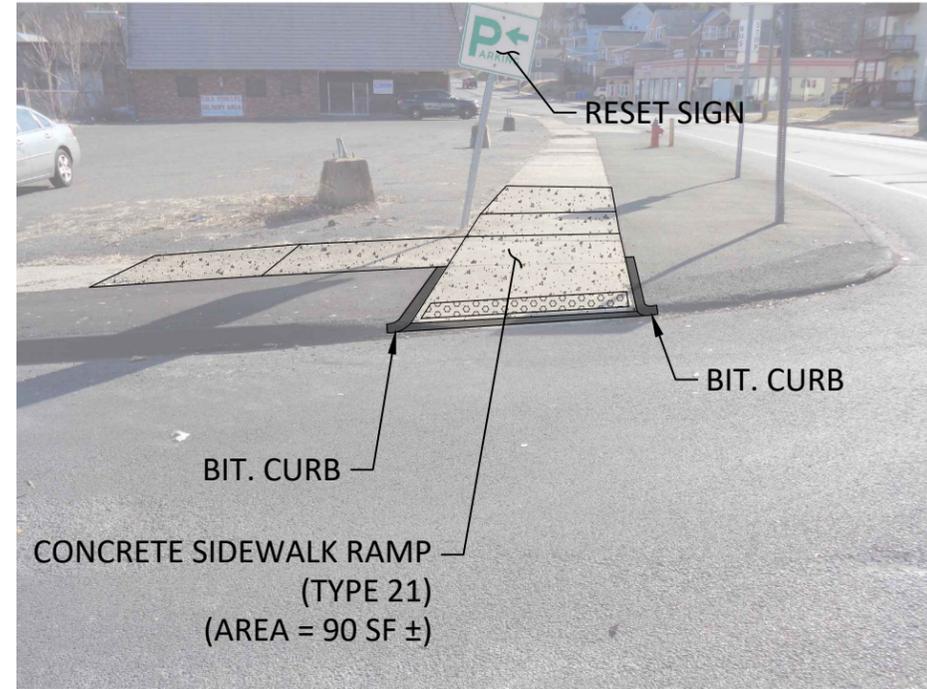
SCALE: 1" = 1000'

**NOTE:**  
SIDEWALK RAMPS ALONG WEST STREET (RTE. 69) TO BE PAID FOR UNDER ITEM "CONCRETE SIDEWALK RAMP (STATE)".



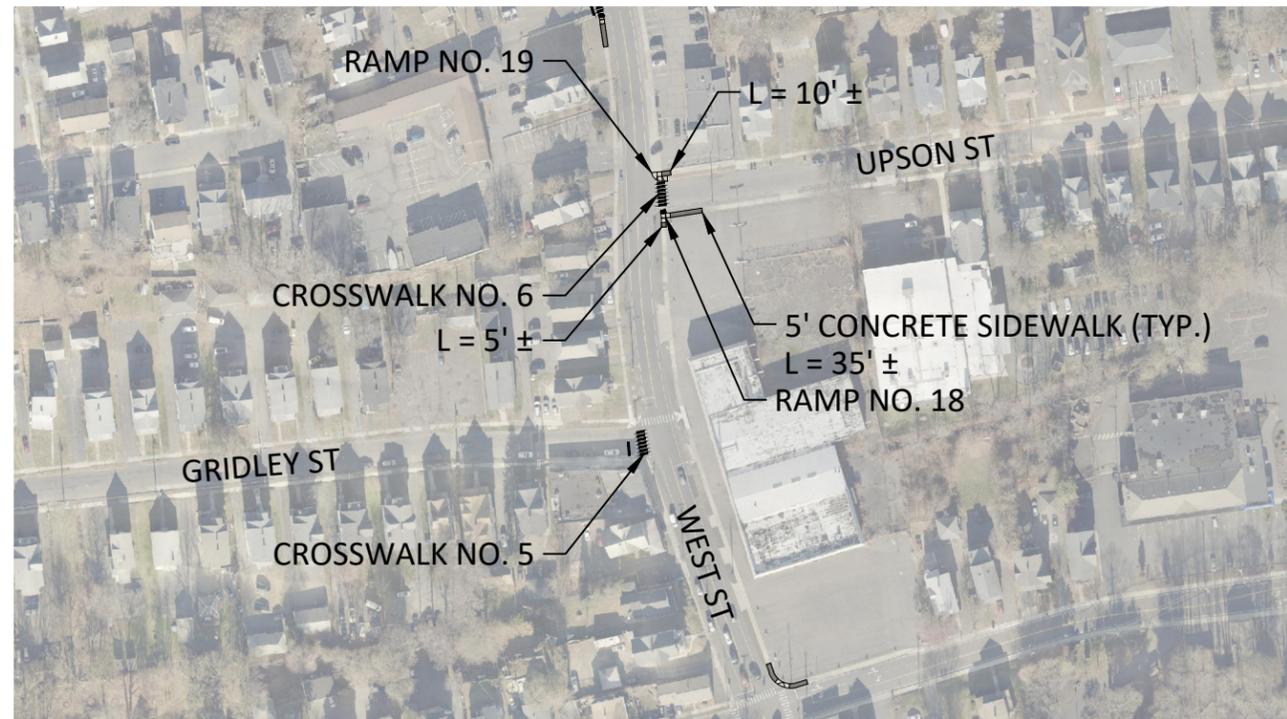
**CROSSWALK NO. 5**

NOT TO SCALE



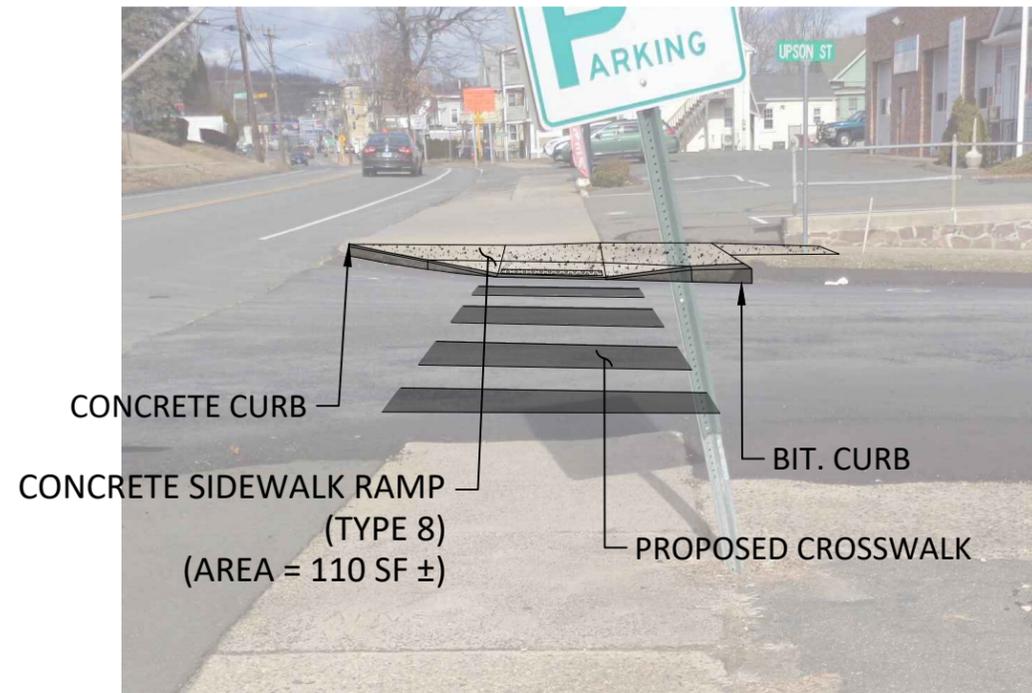
**RAMP NO. 18**

NOT TO SCALE



**PLAN VIEW**

SCALE: 1" = 200'



**RAMP NO. 19 & CROSSWALK NO. 6**

NOT TO SCALE



City of Bristol  
Department of Public Works  
Tel: 860-584-6125  
Fax: 860-584-3838  
ci.bristol.ct.us

PREPARED BY:

COMMENTS:

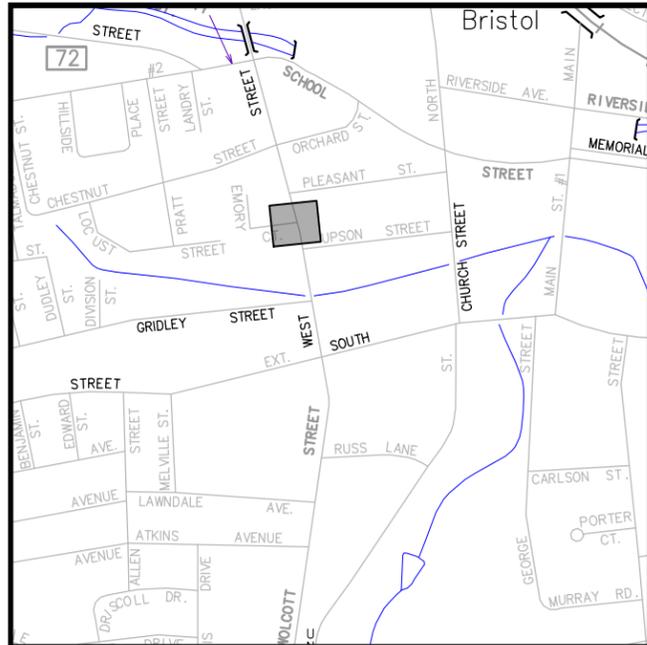
DATE:

DESIGN BY: WRS  
DRAFTED BY: WRS  
CHECKED BY: ---  
SCALE: -  
DATE: JULY 3, 2023  
PROJECT No.: 0170-3513

**COMMUNITY CONNECTIVITY PROGRAM**  
Bristol, Connecticut  
WEST STREET (RTE. 69)

DRAWING NO.:

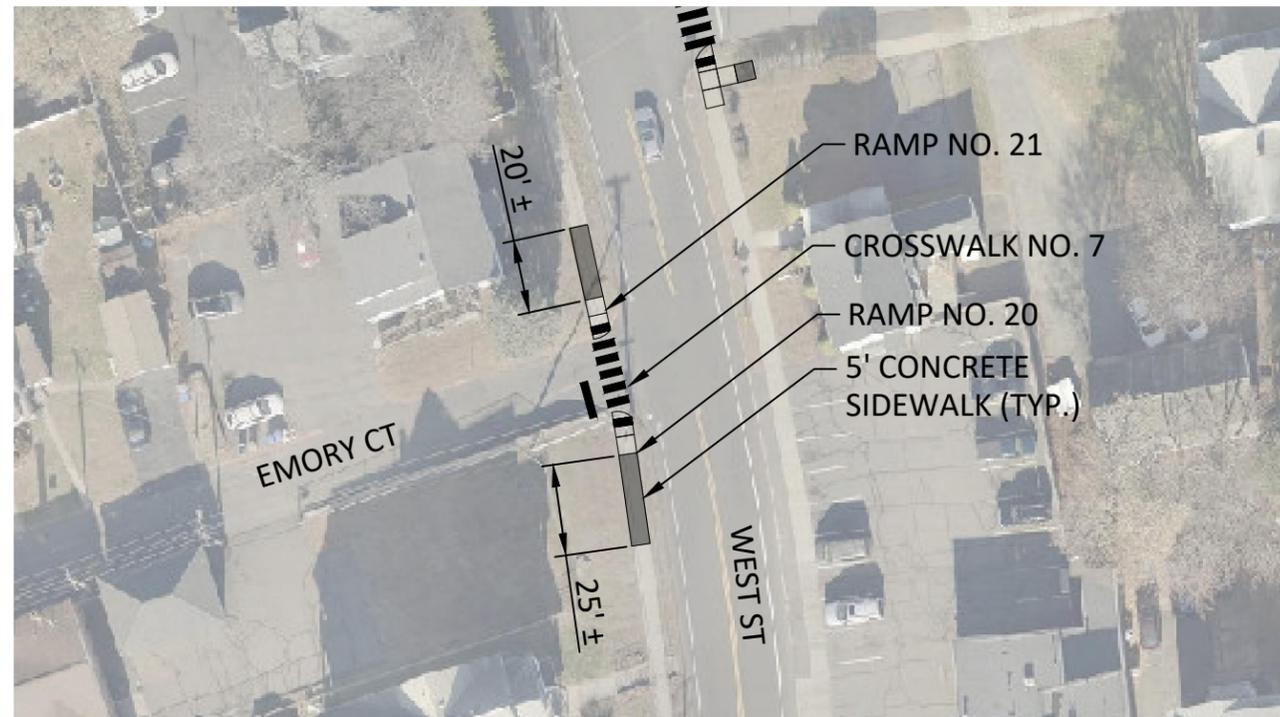
PLN-09



**LOCATION MAP**

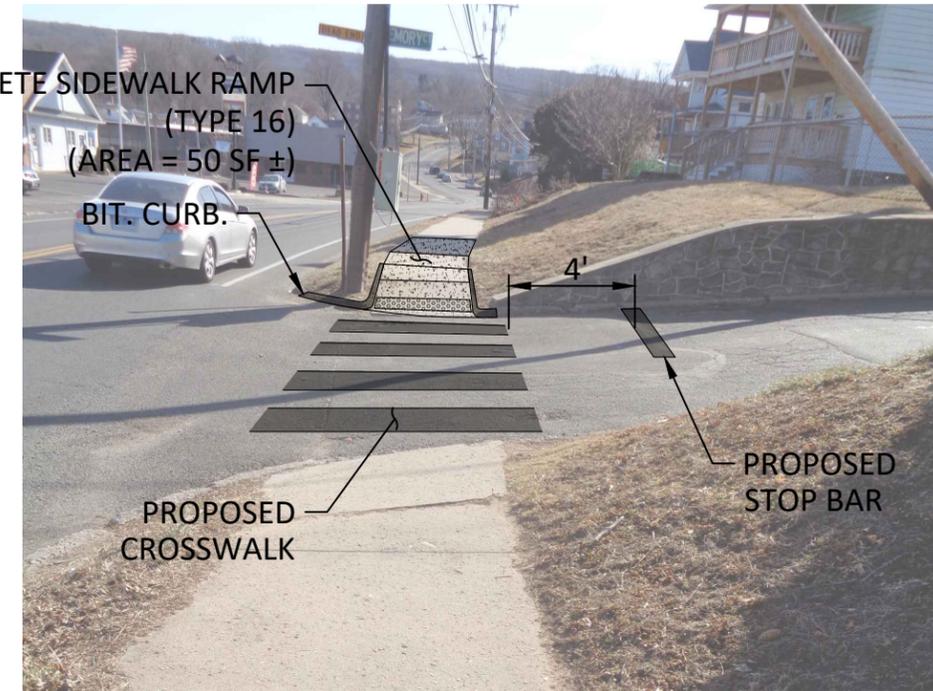
SCALE: 1" = 1000'

**NOTE:**  
 SIDEWALK RAMPS ALONG WEST STREET (RTE. 69) TO BE PAID FOR UNDER ITEM "CONCRETE SIDEWALK RAMP (STATE)".



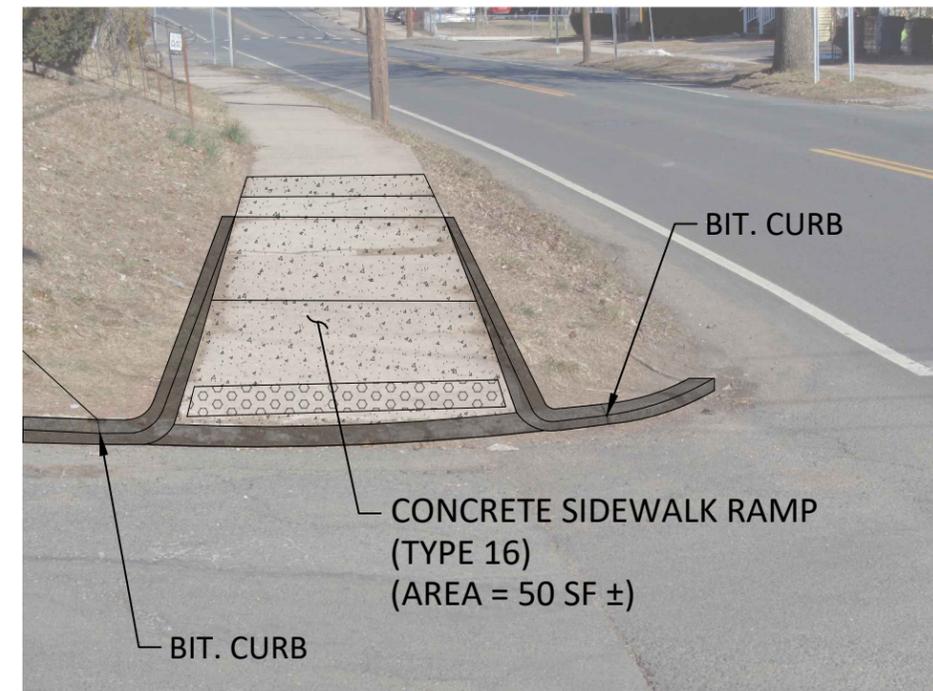
**PLAN VIEW**

SCALE: 1" = 50'



**RAMP NO. 20 & CROSSWALK NO. 7**

NOT TO SCALE



**RAMP NO. 21**

NOT TO SCALE



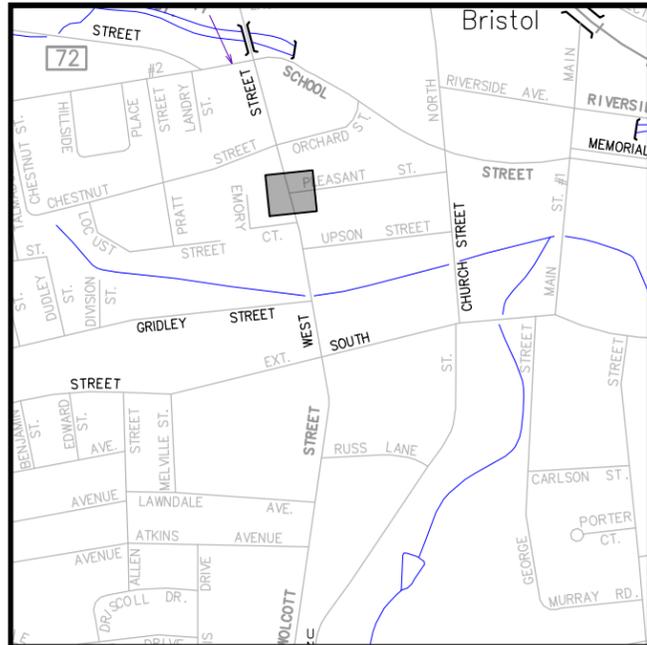
Prepared by:  
 City of Bristol  
 Department of Public Works  
 111 North Main Street  
 Bristol, Connecticut 06010  
 Tel: 860-584-6125  
 Fax: 860-584-3838  
 ci.bristol.ct.us

No.	DATE	COMMENTS

DESIGN BY: WRS  
 DRAFTED BY: WRS  
 CHECKED BY: ---  
 SCALE: -  
 DATE: JULY 3, 2023  
 PROJECT No.: 0170-3513

**COMMUNITY CONNECTIVITY PROGRAM**  
 Bristol, Connecticut  
 WEST STREET (RTE. 69)

DRAWING NO.:  
 PLN-10

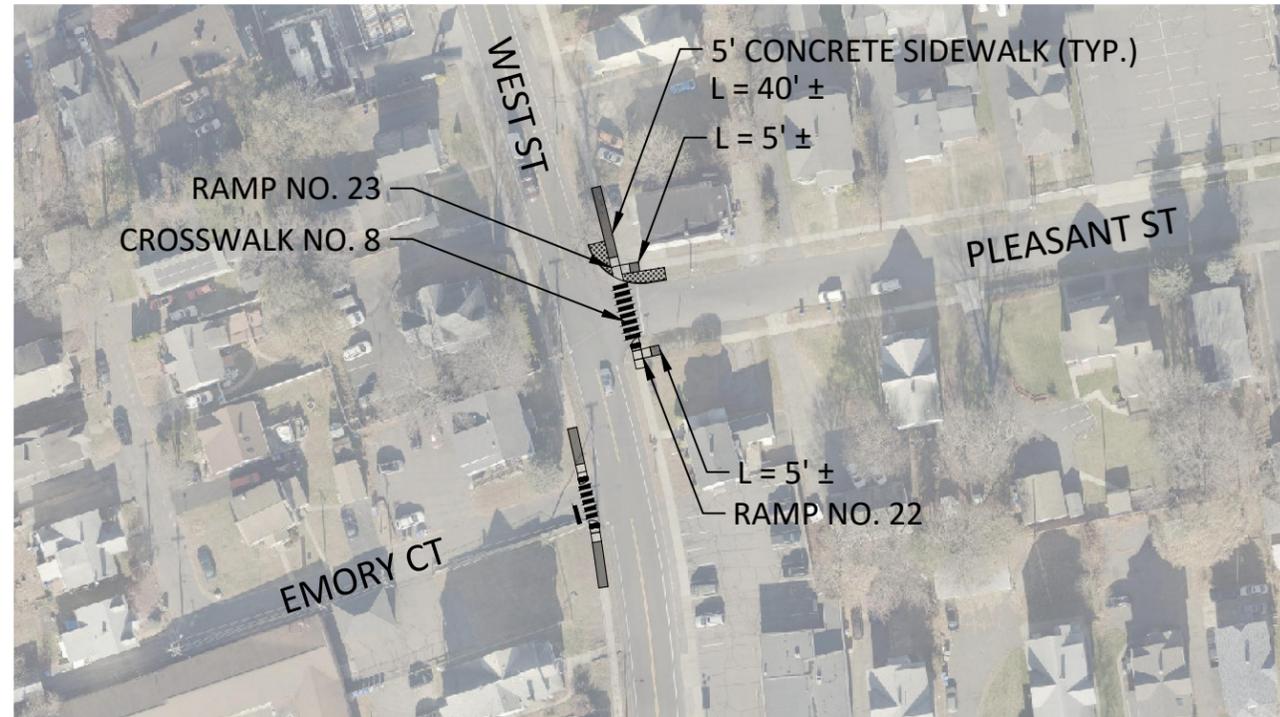


**LOCATION MAP**

SCALE: 1" = 1000'

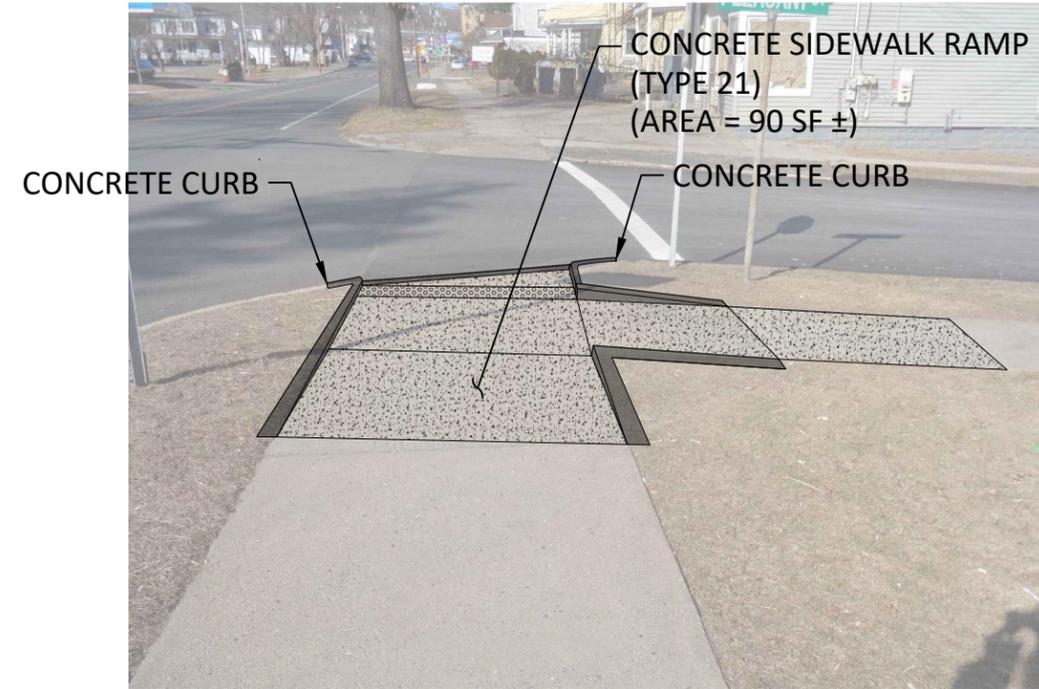
**NOTE:**

SIDEWALK RAMPS ALONG WEST STREET (RTE. 69) TO BE PAID FOR UNDER ITEM "CONCRETE SIDEWALK RAMP (STATE)".



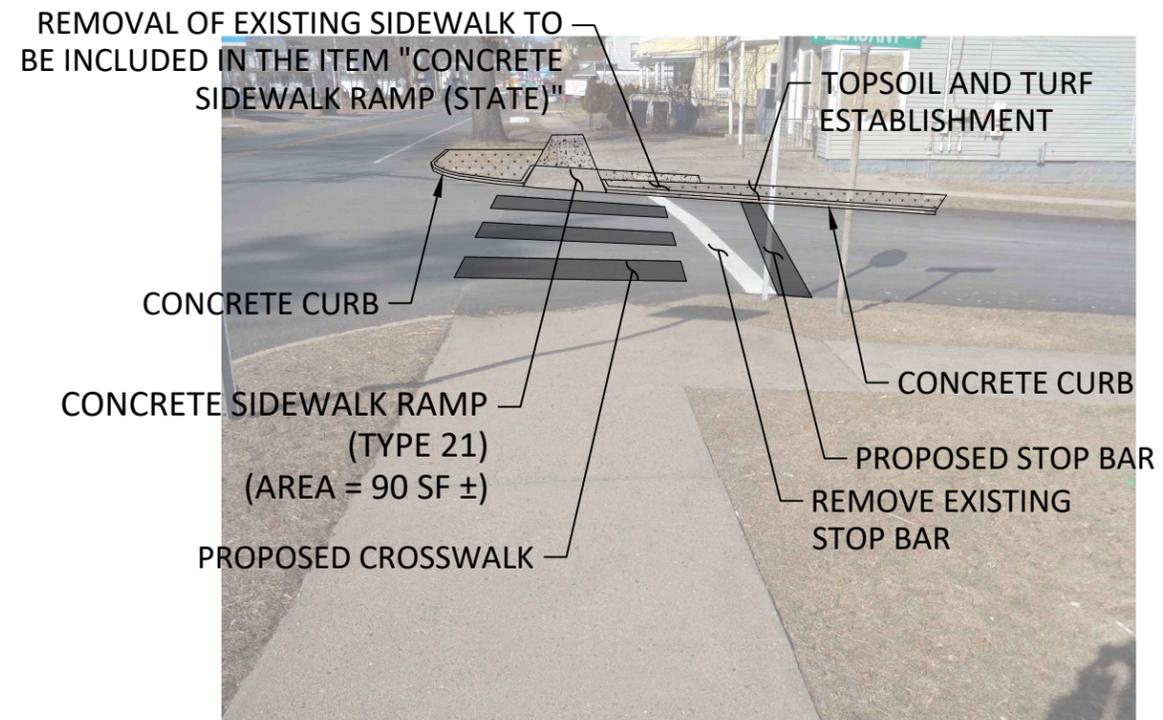
**PLAN VIEW**

SCALE: 1" = 100'



**RAMP NO. 22**

NOT TO SCALE



**RAMP NO. 23 & CROSSWALK NO. 8**

NOT TO SCALE



City of Bristol  
Department of Public Works  
Tel. 860-584-6125  
Fax 860-584-3838  
111 North Main Street  
Bristol, Connecticut 06010  
ci.bristol.ct.us

PREPARED BY:

COMMENTS:

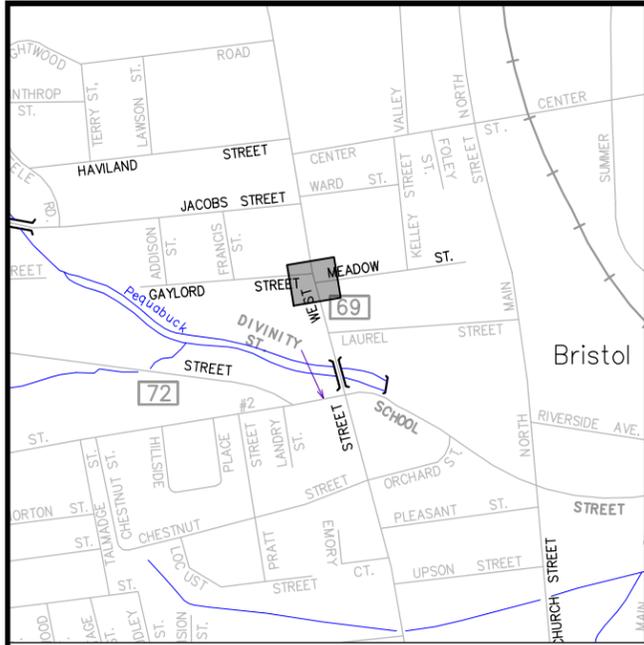
DATE:

No.:

DESIGN BY: WRS  
DRAFTED BY: WRS  
CHECKED BY: ---  
SCALE: -  
DATE: JULY 3, 2023  
PROJECT No.: 0170-3513

**COMMUNITY CONNECTIVITY PROGRAM**  
Bristol, Connecticut  
WEST STREET (RTE. 69)

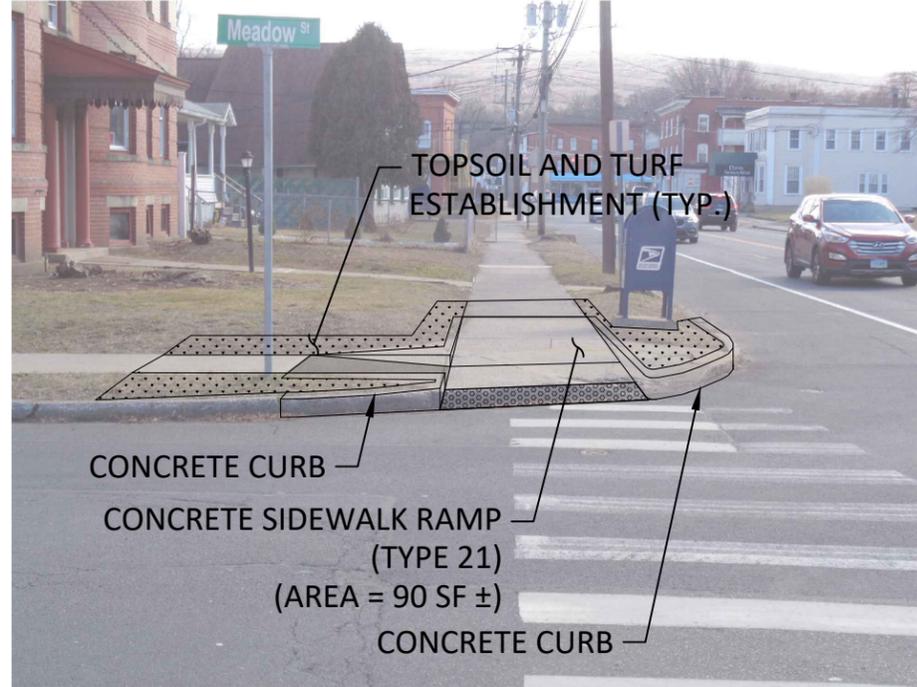
DRAWING NO.:  
**PLN-11**



**LOCATION MAP**

SCALE: 1" = 1000'

**NOTE:**  
SIDEWALK RAMPS ALONG WEST STREET (RTE. 69) TO BE PAID FOR UNDER ITEM "CONCRETE SIDEWALK RAMP (STATE)".



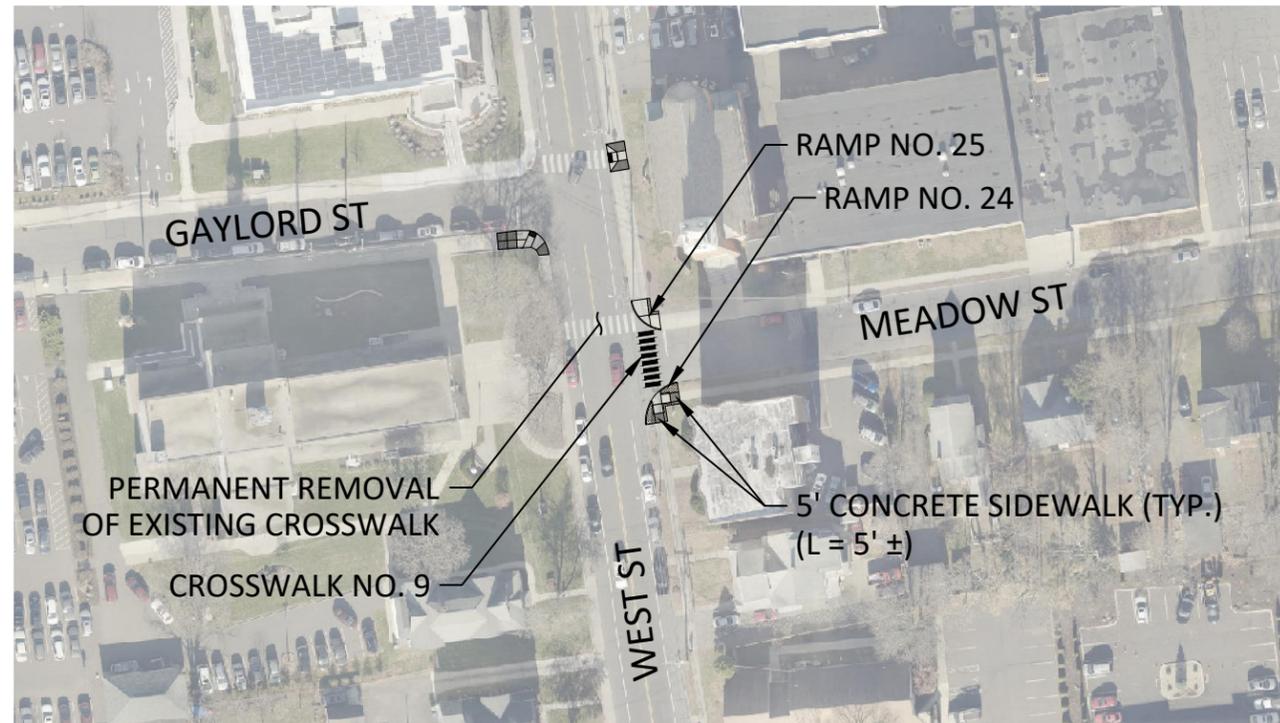
**RAMP NO. 24**

NOT TO SCALE



**RAMP NO. 25**

NOT TO SCALE



**PLAN VIEW**

SCALE: 1" = 100'



**CROSSWALK NO. 9**

NOT TO SCALE



City of Bristol  
Department of Public Works  
Tel: 860-584-6125  
Fax: 860-584-3838  
111 North Main Street  
Bristol, Connecticut 06010  
ci.bristol.ct.us

PREPARED BY:

COMMENTS:

DATE:

No.:

DESIGN BY: WRS  
DRAFTED BY: WRS  
CHECKED BY: ---  
SCALE: -  
DATE: JULY 3, 2023  
PROJECT No.: 0170-3513

**COMMUNITY CONNECTIVITY PROGRAM**  
Bristol, Connecticut  
WEST STREET (RTE. 69)

DRAWING NO.:

PLN-12

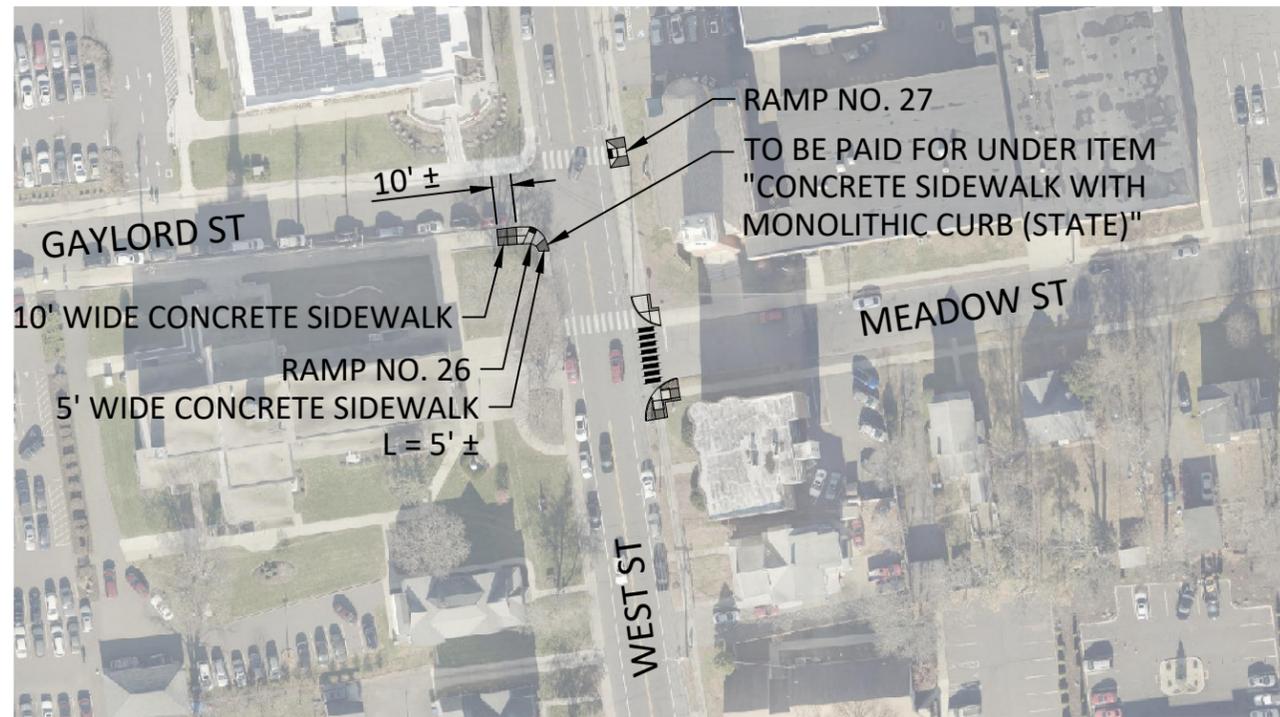


**LOCATION MAP**

SCALE: 1" = 1000'

**NOTE:**

SIDEWALK RAMPS ALONG WEST STREET (RTE. 69) TO BE PAID FOR UNDER ITEM "CONCRETE SIDEWALK RAMP (STATE)".



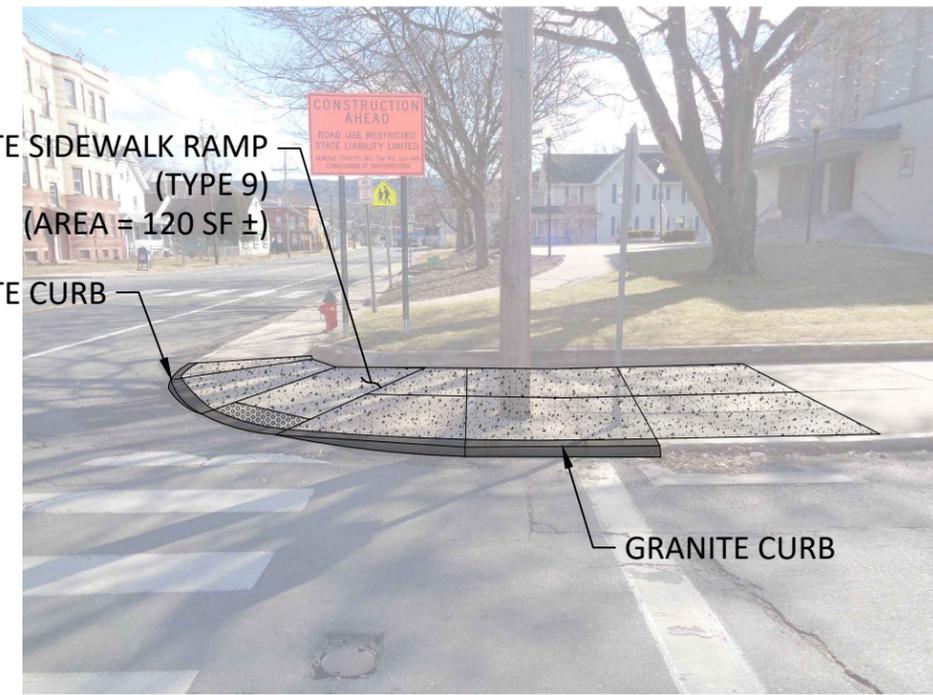
**PLAN VIEW**

SCALE: 1" = 100'

CONCRETE SIDEWALK RAMP  
(TYPE 9)  
(AREA = 120 SF ±)

CONCRETE CURB

GRANITE CURB



**RAMP NO. 26**

NOT TO SCALE

CONCRETE SIDEWALK RAMP  
(TYPE 8)  
(AREA = 150 SF ±)



**RAMP NO. 27**

NOT TO SCALE



City of Bristol  
Department of Public Works  
Tel: 860-584-6125  
Fax: 860-584-3838  
111 North Main Street  
Bristol, Connecticut 06010  
ci.bristol.ct.us

PREPARED BY:

COMMENTS:

DATE:

DESIGN BY: WRS

DRAFTED BY: WRS

CHECKED BY: ---

SCALE: -

DATE: JULY 3, 2023

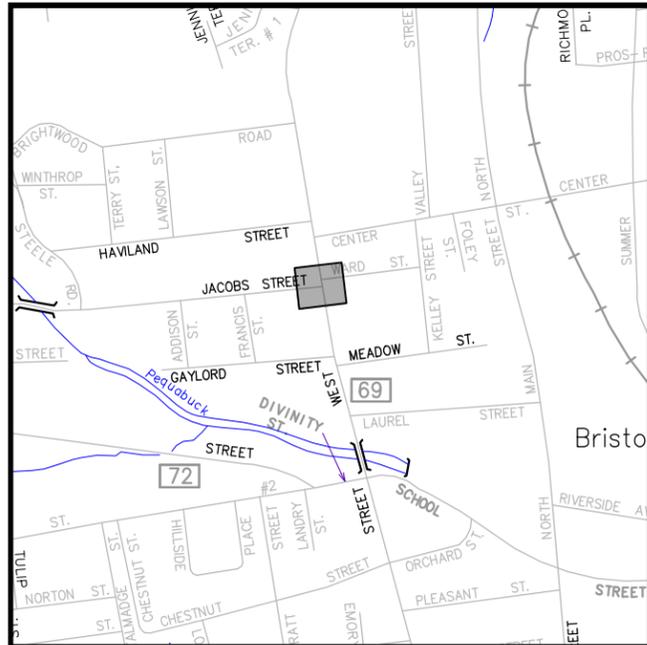
PROJECT No.: 0170-3513

**COMMUNITY  
CONNECTIVITY PROGRAM**  
Bristol, Connecticut

WEST STREET (RTE. 69)

DRAWING NO.:

PLN-13

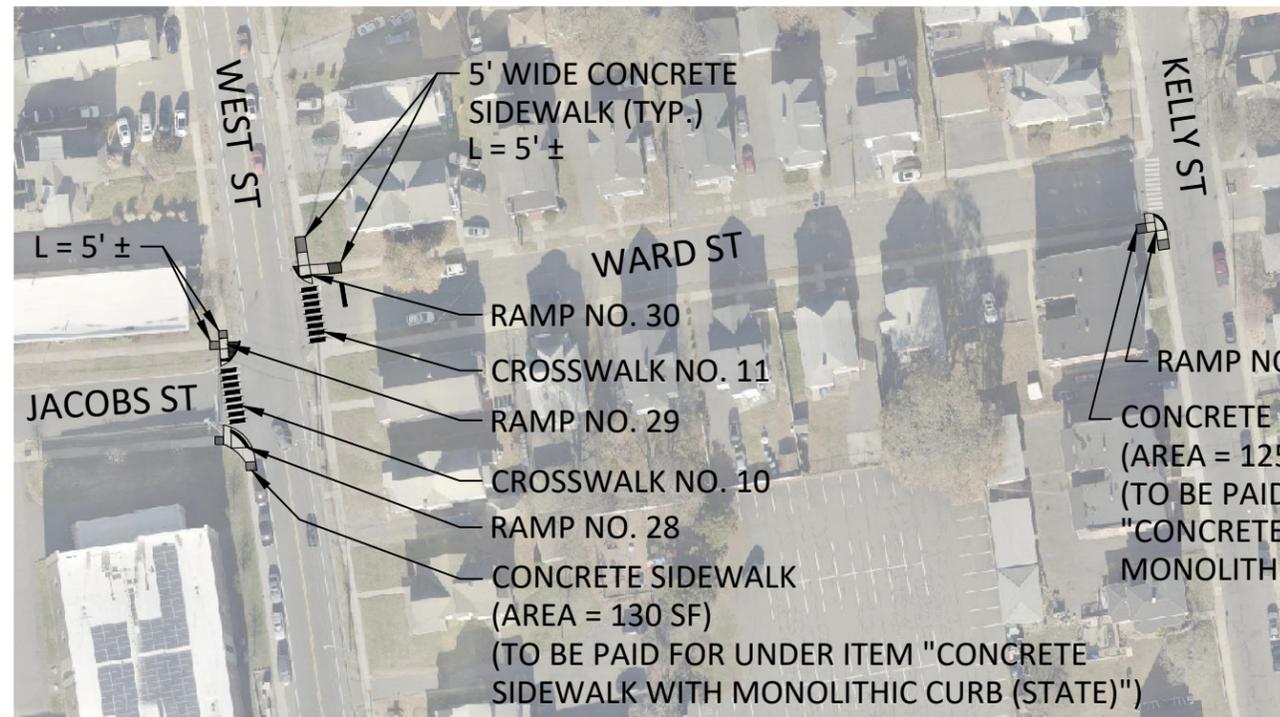


**LOCATION MAP**

SCALE: 1" = 1000'

**NOTE:**

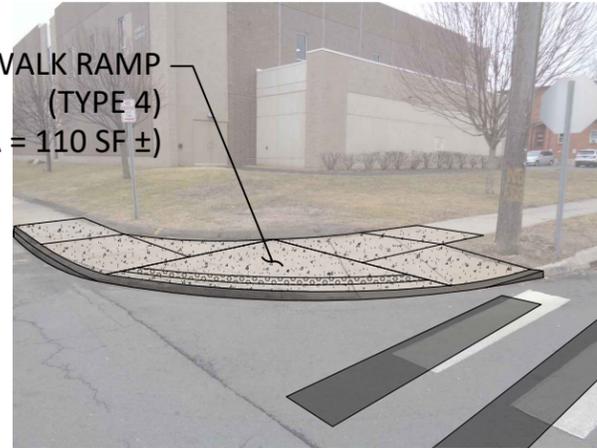
SIDEWALK RAMPS ALONG WEST STREET (RTE. 69) TO BE PAID FOR UNDER ITEM "CONCRETE SIDEWALK RAMP (STATE)".



**PLAN VIEW**

SCALE: 1" = 100'

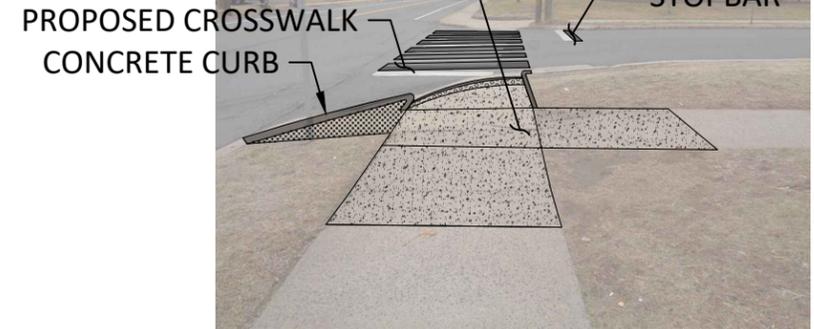
CONCRETE SIDEWALK RAMP (TYPE 4) (AREA = 110 SF ±)



**RAMP NO. 28**

NOT TO SCALE

CONCRETE SIDEWALK RAMP (TYPE 20) (AREA = 45 SF ±)



**RAMP NO. 29 & CROSSWALK NO. 10**

NOT TO SCALE

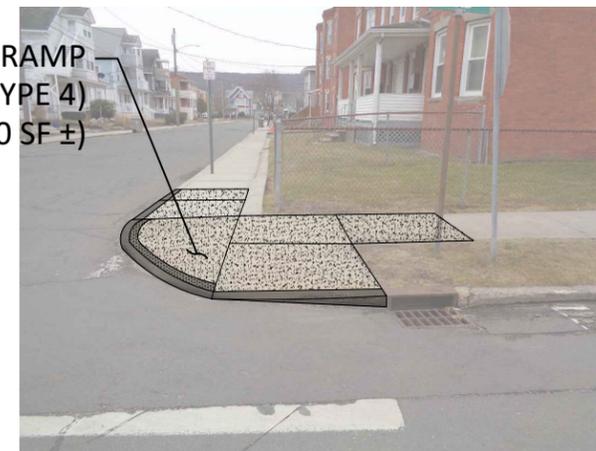
CONCRETE SIDEWALK RAMP (TYPE 21) (AREA = 90 SF ±)



**RAMP NO. 30 & CROSSWALK NO. 11**

NOT TO SCALE

CONCRETE SIDEWALK RAMP (TYPE 4) (AREA = 110 SF ±)



**RAMP NO. 31**

NOT TO SCALE



City of Bristol  
Department of Public Works  
Tel: 860-584-6125  
Fax: 860-584-3838  
ci.bristol.ct.us

PREPARED BY:

COMMENTS:

DATE:

DESIGN BY: WRS

DRAFTED BY: WRS

CHECKED BY: ---

SCALE: -

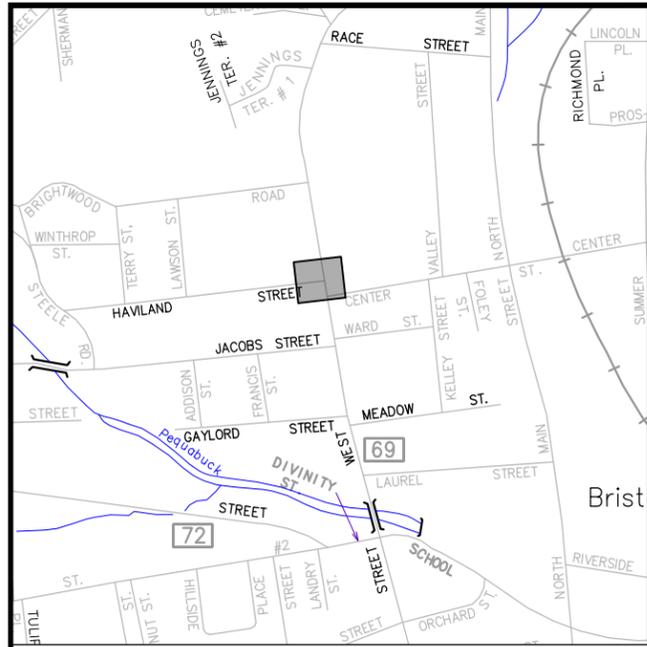
DATE: JULY 3, 2023

PROJECT No.: 0170-3513

DRAWING NO.:

PLN-14

**COMMUNITY CONNECTIVITY PROGRAM**  
Bristol, Connecticut  
WEST STREET (RTE. 69)

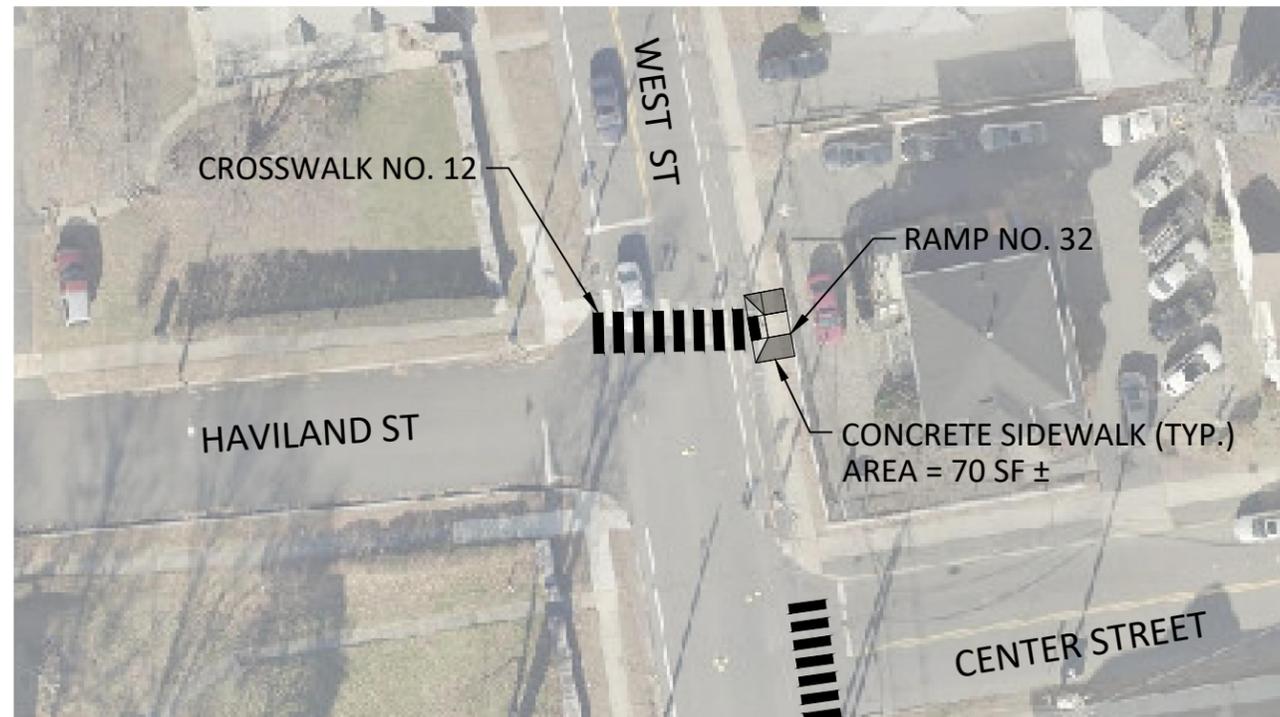


**LOCATION MAP**

SCALE: 1" = 1000'

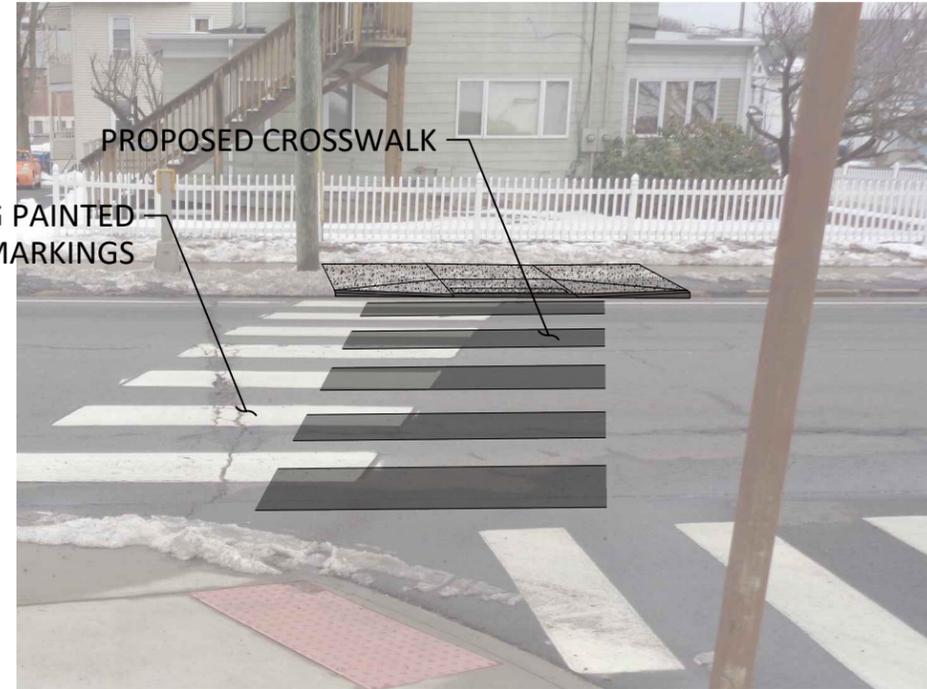
**NOTE:**

SIDEWALK RAMPS ALONG WEST STREET (RTE. 69) TO BE PAID FOR UNDER ITEM "CONCRETE SIDEWALK RAMP (STATE)".



**PLAN VIEW**

SCALE: 1" = 40'



**CROSSWALK NO. 12**

NOT TO SCALE



**RAMP NO. 32**

NOT TO SCALE



City of Bristol  
Department of Public Works  
111 North Main Street  
Bristol, Connecticut 06010  
Tel: 860-584-6125  
Fax: 860-584-3838  
ci.bristol.ct.us

PREPARED BY:

COMMENTS:

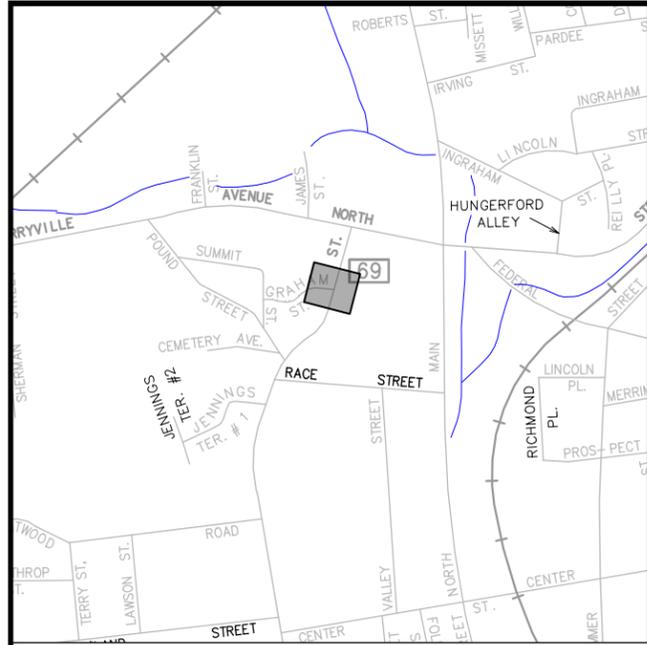
DATE:

DESIGN BY: WRS  
DRAFTED BY: WRS  
CHECKED BY: ---  
SCALE: -  
DATE: JULY 3, 2023  
PROJECT No.: 0170-3513

**COMMUNITY CONNECTIVITY PROGRAM**  
Bristol, Connecticut  
WEST STREET (RTE. 69)

DRAWING NO.:

PLN-15



**LOCATION MAP**

SCALE: 1" = 1000'

**NOTE:**

1. REMOVE EXISTING SIGN (TOTAL = 2) TO BE PAID FOR UNDER THE ITEM "REMOVE EXISTING SIGN".



**EXISTING CROSSWALK**

NOT TO SCALE



**PLAN VIEW**

SCALE: 1" = 100'



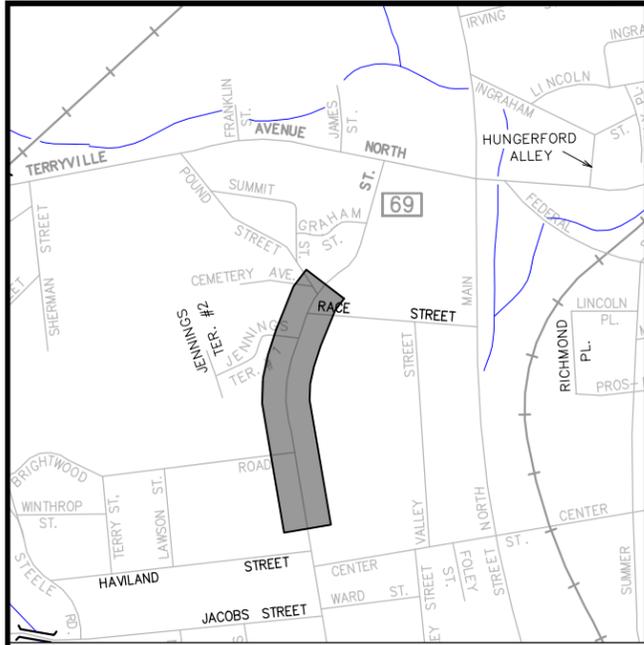
PREPARED BY:  
**City of Bristol**  
 Department of Public Works  
 Tel: 860-584-6125  
 Fax: 860-584-3838  
 ci.bristol.ct.us

No.	DATE	COMMENTS

DESIGN BY: WRS  
 DRAFTED BY: WRS  
 CHECKED BY: ---  
 SCALE: -  
 DATE: JULY 3, 2023  
 PROJECT No.: 0170-3513

**COMMUNITY CONNECTIVITY PROGRAM**  
 Bristol, Connecticut  
 WEST STREET (RTE. 69)

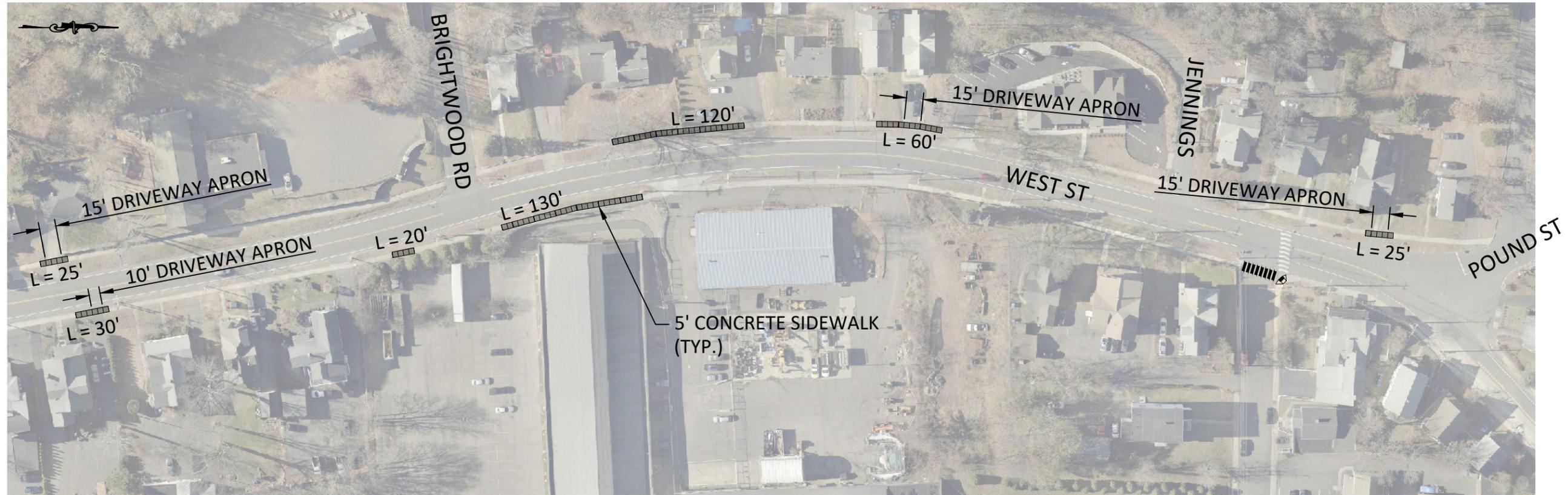
DRAWING NO.:  
**PLN-16**



**LOCATION MAP**  
SCALE: 1" = 1000'

**NOTES:**

1. REPLACE DISTURBED DRIVEWAY APRONS (TOTAL = 275 SF). SEE DETAIL "EIGHT-INCH-THICK CONCRETE SIDEWALK ON EXISTING BASE - SECTION" ON SHEET SD-06.



**PLAN VIEW**  
SCALE: 1" = 100'



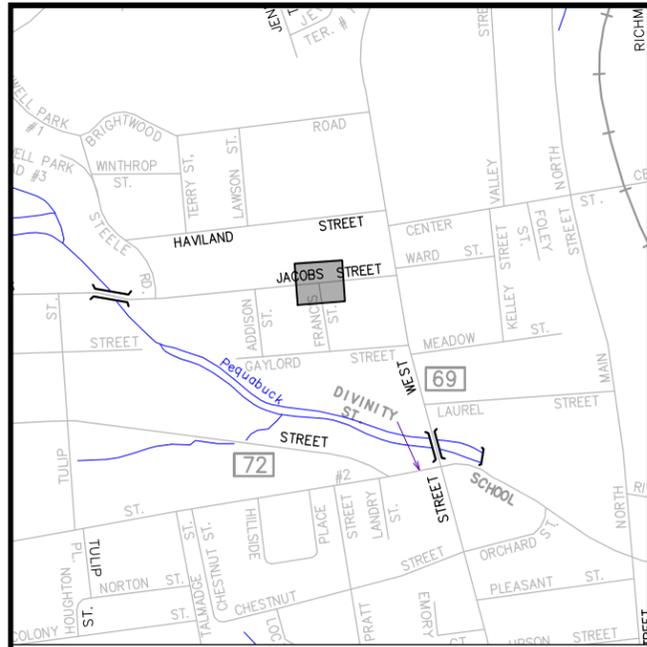
PREPARED BY:  
**City of Bristol**  
Department of Public Works  
Tel: 860-584-6125  
Fax: 860-584-3838  
ci.bristol.ct.us

No.	DATE	COMMENTS

DESIGN BY: WRS  
DRAFTED BY: WRS  
CHECKED BY: ---  
SCALE: -  
DATE: JULY 3, 2023  
PROJECT No.: 0170-3513

**COMMUNITY CONNECTIVITY PROGRAM**  
Bristol, Connecticut  
WEST STREET (RTE. 69)

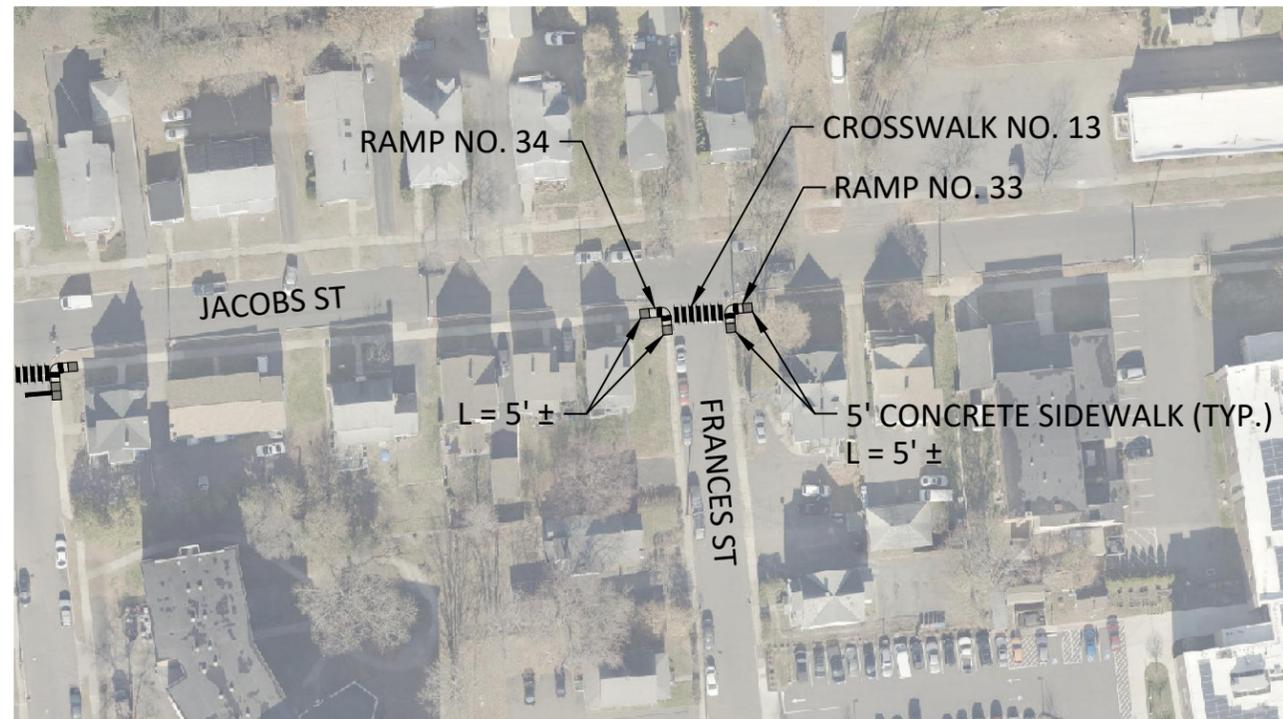
DRAWING NO.:  
**PLN-17**



**LOCATION MAP**

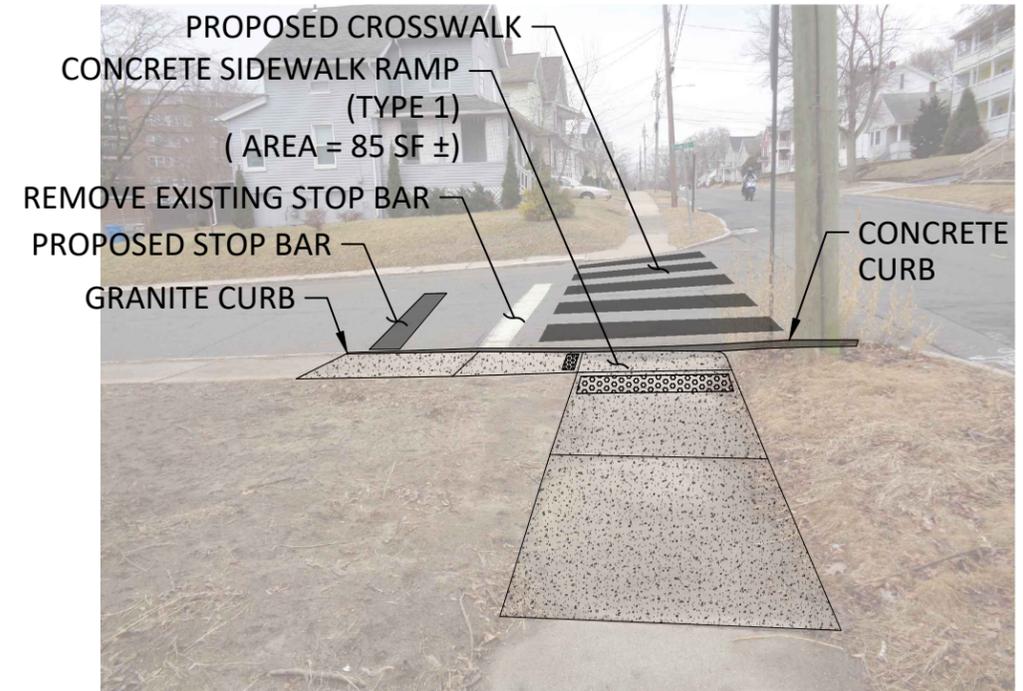
SCALE: 1" = 1000'

**NOTE:**  
SIDEWALK RAMPS ALONG JACOBS STREET TO BE PAID FOR UNDER ITEM "CONCRETE SIDEWALK RAMP (CITY)".



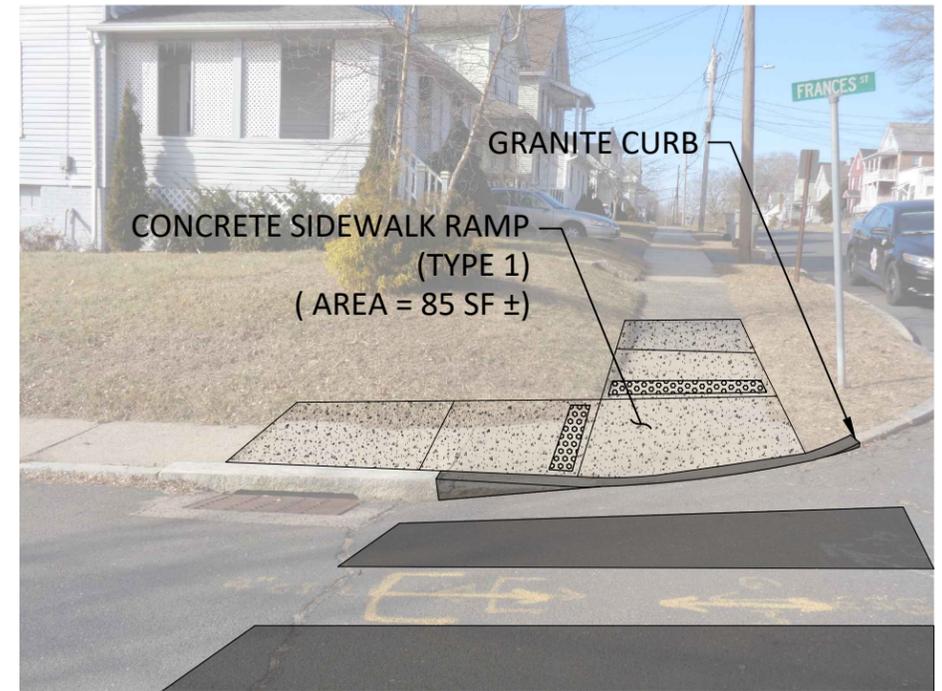
**PLAN VIEW**

SCALE: 1" = 100'



**RAMP NO. 33 & CROSSWALK NO. 13**

NOT TO SCALE



**RAMP NO. 34**

NOT TO SCALE



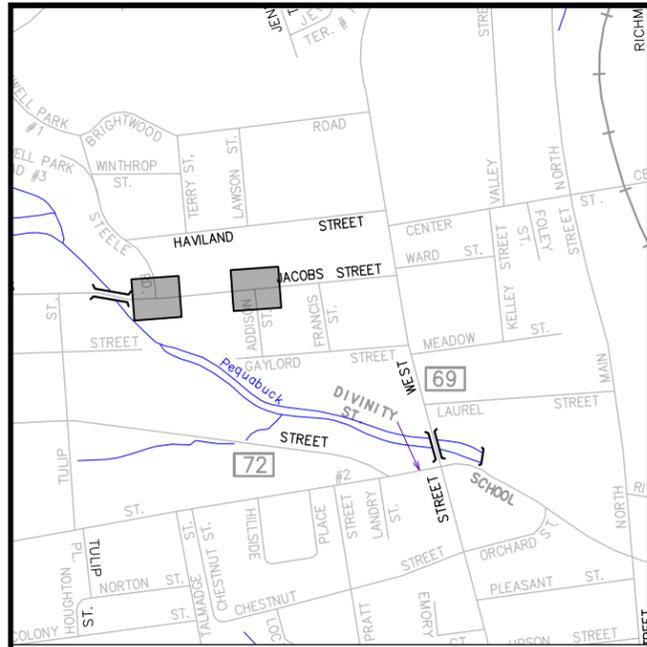
Prepared by:  
City of Bristol  
Department of Public Works  
Tel: 860-584-6125  
Fax: 860-584-3838  
ci.bristol.ct.us

No.	DATE	COMMENTS

DESIGN BY: WRS  
DRAFTED BY: WRS  
CHECKED BY: ---  
SCALE: -  
DATE: JULY 3, 2023  
PROJECT No.: 0170-3513

**COMMUNITY CONNECTIVITY PROGRAM**  
Bristol, Connecticut  
JACOBS STREET

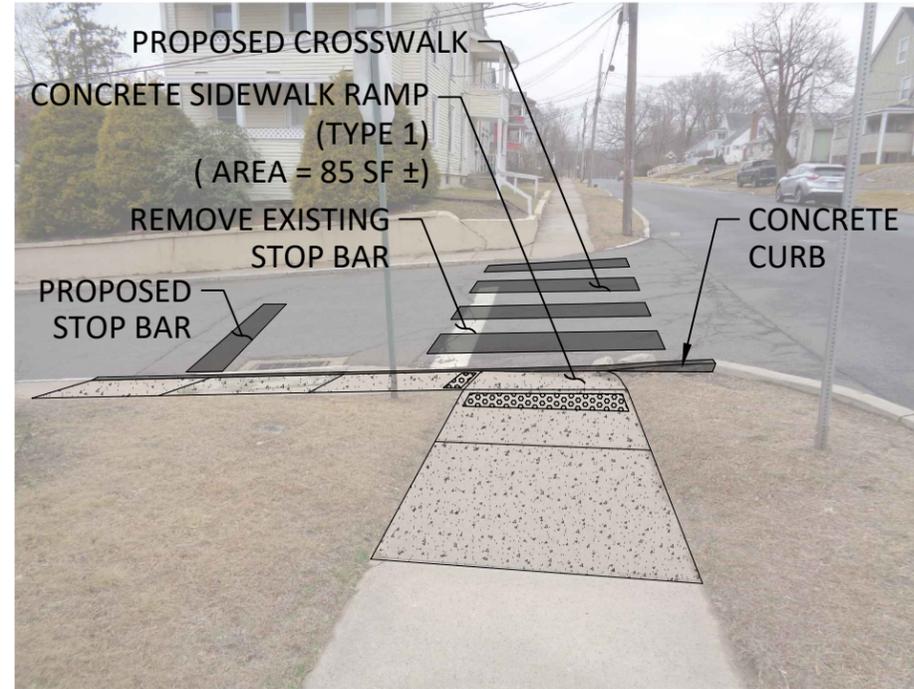
DRAWING NO.:  
**PLN-18**



**LOCATION MAP**

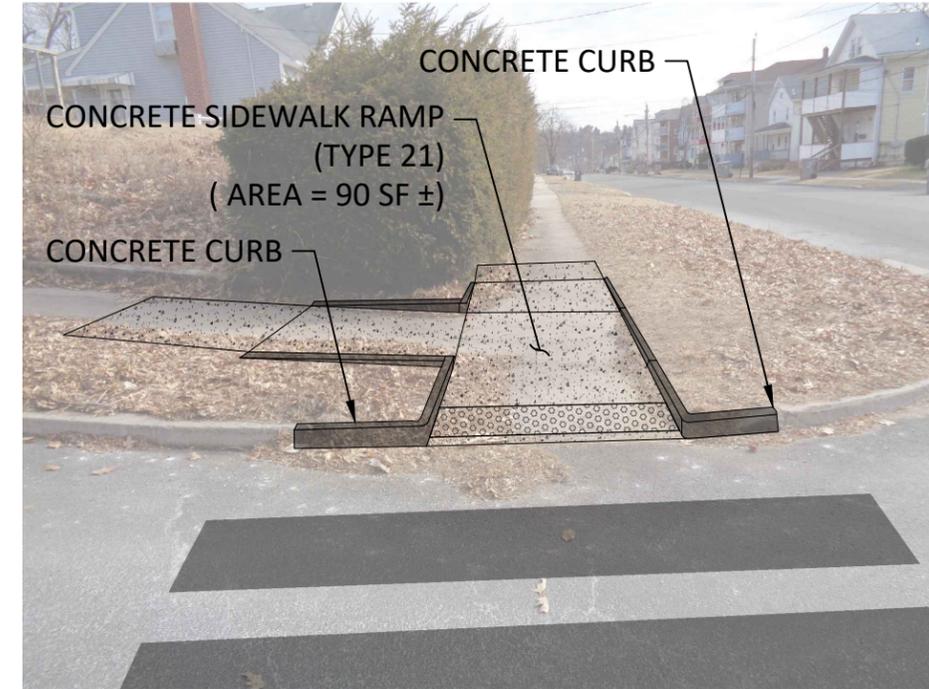
SCALE: 1" = 1000'

**NOTE:**  
SIDEWALK RAMPS ALONG JACOBS STREET TO BE PAID FOR UNDER ITEM "CONCRETE SIDEWALK RAMP (CITY)".



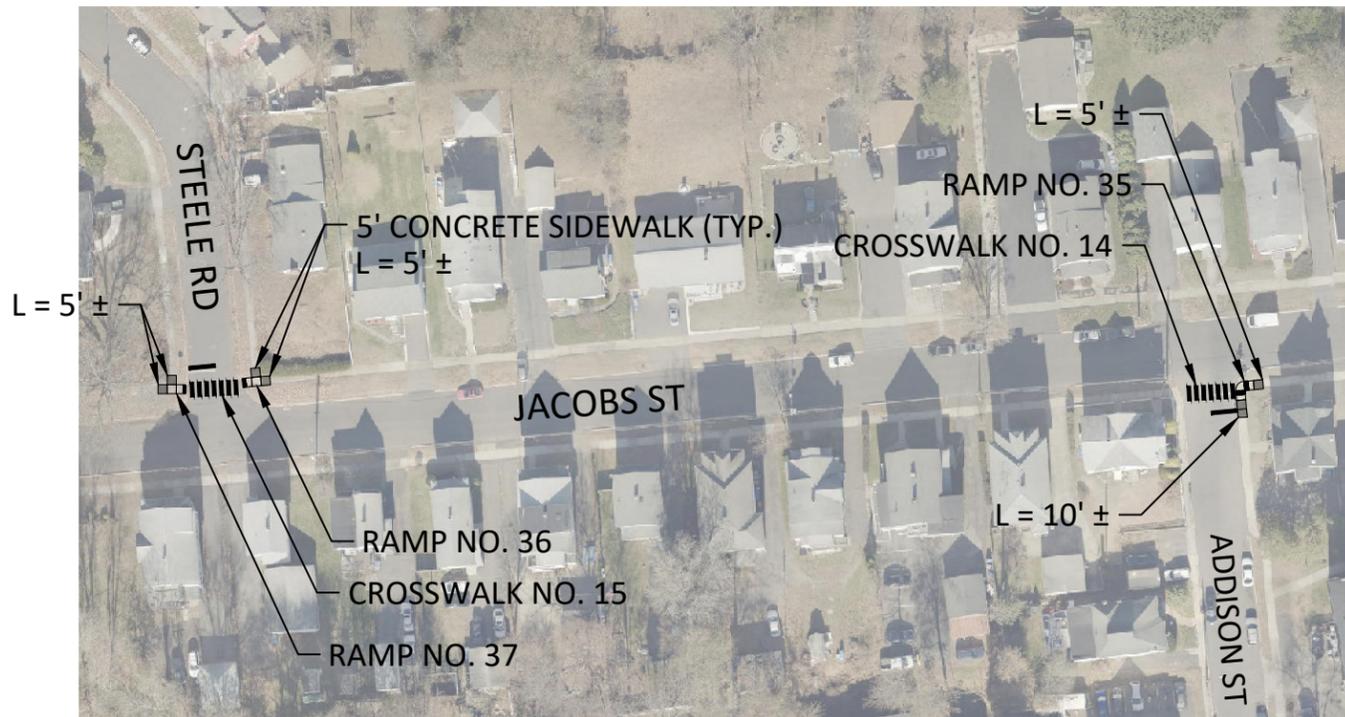
**RAMP NO. 35 & SIDEWALK NO. 14**

NOT TO SCALE



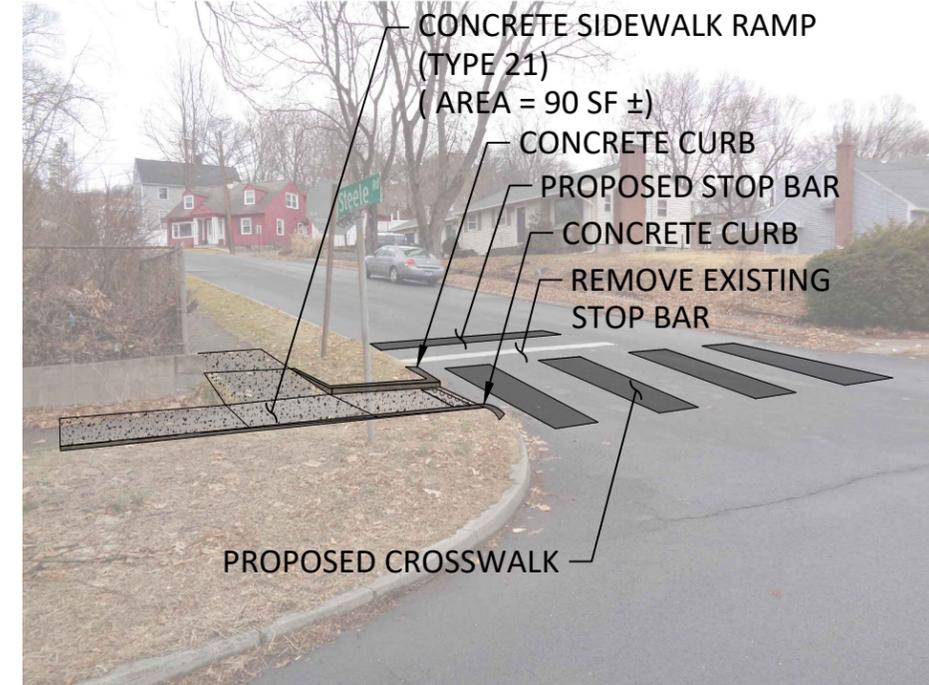
**RAMP NO. 36 & CROSSWALK NO. 15**

NOT TO SCALE



**PLAN VIEW**

SCALE: 1" = 100'



**RAMP NO. 37**

NOT TO SCALE



City of Bristol  
Department of Public Works  
Tel: 860-584-6125  
Fax: 860-584-3838  
111 North Main Street  
Bristol, Connecticut 06010  
ci.bristol.ct.us

PREPARED BY:

COMMENTS:

DATE:

DESIGN BY: WRS

DRAFTED BY: WRS

CHECKED BY: ---

SCALE: -

DATE: JULY 3, 2023

PROJECT No.: 0170-3513

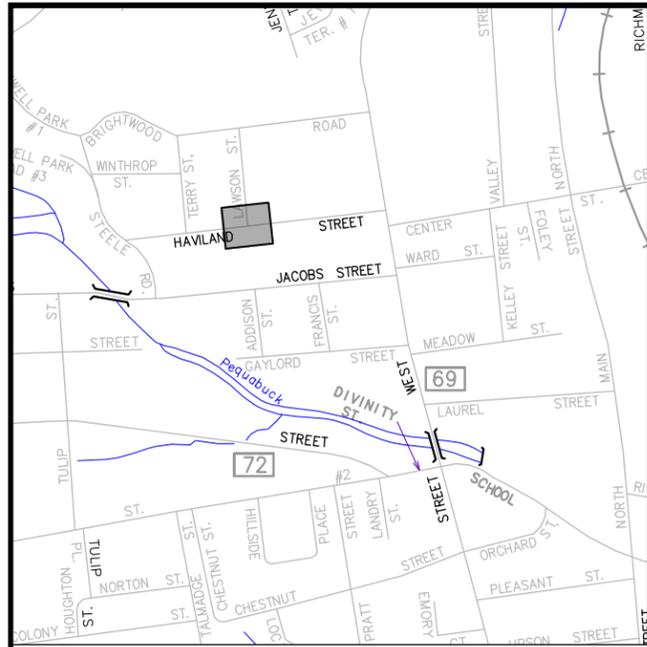
COMMUNITY CONNECTIVITY PROGRAM

Bristol, Connecticut

JACOBS STREET

DRAWING NO.:

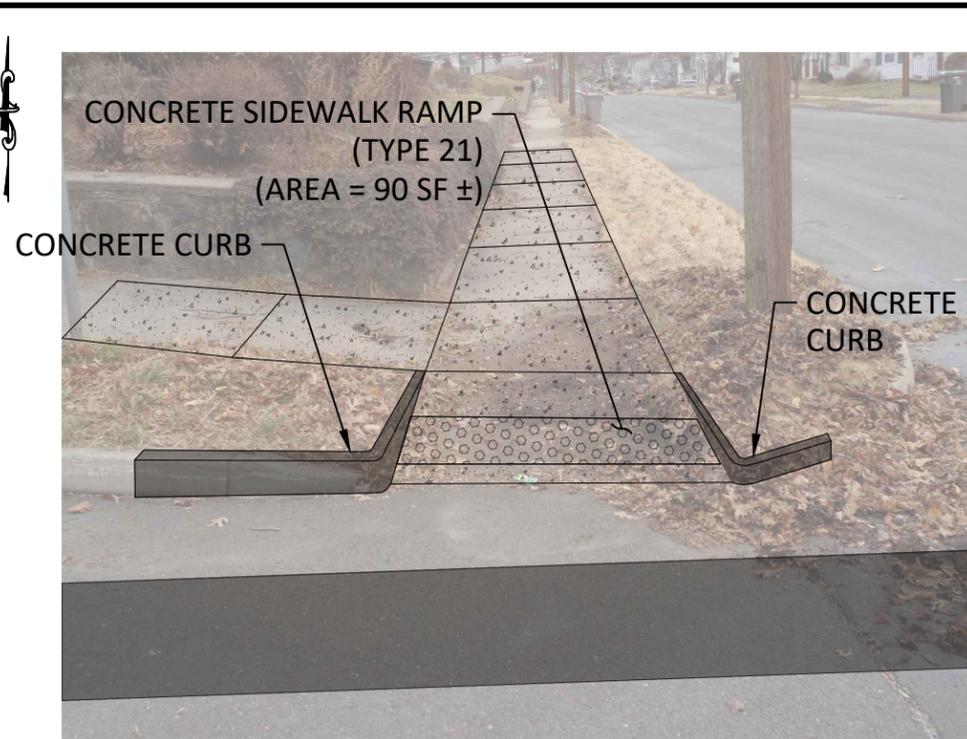
PLN-19



**LOCATION MAP**

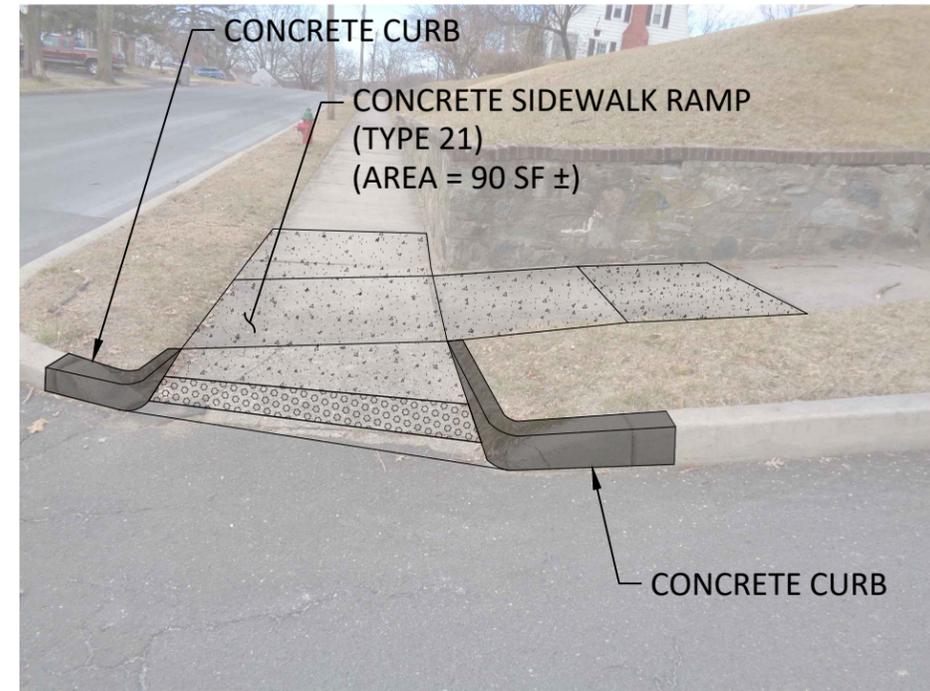
SCALE: 1" = 1000'

**NOTE:**  
SIDEWALK RAMPS ALONG HAVILAND STREET TO BE PAID FOR UNDER ITEM "CONCRETE SIDEWALK RAMP (CITY)".



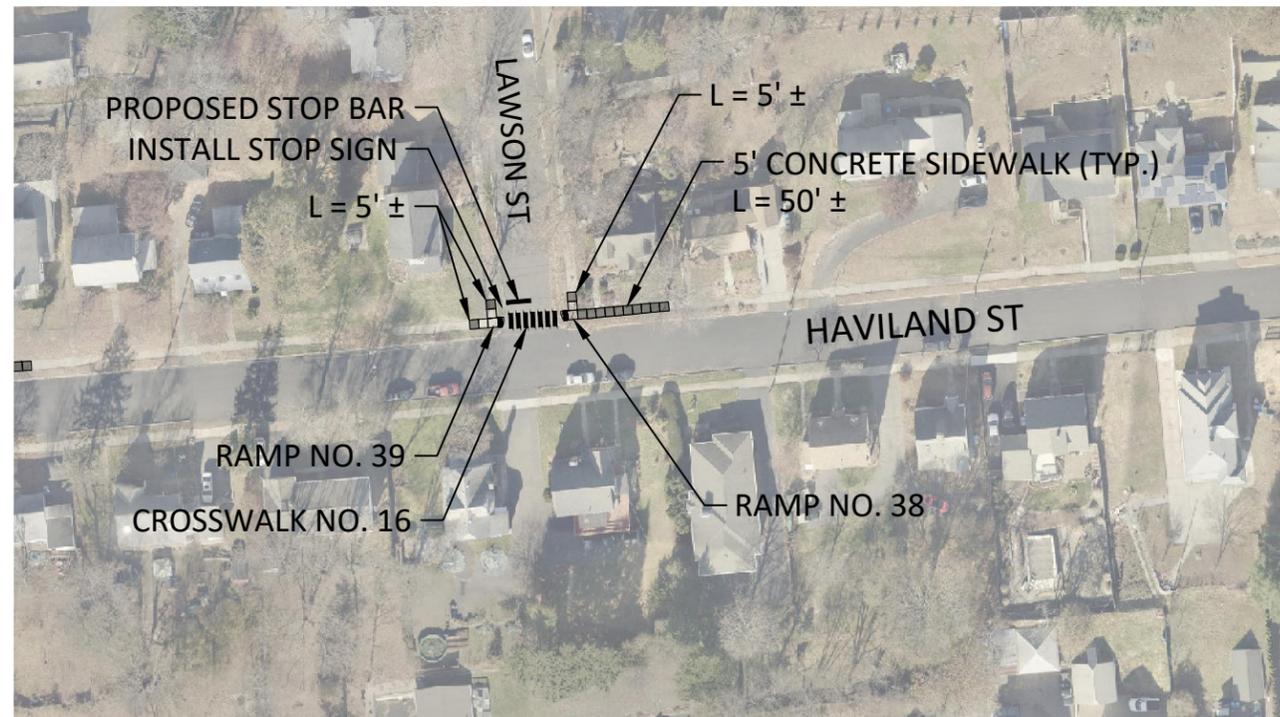
**RAMP NO. 38**

NOT TO SCALE



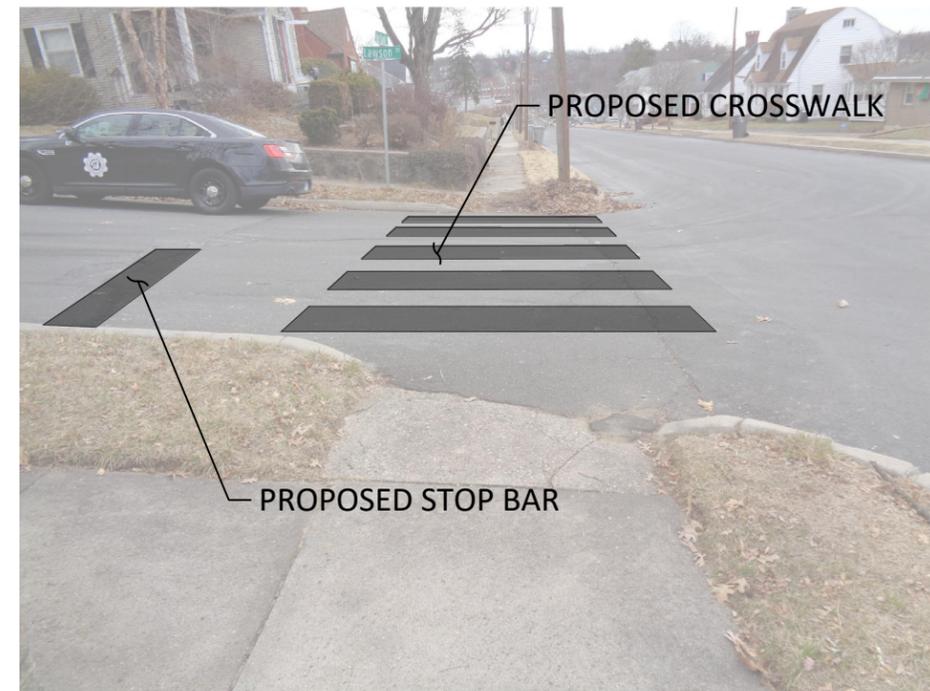
**RAMP NO. 39**

NOT TO SCALE



**PLAN VIEW**

SCALE: 1" = 100'



**CROSSWALK NO. 16**

NOT TO SCALE



City of Bristol  
Department of Public Works  
Tel: 860-584-6125  
Fax: 860-584-3838  
111 North Main Street  
Bristol, Connecticut 06010  
ci.bristol.ct.us

PREPARED BY:

COMMENTS:

DATE:

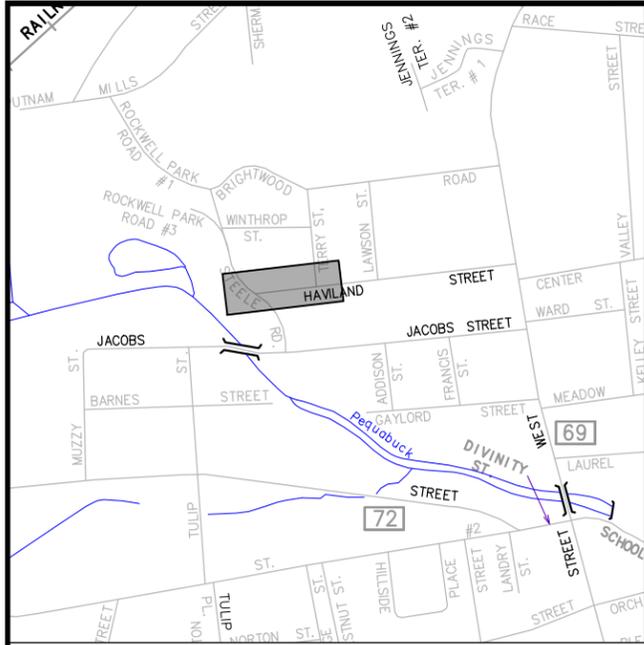
No.:

DESIGN BY: WRS  
DRAFTED BY: WRS  
CHECKED BY: ---  
SCALE: -  
DATE: JULY 3, 2023  
PROJECT No.: 0170-3513

**COMMUNITY CONNECTIVITY PROGRAM**  
Bristol, Connecticut  
HAVILAND STREET

DRAWING NO.:

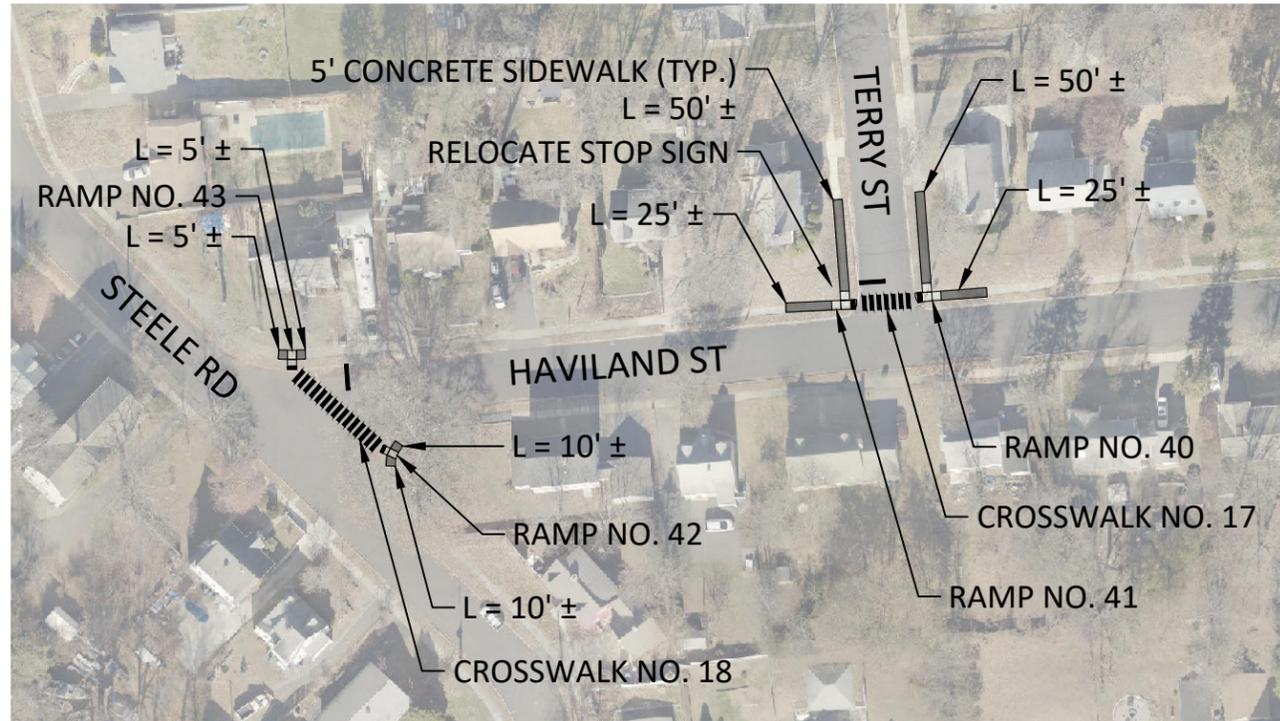
PLN-20



**LOCATION MAP**

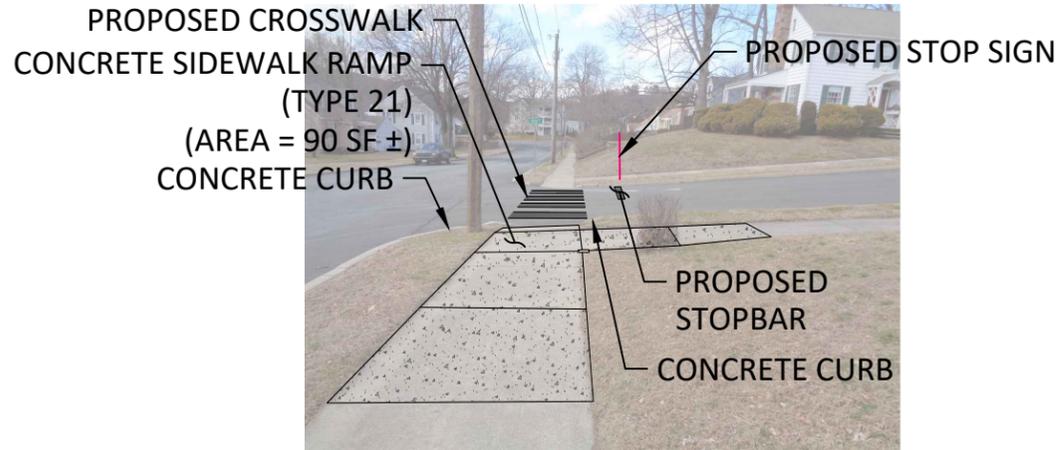
SCALE: 1" = 1000'

**NOTE:**  
SIDEWALK RAMPS ALONG HAVILAND STREET TO BE PAID FOR UNDER ITEM "CONCRETE SIDEWALK RAMP (CITY)".



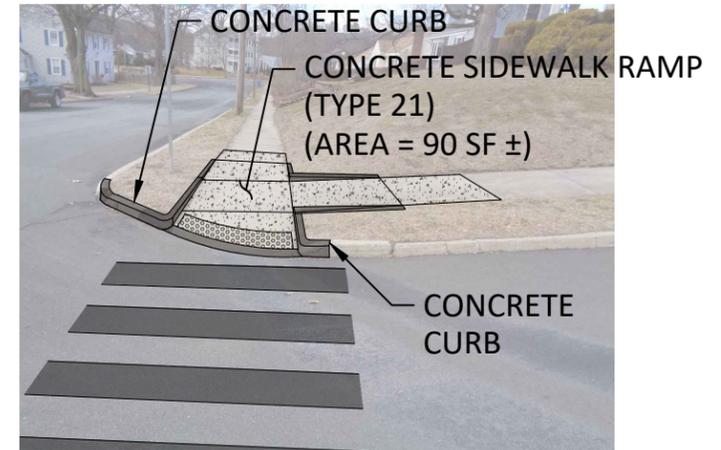
**PLAN VIEW**

SCALE: 1" = 100'



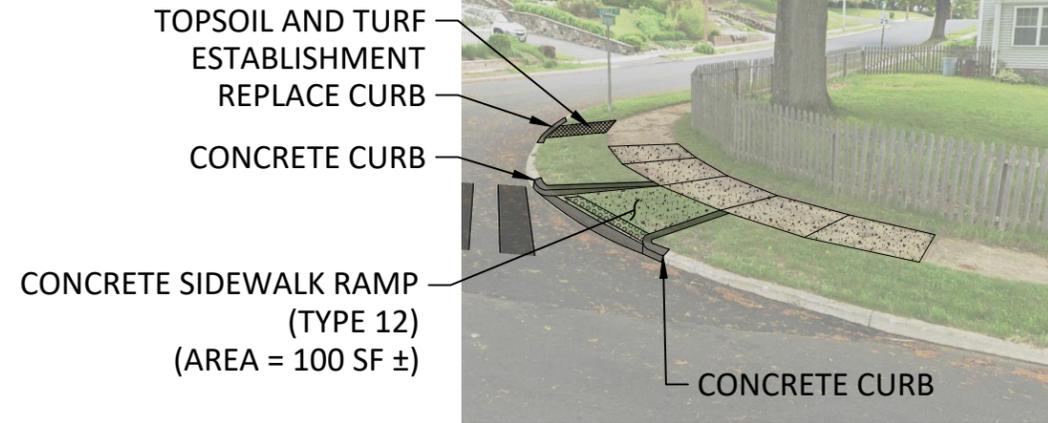
**RAMP NO. 40 & CROSSWALK NO. 17**

NOT TO SCALE



**RAMP NO. 41**

NOT TO SCALE



**RAMP NO. 42**

NOT TO SCALE



**RAMP NO. 43 & CROSSWALK NO. 18**

NOT TO SCALE



City of Bristol  
Department of Public Works  
Tel: 860-584-6125  
Fax: 860-584-3838  
ci.bristol.ct.us

PREPARED BY:

COMMENTS:

DATE:

No.:

DESIGN BY: WRS

DRAFTED BY: WRS

CHECKED BY: ---

SCALE: -

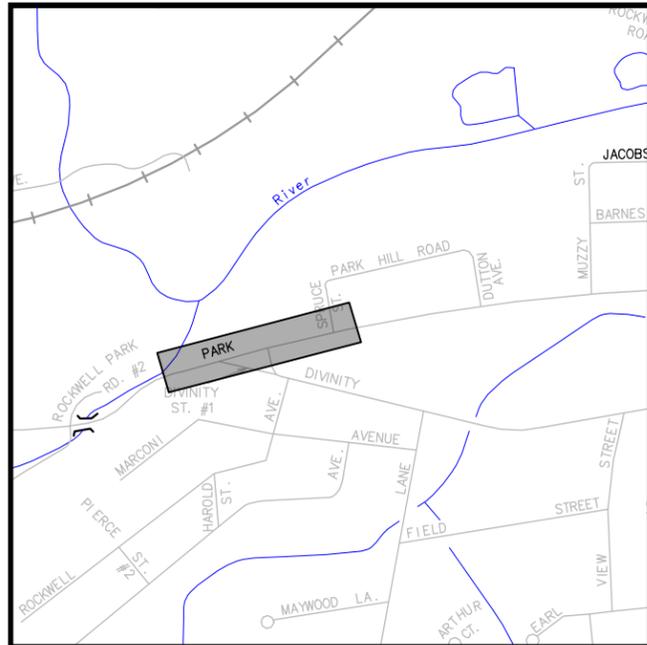
DATE: JULY 3, 2023

PROJECT No.: 0170-3513

**COMMUNITY CONNECTIVITY PROGRAM**  
Bristol, Connecticut  
HAVILAND STREET

DRAWING NO.:

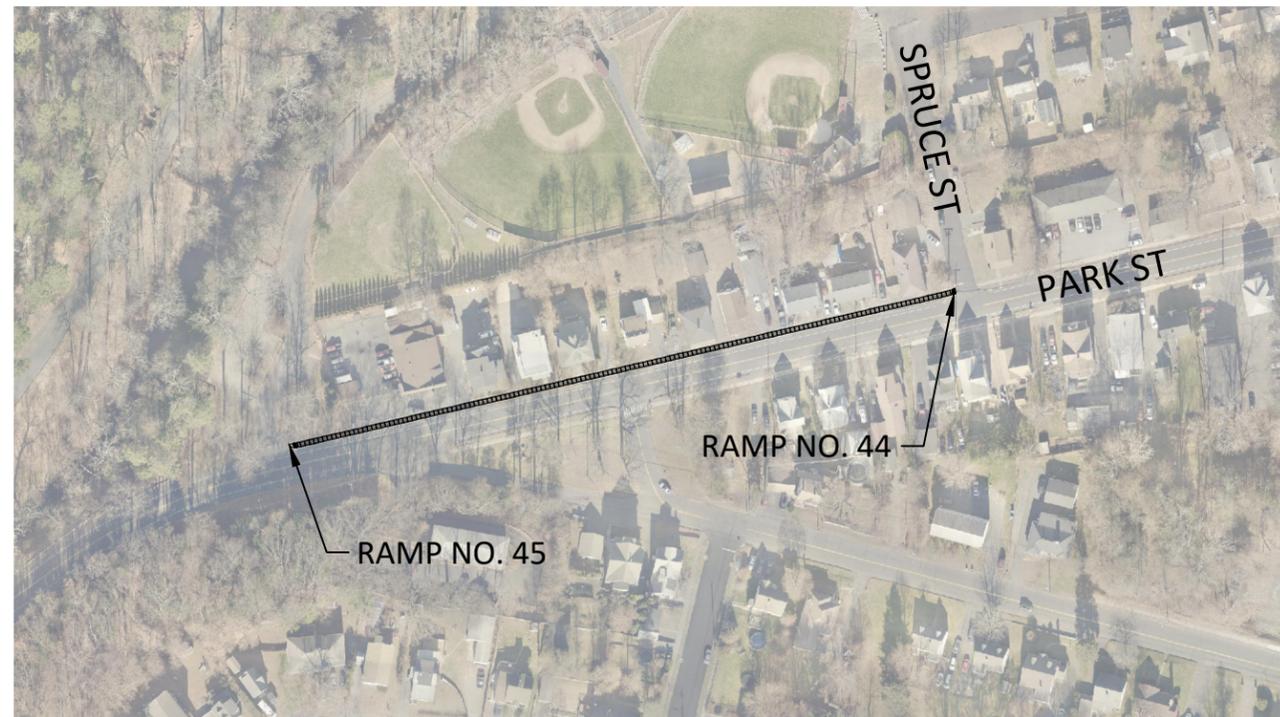
PLN-21



**LOCATION MAP**

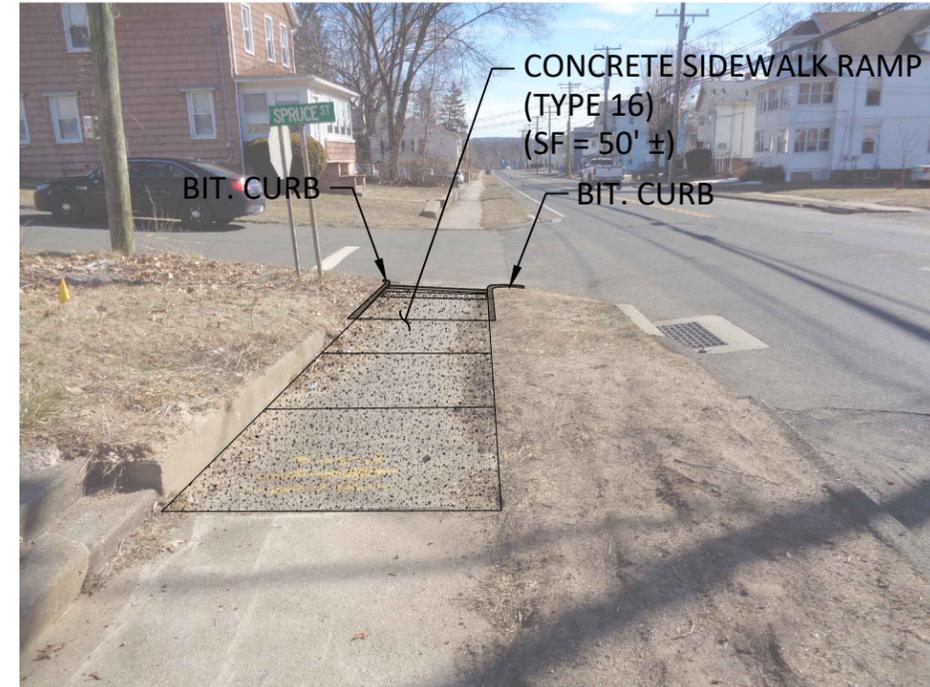
SCALE: 1" = 1000'

**NOTE:**  
SIDEWALK RAMPS ALONG PARK STREET (RTE. 72) TO BE PAID FOR UNDER ITEM "CONCRETE SIDEWALK RAMP (STATE)".



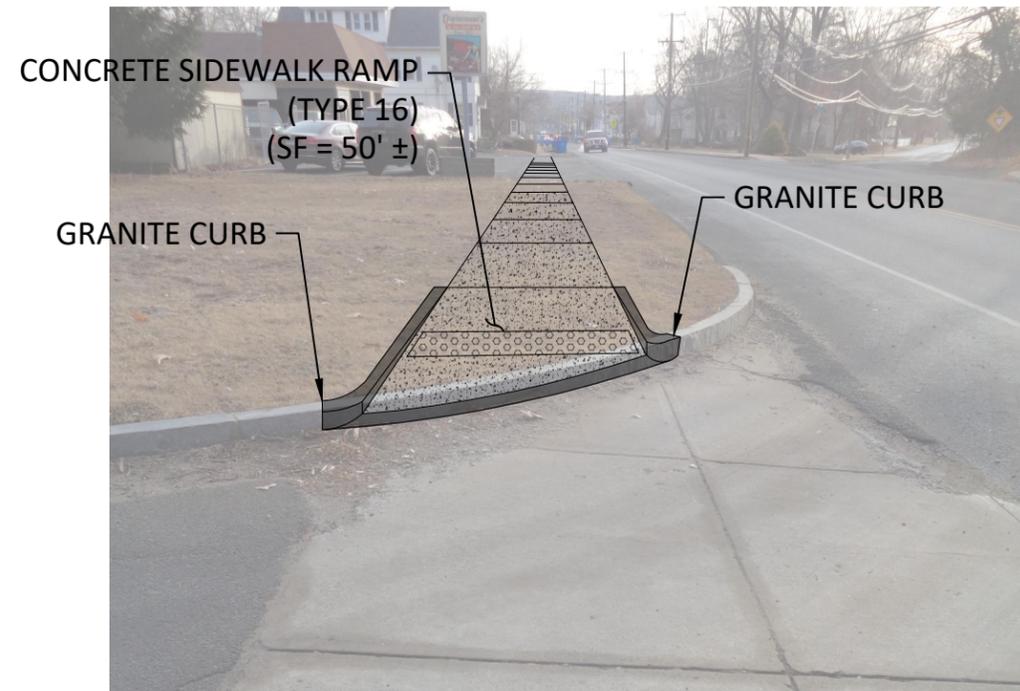
**PLAN VIEW**

SCALE: 1" = 200'



**RAMP NO. 44**

NOT TO SCALE



**RAMP NO. 45**

NOT TO SCALE



City of Bristol  
Department of Public Works  
Tel: 860-584-6125  
Fax: 860-584-3838  
ci.bristol.ct.us

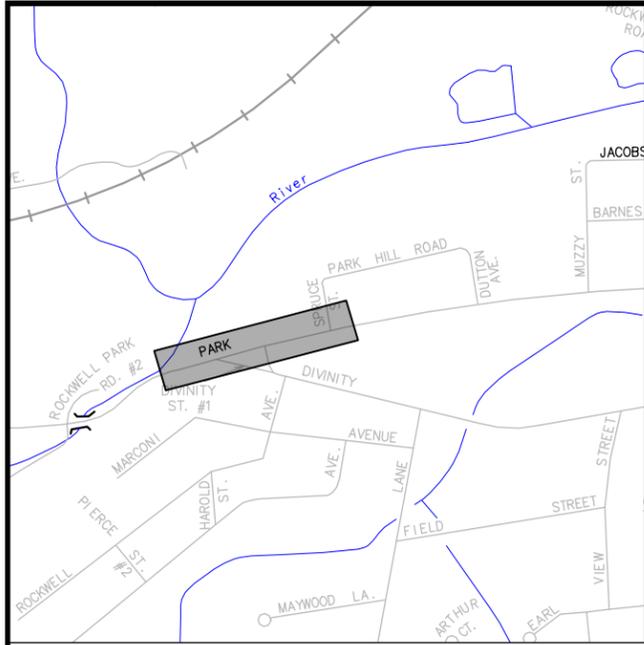
PREPARED BY:

No.	DATE	COMMENTS

DESIGN BY: WRS  
DRAFTED BY: WRS  
CHECKED BY: ---  
SCALE: -  
DATE: JULY 3, 2023  
PROJECT No.: 0170-3513

**COMMUNITY CONNECTIVITY PROGRAM**  
Bristol, Connecticut  
PARK STREET (RTE. 72)

DRAWING NO.:  
**PLN-22**

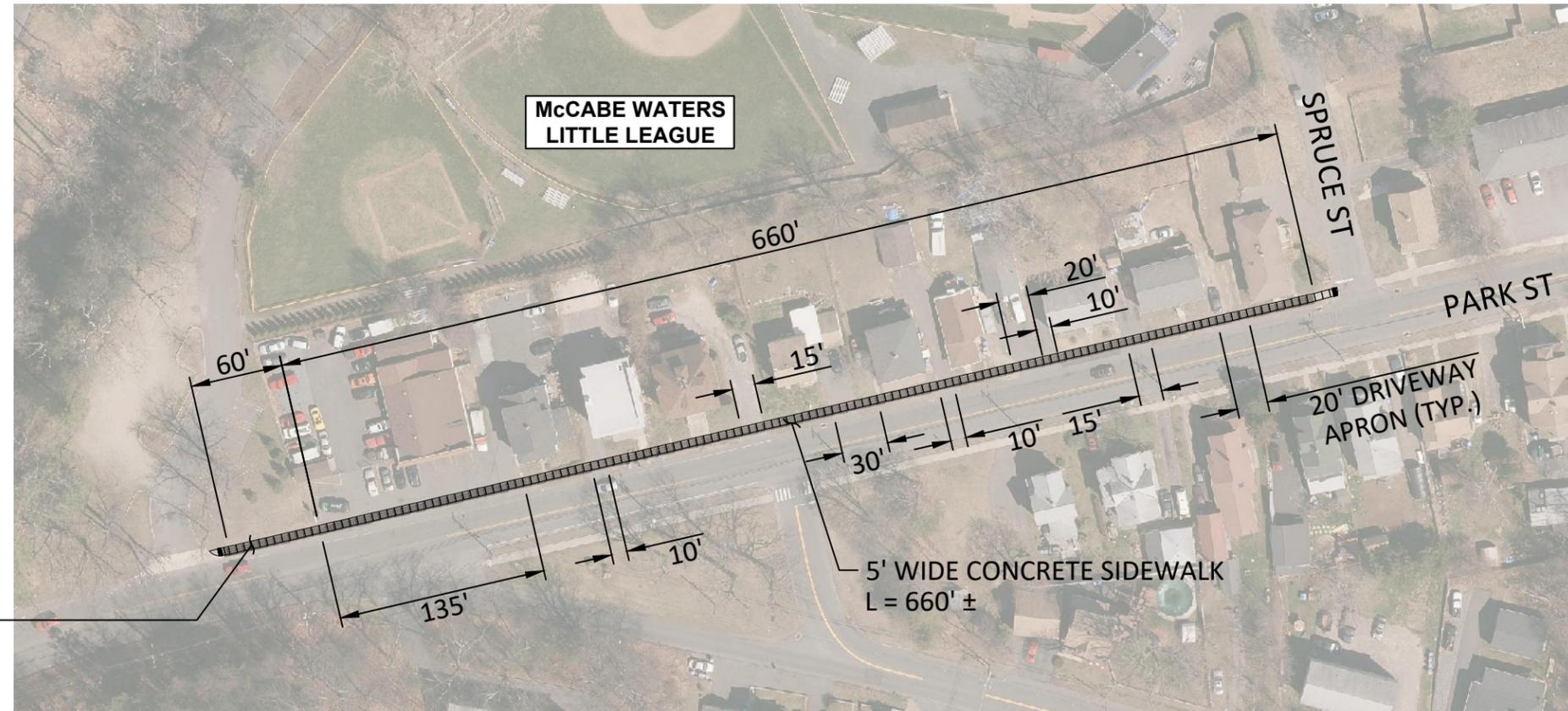


**LOCATION MAP**

SCALE: 1" = 1000'

**NOTES:**

1. REPLACE DISTURBED DRIVEWAY APRONS (TOTAL = 280LF). SEE DETAIL "EIGHT-INCH-THICK CONCRETE SIDEWALK ON EXISTING BASE - SECTION" ON SHEET SD-06.



**PLAN VIEW**

SCALE: 1" = 100'

5' WIDE CONCRETE SIDEWALK  
L = 60' ±  
(TO BE PAID FOR UNDER ITEM  
"FIVE-INCH-THICK CONCRETE SIDEWALK ON  
NEW PROCESSED GRAVEL BASE")



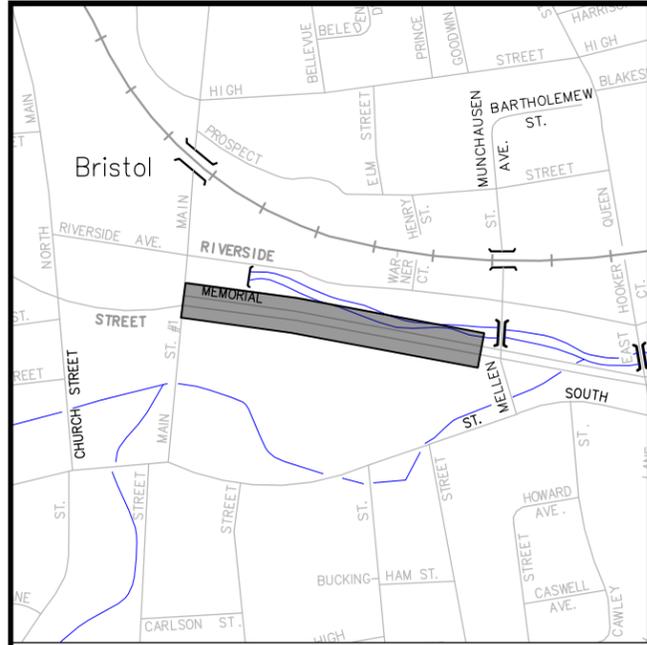
PREPARED BY:  
**City of Bristol**  
Department of Public Works  
Tel: 860-584-6125  
Fax: 860-584-3838  
ci.bristol.ct.us

No.	DATE	COMMENTS

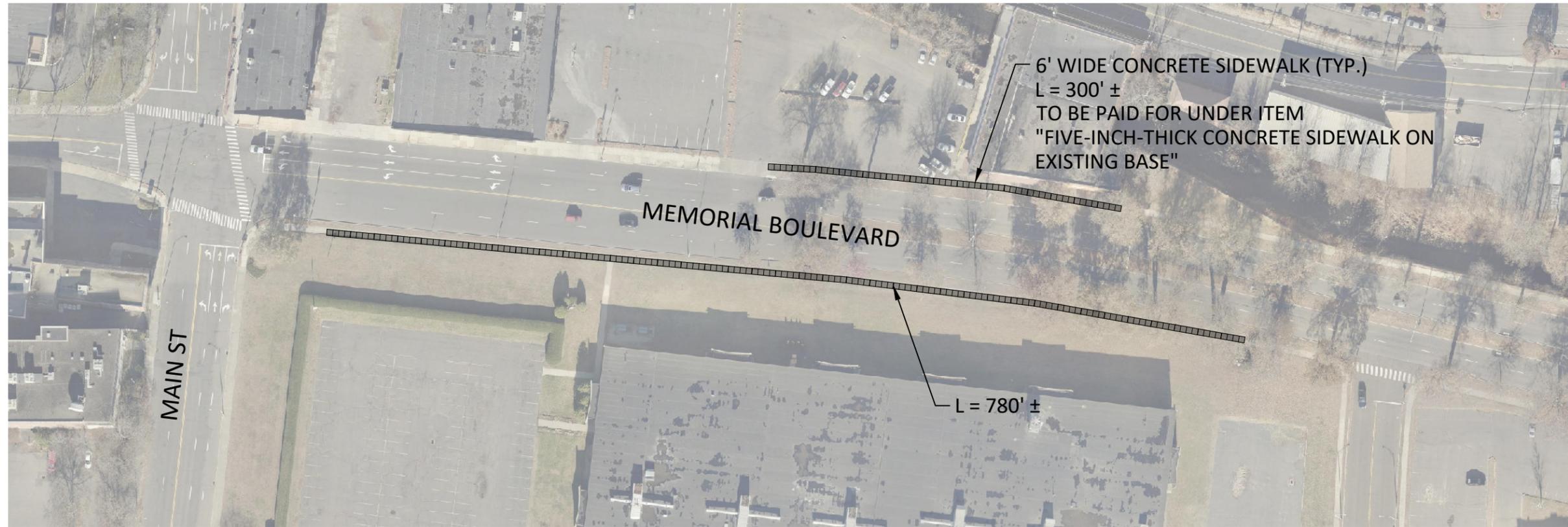
DESIGN BY: WRS  
DRAFTED BY: WRS  
CHECKED BY: ---  
SCALE: -  
DATE: JULY 3, 2023  
PROJECT No.: 0170-3513

**COMMUNITY  
CONNECTIVITY PROGRAM**  
Bristol, Connecticut  
PARK STREET (RTE. 72)

DRAWING NO.:  
**PLN-23**



**LOCATION MAP**  
SCALE: 1" = 1000'



**PLAN VIEW**  
SCALE: 1" = 100'



PREPARED BY:  
City of Bristol  
Department of Public Works  
111 North Main Street  
Bristol, Connecticut 06010  
Tel: 860-584-6125  
Fax: 860-584-3838  
ci.bristol.ct.us

No.	DATE	COMMENTS:

DESIGN BY: WRS  
DRAFTED BY: WRS  
CHECKED BY: ---  
SCALE: -  
DATE: JULY 3, 2023  
PROJECT No.: 0170-3513

**COMMUNITY  
CONNECTIVITY PROGRAM**  
Bristol, Connecticut  
**MEMORIAL BOULEVARD**

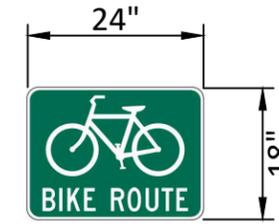
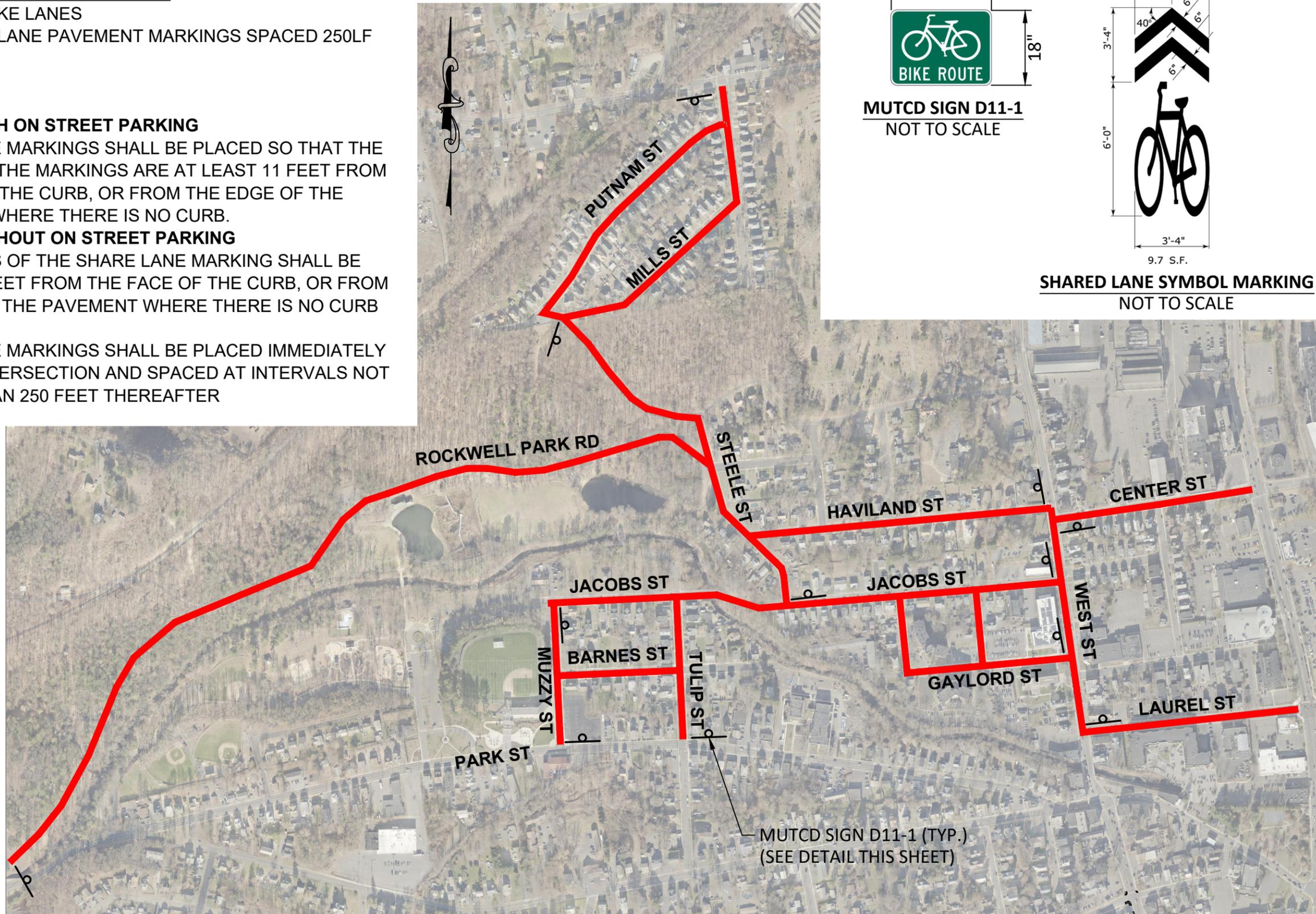
DRAWING NO.:  
**PLN-24**

# STREETS SHARED LANE

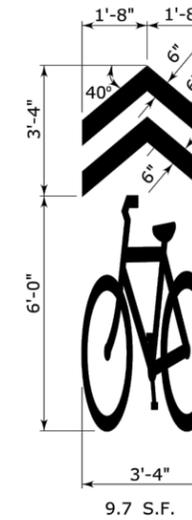
-17,500 LF OF BIKE LANES  
 -83 SHARE THE LANE PAVEMENT MARKINGS SPACED 250LF APART.

## NOTES:

- STREETS WITH ON STREET PARKING**  
 SHARED LANE MARKINGS SHALL BE PLACED SO THAT THE CENTERS OF THE MARKINGS ARE AT LEAST 11 FEET FROM THE FACE OF THE CURB, OR FROM THE EDGE OF THE PLACEMENT WHERE THERE IS NO CURB.
- STREETS WITHOUT ON STREET PARKING**  
 THE CENTERS OF THE SHARE LANE MARKING SHALL BE AT LEAST 4 FEET FROM THE FACE OF THE CURB, OR FROM THE EDGE OF THE PAVEMENT WHERE THERE IS NO CURB
- SEPARATION**  
 SHARED LANE MARKINGS SHALL BE PLACED IMMEDIATELY AFTER AN INTERSECTION AND SPACED AT INTERVALS NOT GREATER THAN 250 FEET THEREAFTER



MUTCD SIGN D11-1  
 NOT TO SCALE



SHARED LANE SYMBOL MARKING  
 NOT TO SCALE



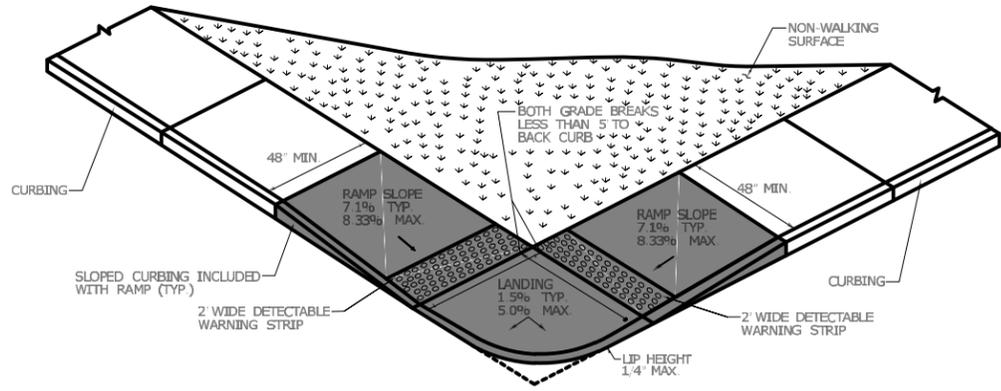
City of Bristol  
 Department of Public Works  
 111 North Main Street  
 Bristol, Connecticut 06010  
 Tel. 860-584-6125  
 Fax 860-584-3838  
 ci.bristol.ct.us

No.	DATE	COMMENTS:

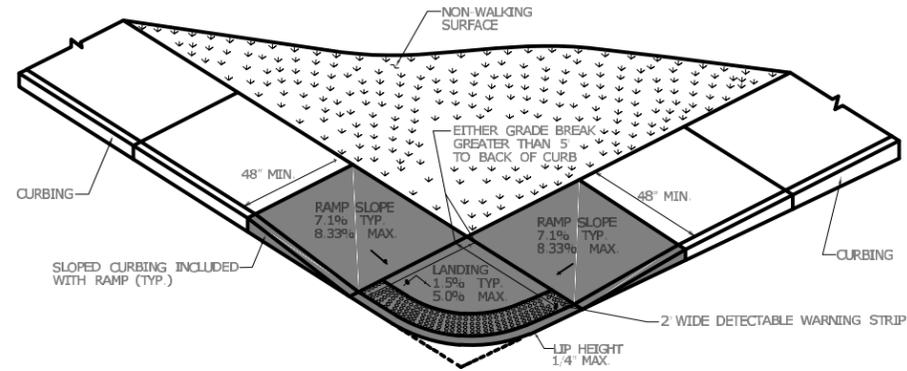
DESIGN BY: WRS  
 DRAFTED BY: WRS  
 CHECKED BY: ---  
 SCALE: 1" = 500'  
 DATE: JULY 3, 2023  
 PROJECT No.: 0170-3513

**COMMUNITY CONNECTIVITY PROGRAM**  
 Bristol, Connecticut  
**BIKE ROUTE**

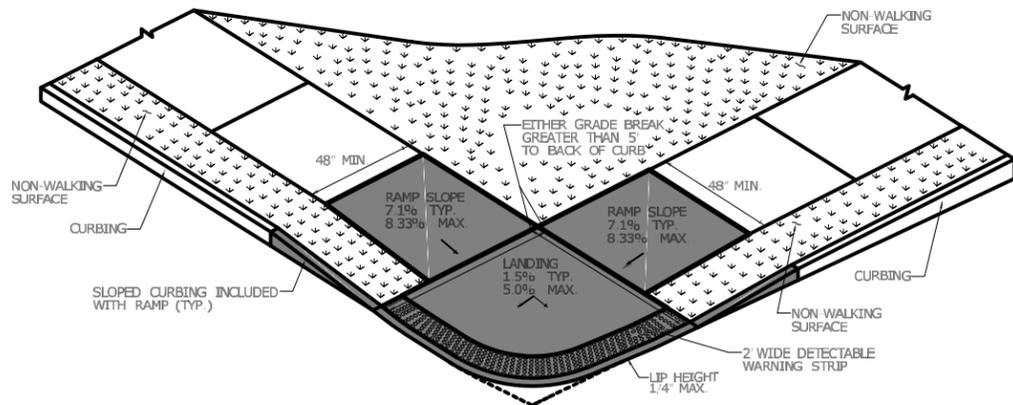
DRAWING NO.:  
**PLN-25**



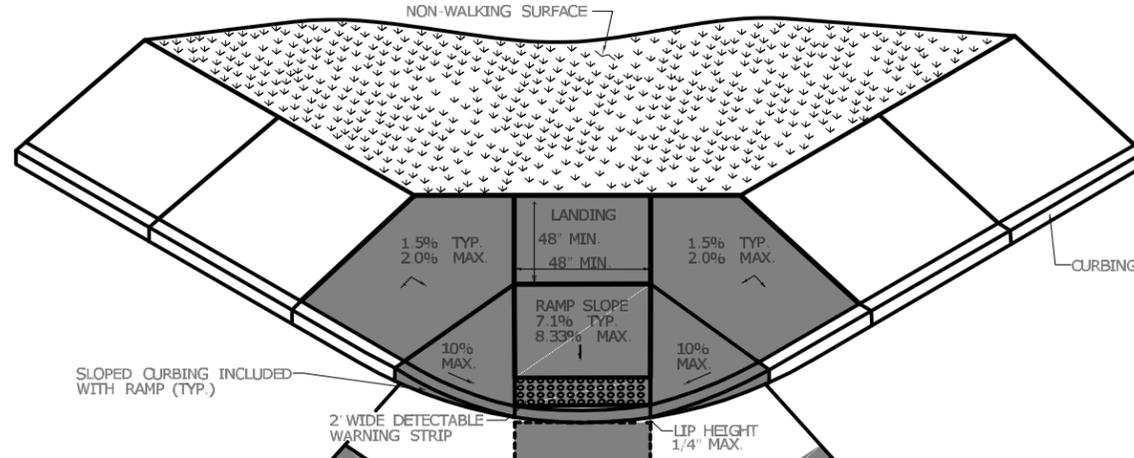
**PERPENDICULAR RAMP WITH A GRADE BREAK OF 5' OR LESS (TYPE 1)**



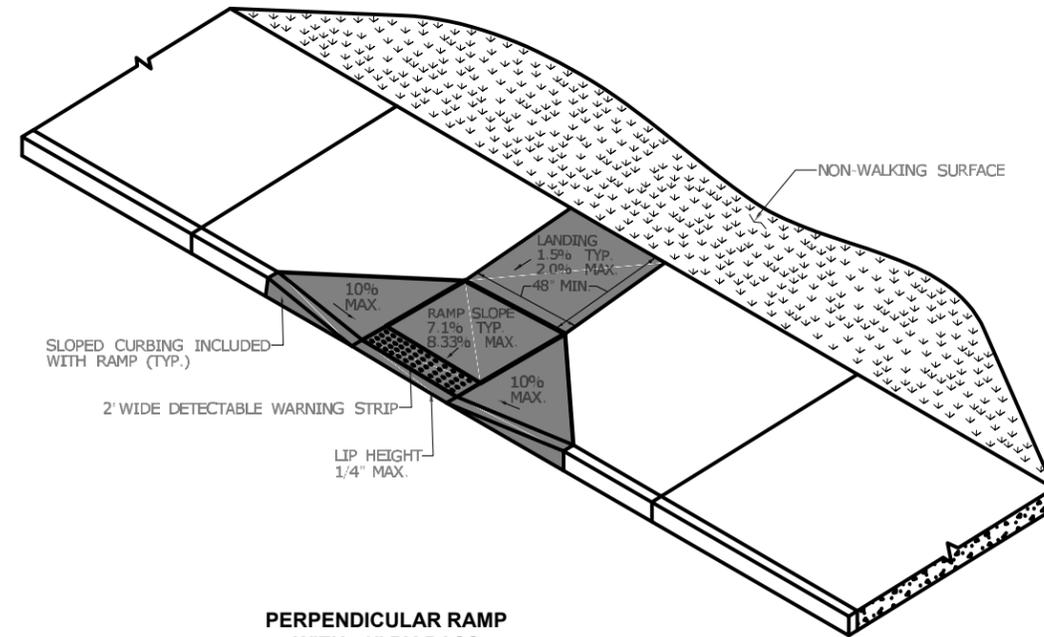
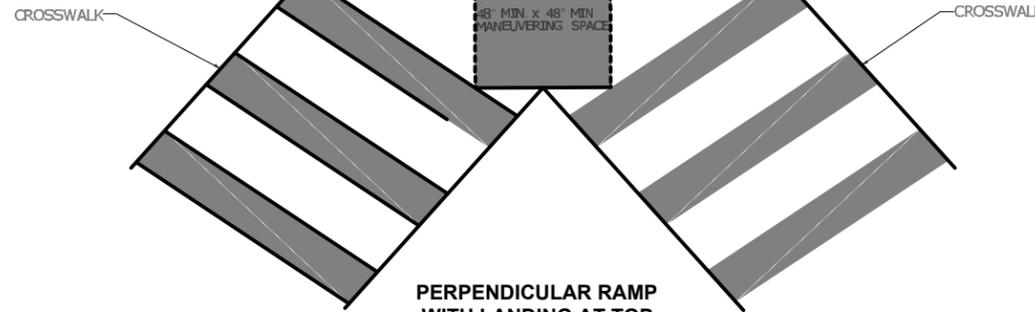
**BLENDED TRANSITION WITH A GRADE BREAK GREATER THAN 5' (TYPE 2)**



**BLENDED TRANSITION WITH A GRADE BREAK TO BACK OF CURB GREATER THAN 5' (TYPE 4)**



**PERPENDICULAR RAMP WITH LANDING AT TOP (TYPE 7)**



**PERPENDICULAR RAMP WITH 48" BY-PASS (TYPE 8)**

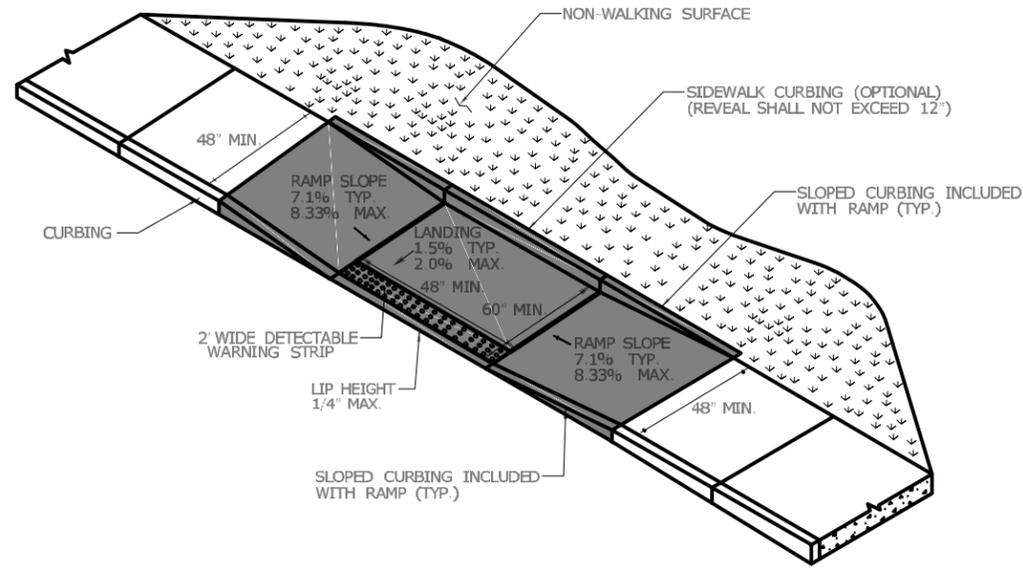
PREPARED BY:

COMMENTS:

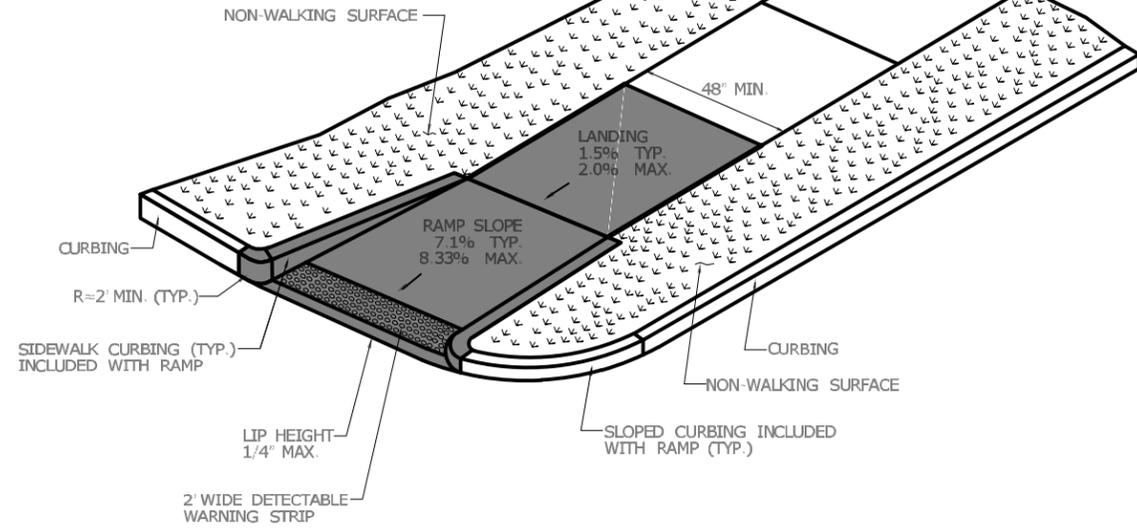
DESIGN BY: WRS  
 DRAFTED BY: WRS  
 CHECKED BY: ---  
 SCALE: -  
 DATE: JULY 3, 2023  
 PROJECT No.: 0170-3513

**COMMUNITY CONNECTIVITY PROGRAM**  
 Bristol, Connecticut  
**STANDARD DETAILS**

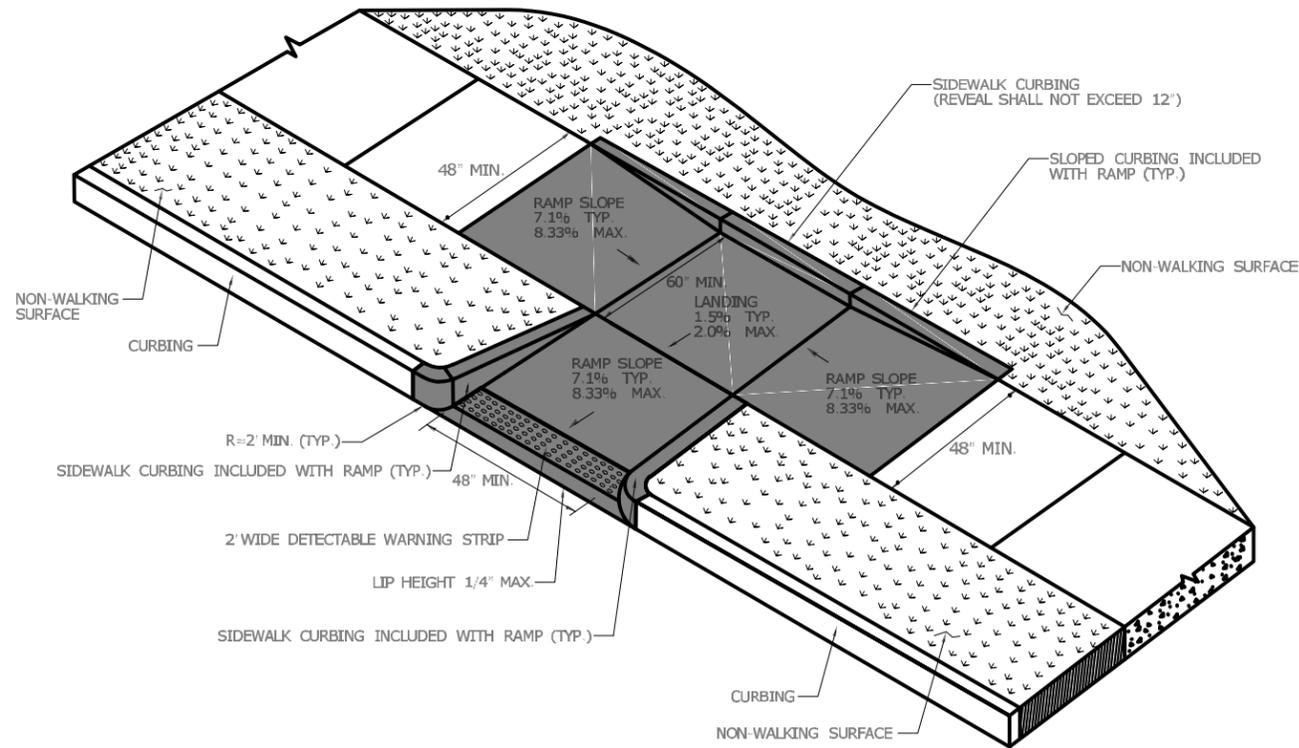
DRAWING NO.:  
**SD-01**



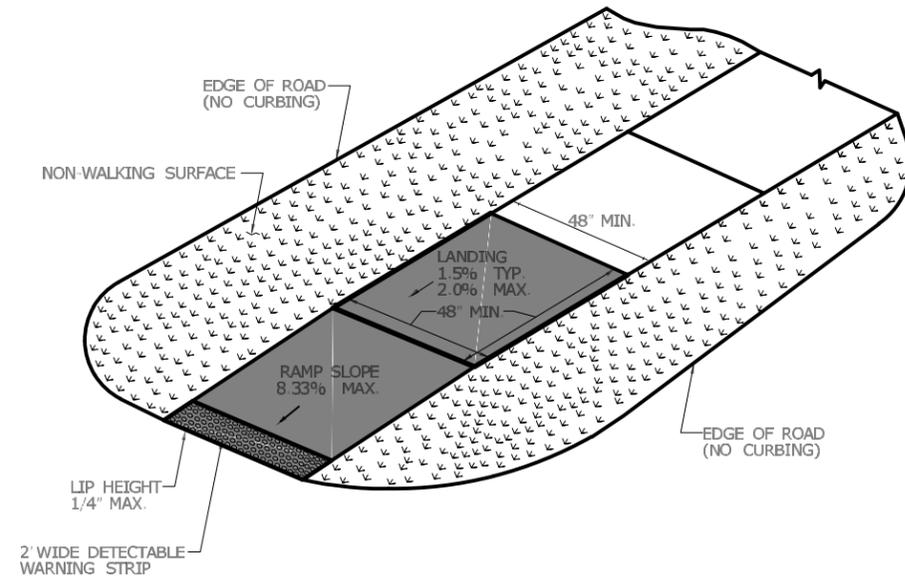
**PARALLEL RAMP WITHOUT  
NON-WALKING SURFACE  
(TYPE 9)**



**SINGLE DIRECTION - RETURN CURB  
WITH NON-WALKING SURFACE  
(TYPE 16)**



**PERPENDICULAR RAMP WITH SIDEWALK CURB  
AND NON-WALKING SURFACE  
(TYPE 12)**



**SINGLE DIRECTION - NO CURB  
WITH NON-WALKING SURFACE  
(TYPE 17)**



**City of Bristol  
Department of Public Works**  
Tel: 860-584-6125  
Fax: 860-584-3838  
111 North Main Street  
Bristol, Connecticut 06010

PREPARED BY:

COMMENTS:

DATE:

DESIGN BY: WRS

DRAFTED BY: WRS

CHECKED BY: ---

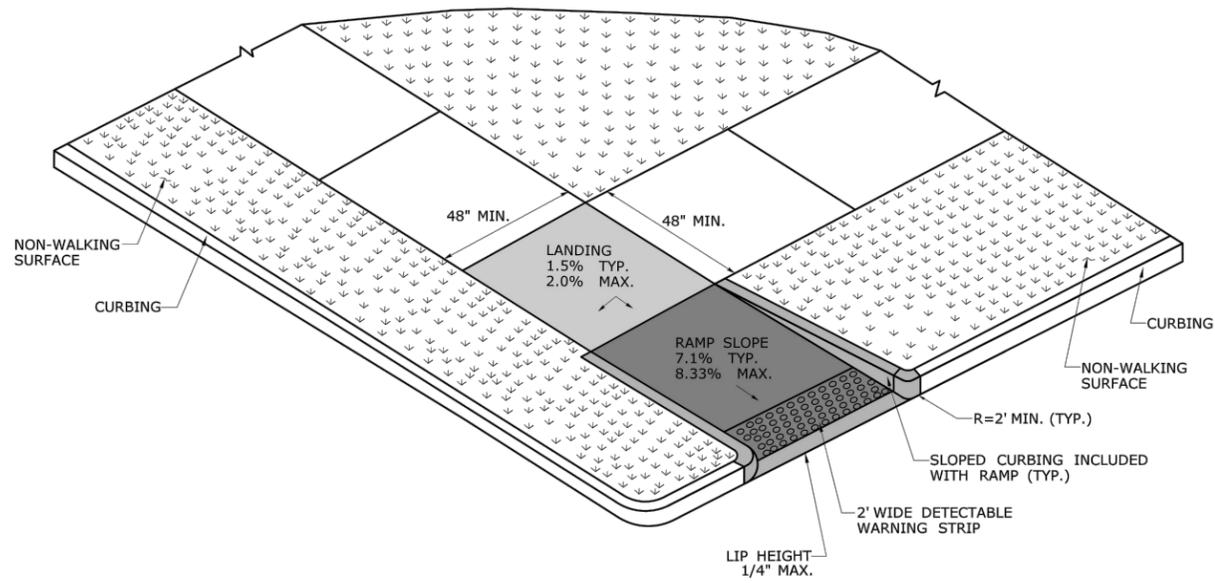
SCALE: -

DATE: JULY 3, 2023

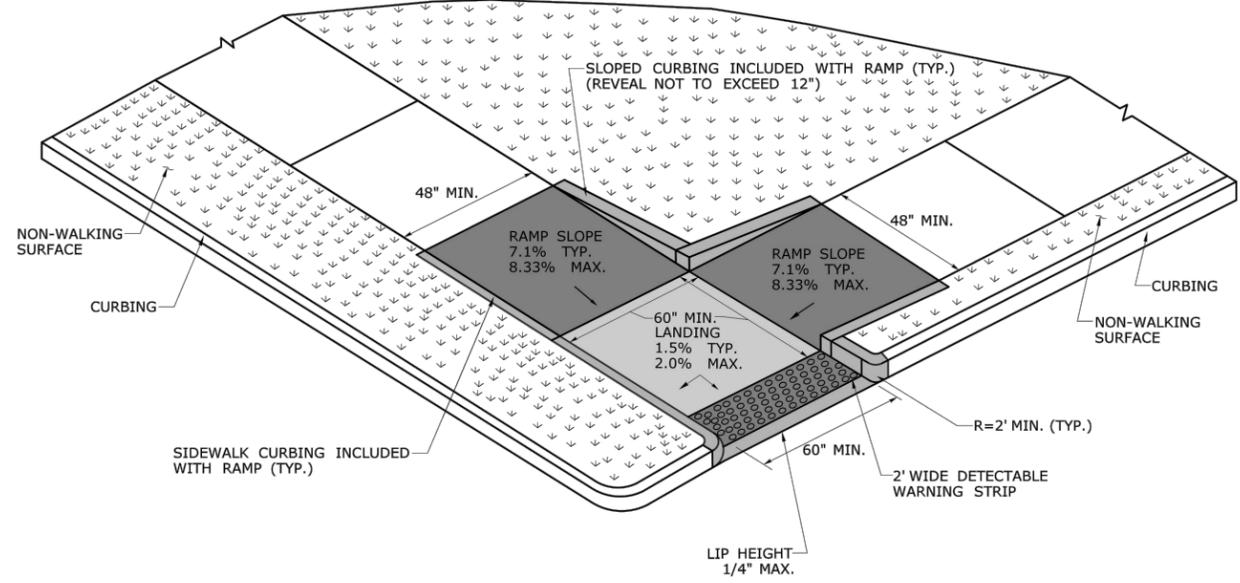
PROJECT No.: 0170-3513

DRAWING NO.:  
**SD-02**

**COMMUNITY  
CONNECTIVITY PROGRAM**  
Bristol, Connecticut  
**STANDARD DETAILS**



**RESTRICTED PEDESTRIAN CROSSING SIDEWALK RAMP  
WITH NON-WALKING SURFACE  
(TYPE 20)**



**RESTRICTED PEDESTRIAN CROSSING  
WITH LANDING AT BOTTOM AND NON-WALKING SURFACE  
(TYPE 21)**



**City of Bristol**  
Department of Public Works  
Tel: 860-584-6125  
Fax: 860-584-3838  
ci.bristol.ct.us

PREPARED BY:

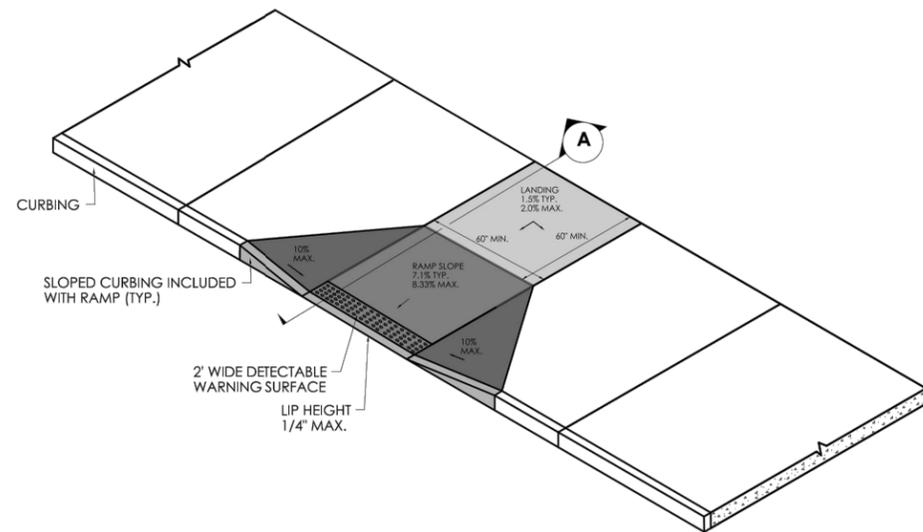
COMMENTS:

No.	DATE	COMMENTS

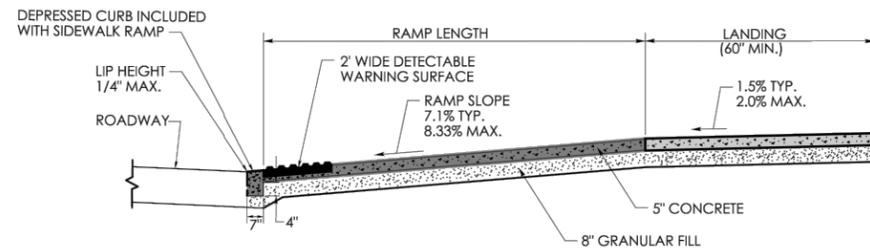
DESIGN BY: WRS  
DRAFTED BY: WRS  
CHECKED BY: ---  
SCALE: -  
DATE: JULY 3, 2023  
PROJECT No.: 0170-3513

**COMMUNITY  
CONNECTIVITY PROGRAM**  
Bristol, Connecticut  
STANDARD DETAILS

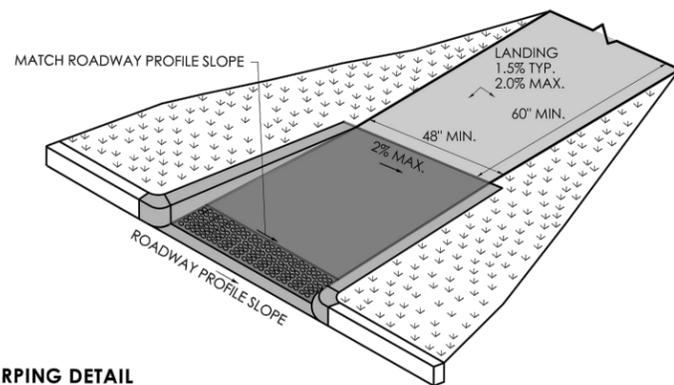
DRAWING NO.:  
**SD-03**



**PERPENDICULAR SIDEWALK RAMP AND SECTION**

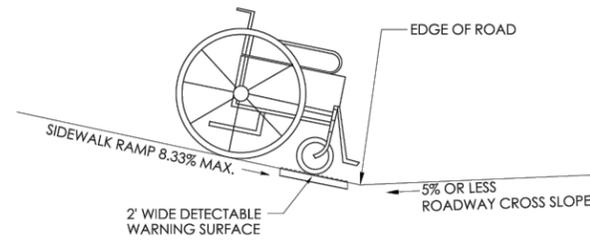


**SECTION A**

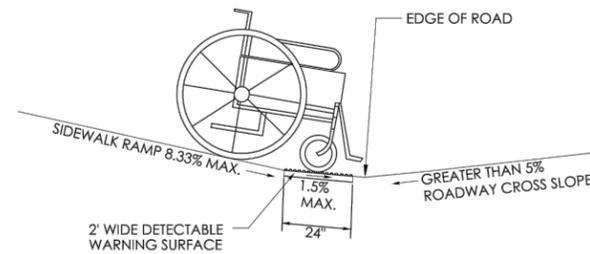


**RAMP WARPING DETAIL**

1. TRANSITION SIDEWALK RAMP TO MATCH ROADWAY PROFILE AS GRADUALLY AS POSSIBLE. DO NOT EXCEED 3% PER FOOT CROSS SLOPE RATE OF CHANGE WHEN TRANSITIONING TO ROADWAY PROFILE.
2. COMPLETE TRANSITION TO ROADWAY PROFILE BEHIND DETECTABLE WARNING SURFACE.



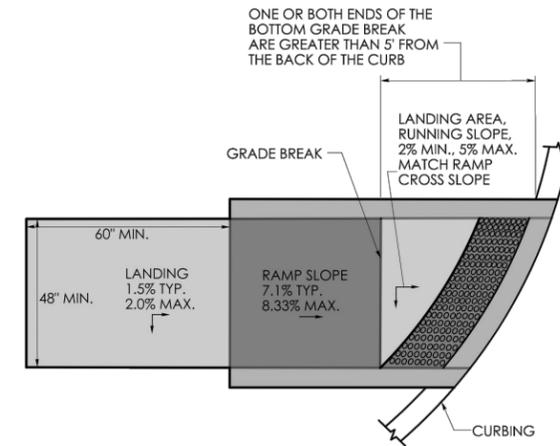
**SIDEWALK RAMP GRADE AT ROADWAY CROSS SLOPE OF 5% OR LESS GUTTER COUNTER SLOPE**



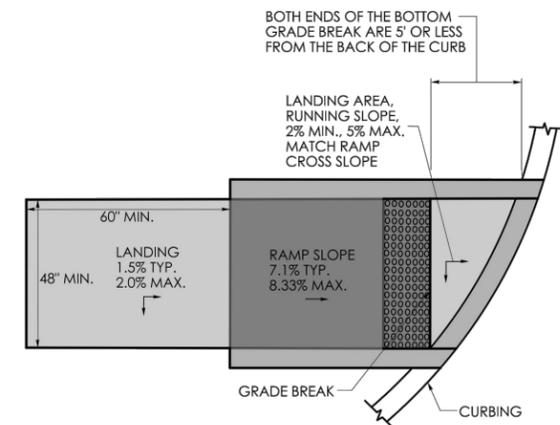
**SIDEWALK RAMP GRADE AT ROADWAY CROSS SLOPE OF GREATER THAN 5% GUTTER COUNTER SLOPE**

**GENERAL NOTES:**

1. SIDEWALK RAMPS SHALL HAVE A COARSE BROOM FINISH TRANSVERSE TO THE SLOPE OF THE RAMP.
2. VERTICAL SURFACE DISCONTINUITIES AT JOINTS SHALL NOT EXCEED 1/4 INCH.
3. REMOVAL OF EXISTING SIDEWALK FOR NEW RAMP INSTALLATIONS SHALL BE TO THE NEAREST EXPANSION OR CONTRACTION JOINT.
4. THE RUNNING SLOPE OF THE CURB RAMP SHALL BE 8.33 PERCENT MAXIMUM BUT SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FEET.



**GRADE BREAK GREATER THAN 5' DETECTABLE WARNING SURFACE LOCATION**



**GRADE BREAK OF 5' OR LESS DETECTABLE WARNING SURFACE LOCATION**



City of Bristol  
Department of Public Works  
Tel: 860-584-6125  
Fax: 860-584-3838  
ci.bristol.ct.us

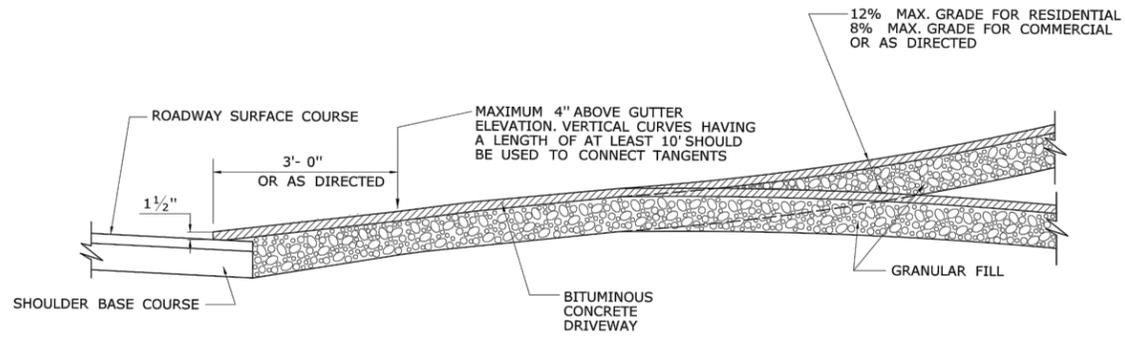
PREPARED BY:

No.	DATE	COMMENTS

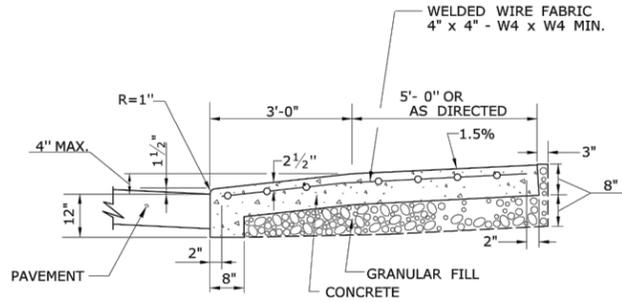
DESIGN BY: WRS  
DRAFTED BY: WRS  
CHECKED BY: ---  
SCALE: -  
DATE: JULY 3, 2023  
PROJECT No.: 0170-3513

**COMMUNITY CONNECTIVITY PROGRAM**  
Bristol, Connecticut  
**STANDARD DETAILS**

DRAWING NO.:  
**SD-04**

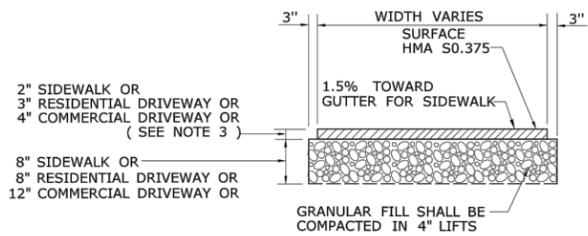


**SECTION A**

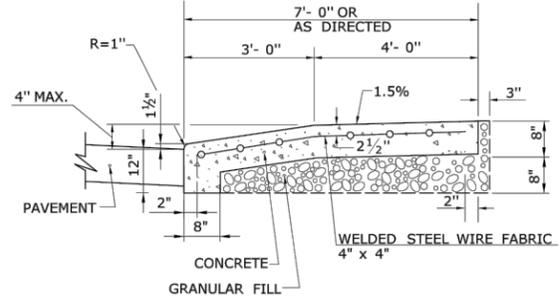


**SECTION C**

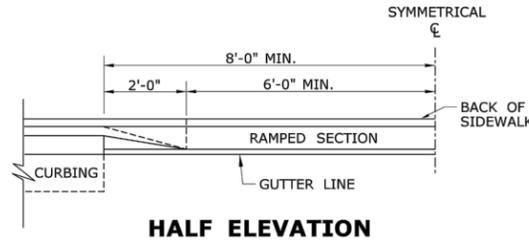
- GENERAL NOTES:**
1. DRIVEWAY ENTRANCE SHALL BE A MINIMUM OF 12' WIDE, EXCLUDING CURBING WHEN PRESENT.
  2. WELDED WIRE FABRIC MATS WITH REINFORCING AT CLOSER SPACING MAY BE USED.
  3. SURFACE HMA S0.375 TO BE PLACED IN TWO EQUAL LIFTS FOR BOTH RESIDENTIAL AND COMMERCIAL DRIVEWAYS.



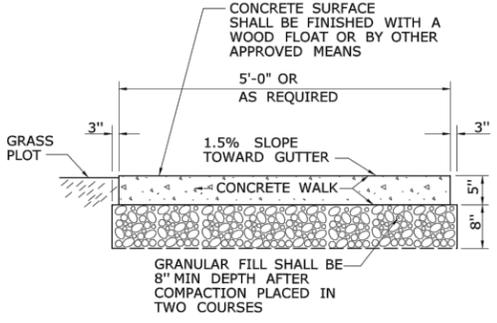
**TYPICAL SECTION BITUMINOUS CONCRETE SIDEWALK AND DRIVEWAY**



**SECTION B**

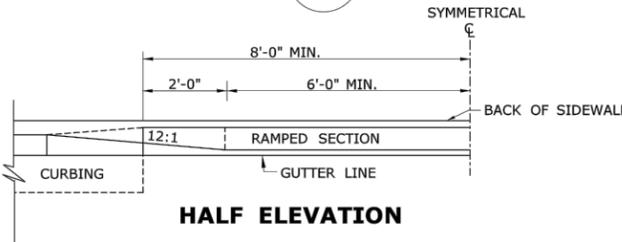


**HALF ELEVATION**

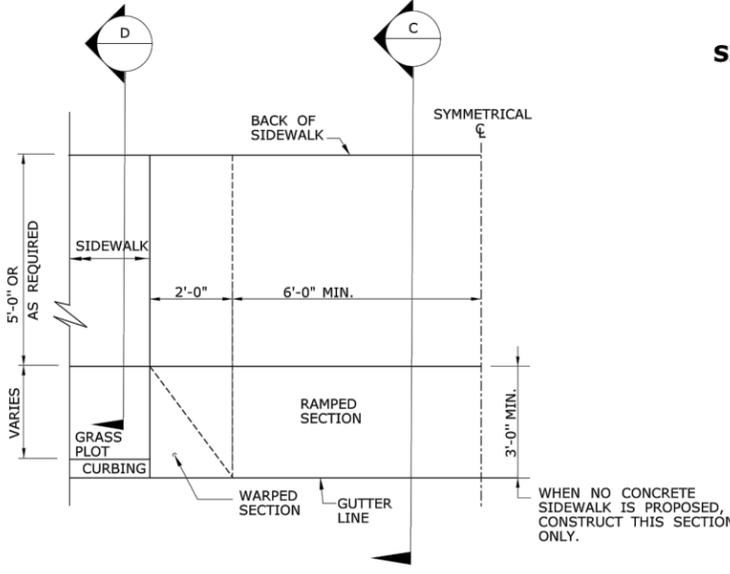


**SECTION D**

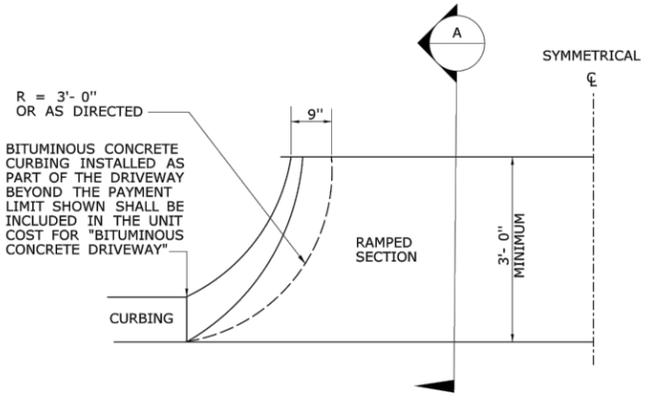
**5' WIDE CONCRETE SIDEWALK WITH GRASS PLOT**



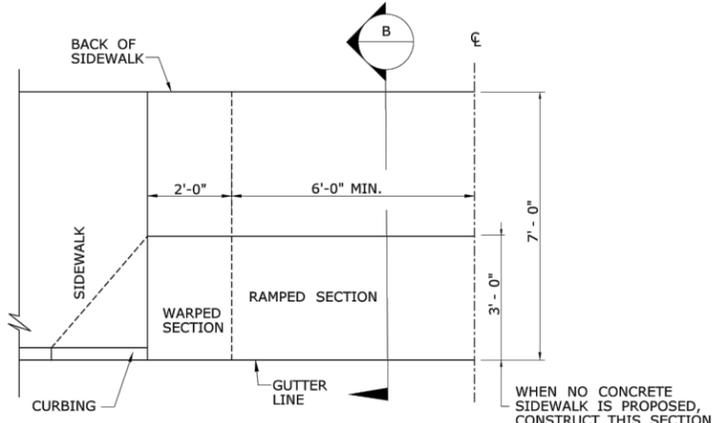
**HALF ELEVATION**



**HALF PLAN OF CONCRETE DRIVEWAY RAMP WHERE CURB IS SEPARATED FROM SIDEWALK BY GRASS PLOT**



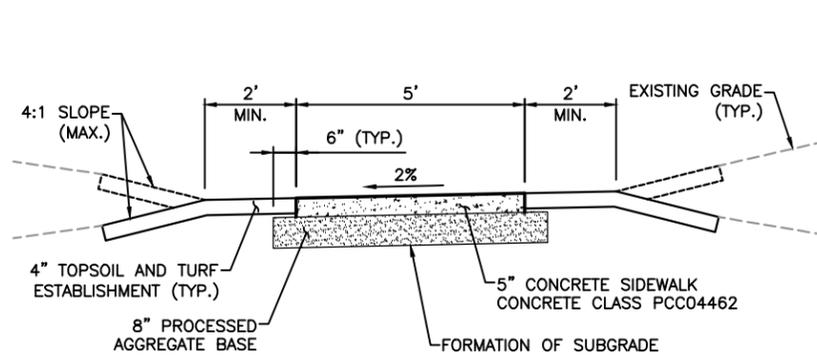
**HALF BITUMINOUS CONCRETE DRIVEWAY PLAN**



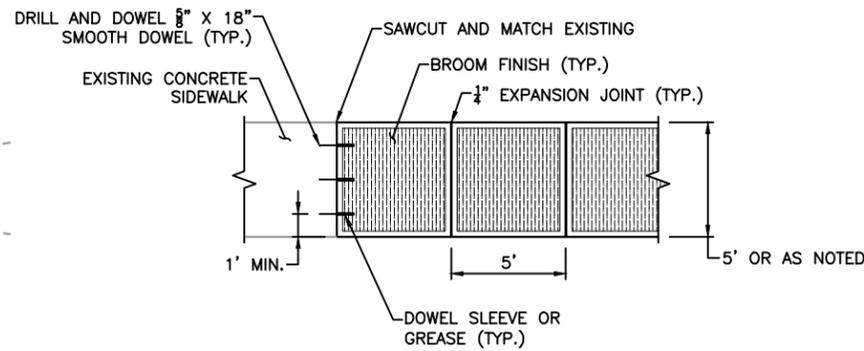
**HALF PLAN OF CONCRETE DRIVEWAY RAMP WHERE SIDEWALK ADJOINS CURBING**

DESIGN BY: WRS  
DRAFTED BY: WRS  
CHECKED BY: ---  
SCALE: -  
DATE: JULY 3, 2023  
PROJECT No.: 0170-3513

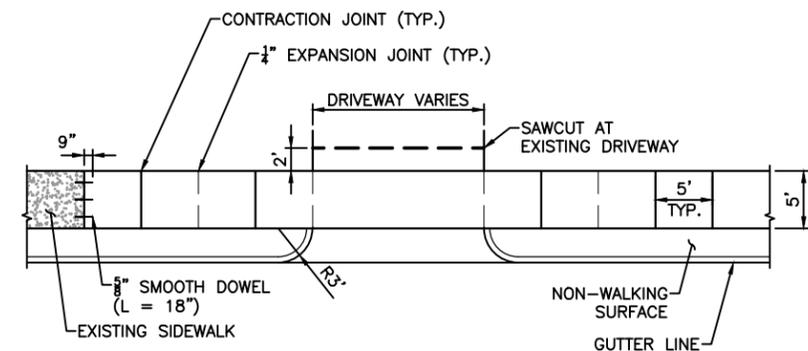
No.	DATE	COMMENTS



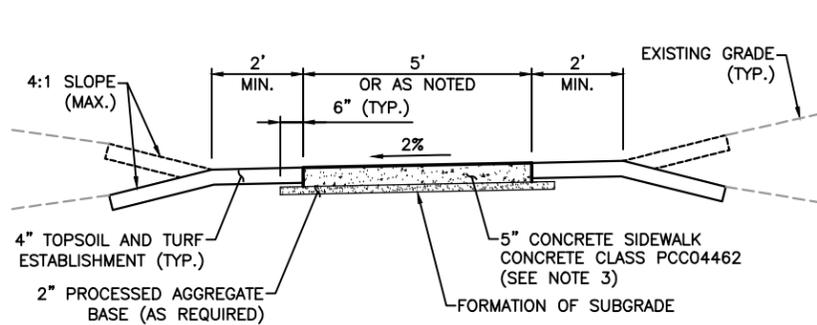
**FIVE-INCH-THICK CONCRETE SIDEWALK ON NEW PROCESSED GRAVEL BASE - SECTION**  
SCALE: 1/2" = 1'-0"



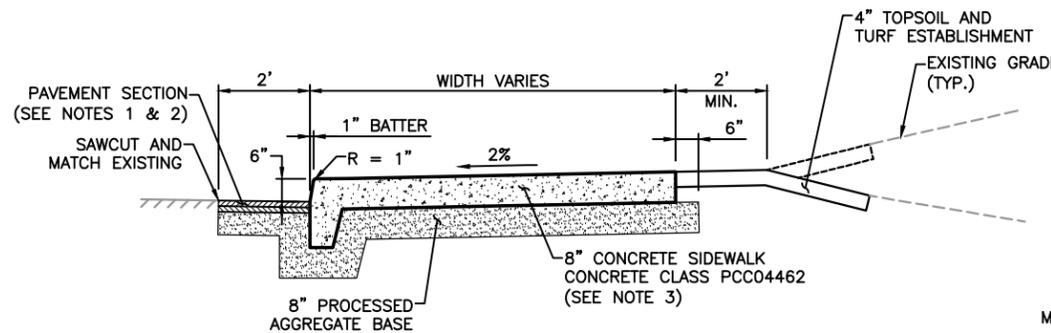
**FIVE-INCH-THICK CONCRETE SIDEWALK - PLAN**  
SCALE: 1/4" = 1'-0"



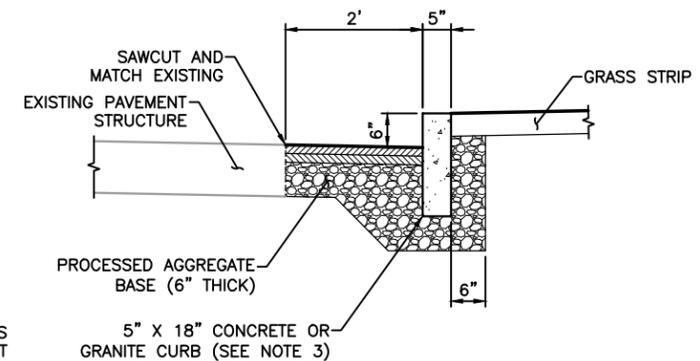
**TYPICAL SIDEWALK AT DRIVEWAY PLAN**  
SCALE: 3/8" = 1'-0"



**FIVE-INCH-THICK CONCRETE SIDEWALK EXISTING BASE - SECTION**  
SCALE: 1/2" = 1'-0"



**CONCRETE SIDEWALK WITH MONOLITHIC CURB**  
SCALE: 1/2" = 1'-0"

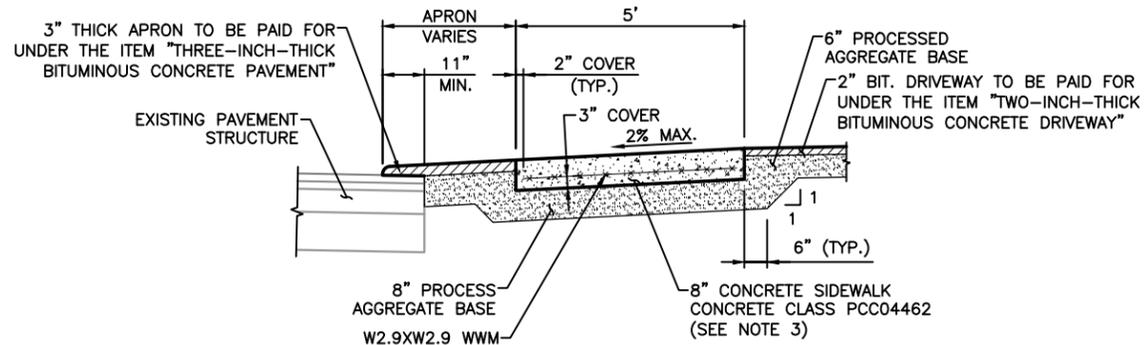


**PRECAST CONCRETE CURB OR GRANITE CURB DETAIL**  
SCALE: 3/4" = 1'-0"

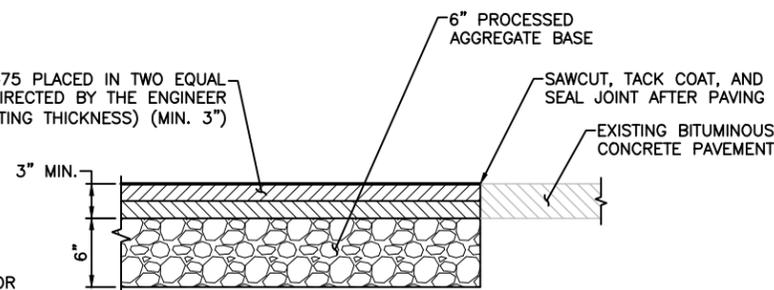
- NOTE:**
1. EDGE OF EXISTING BITUMINOUS SHALL BE PAINTED WITH HOT LIQUID ASPHALT PRIOR TO PAVING.
  2. BITUMINOUS MATERIAL SHALL BE PLACED IN 2 EQUAL 1-1/2" LIFTS COMPACTED.
  3. GRANITE CURB SHALL HAVE A SMOOTH QUARRY-SPLIT STREET FACING.

**GENERAL NOTES:**

1. FOR PAVEMENT RECONSTRUCTION ALONG CITY ROADS THE PROPOSED PAVEMENT SECTION THICKNESS SHALL MATCH EXISTING (3" MIN.).
2. FOR PAVEMENT RECONSTRUCTION ALONG STATE ROADS REFER TO CTDOT PERMANENT PAVEMENT REPAIR DETAILS ON SHEET SD-07.
3. DEMOLITION, REMOVAL AND DISPOSAL OF EXISTING SIDEWALK SHALL BE INCLUDED UNDER THE ITEM "FIVE-INCH-THICK CONCRETE SIDEWALK ON EXISTING BASE".



**EIGHT-INCH-THICK CONCRETE SIDEWALK EXISTING BASE - SECTION**  
SCALE: 1/4" = 1'-0"



**RECONSTRUCTION OF ROADWAY (CITY)**  
SCALE: 1 1/2" = 1'-0"



City of Bristol  
Department of Public Works  
Tel: 860-584-6125  
Fax: 860-584-3838  
ci.bristol.ct.us

PREPARED BY:

No.	DATE	COMMENTS

DESIGN BY: WRS  
DRAFTED BY: WRS  
CHECKED BY: ---  
SCALE: -  
DATE: JULY 3, 2023  
PROJECT No.: 0170-3513

**COMMUNITY CONNECTIVITY PROGRAM**  
Bristol, Connecticut  
**STANDARD DETAILS**

DRAWING NO.:  
**SD-06**

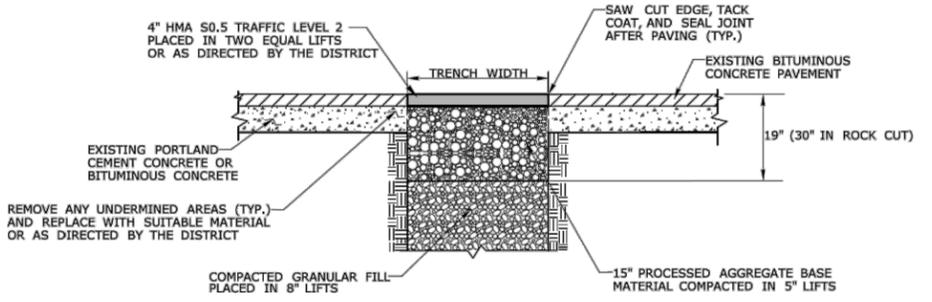
PREPARED BY:

No.	DATE	COMMENTS

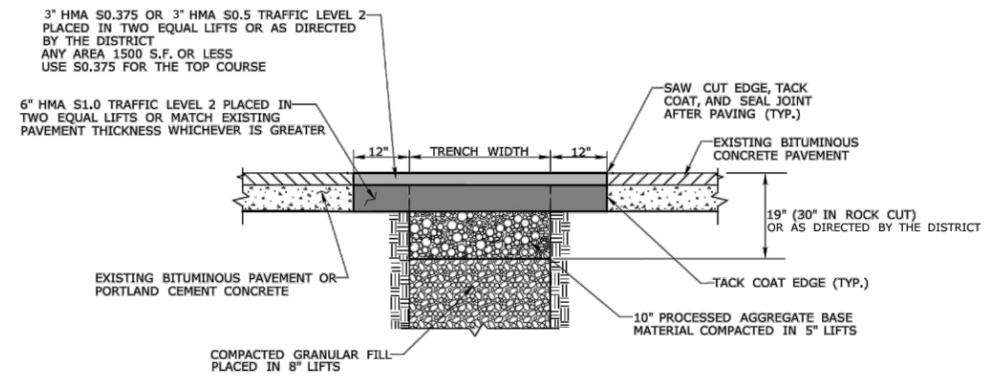
DESIGN BY: WRS  
 DRAFTED BY: WRS  
 CHECKED BY: ---  
 SCALE: -  
 DATE: JULY 3, 2023  
 PROJECT No.: 0170-3513

**COMMUNITY CONNECTIVITY PROGRAM**  
 Bristol, Connecticut  
**STANDARD DETAILS**

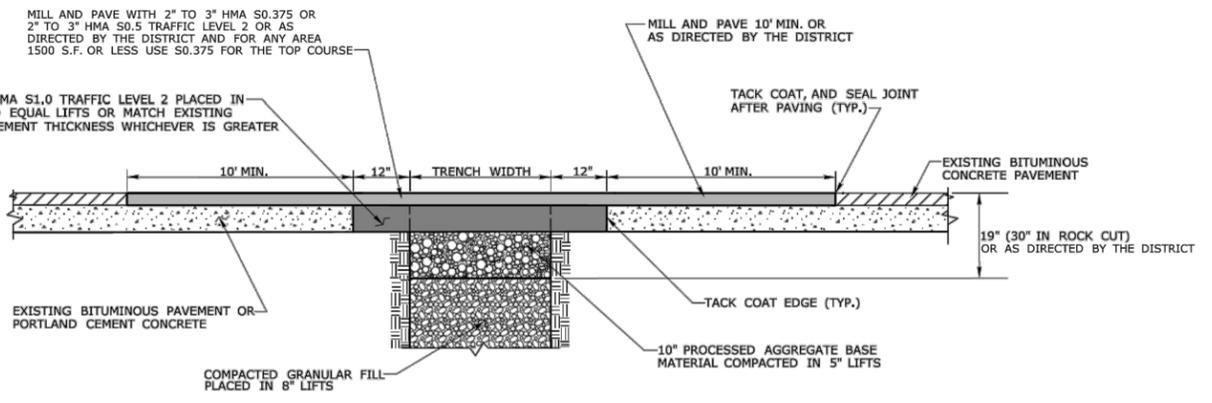
DRAWING NO.:  
**SD-07**



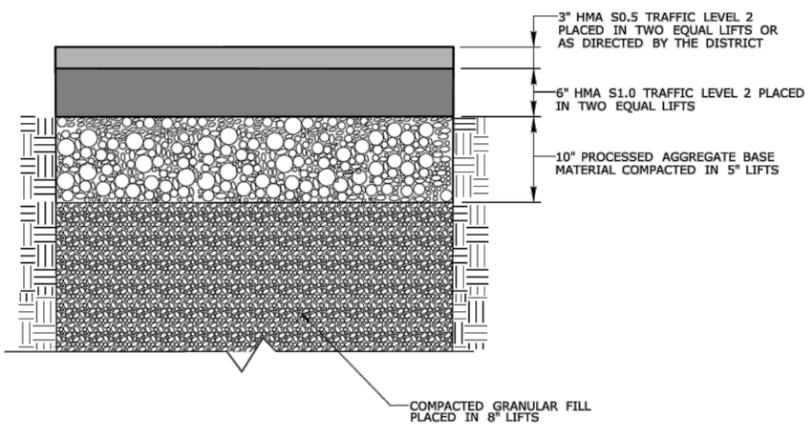
**TEMPORARY PAVEMENT REPAIR FOR TRENCH THROUGH OVERLAID PORTLAND CEMENT CONCRETE OR BITUMINOUS CONCRETE PAVEMENT**



**PERMANENT PAVEMENT REPAIR WITHOUT MILLING - THROUGH PORTLAND CEMENT CONCRETE OR BITUMINOUS CONCRETE PAVEMENT**



**PERMANENT PAVEMENT REPAIR WITH MILLING**



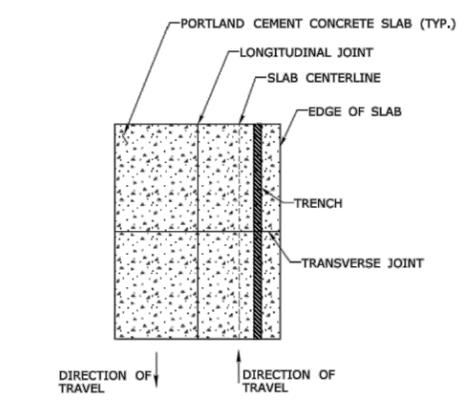
**ROADWAY PROFILE**

**GENERAL NOTES:**

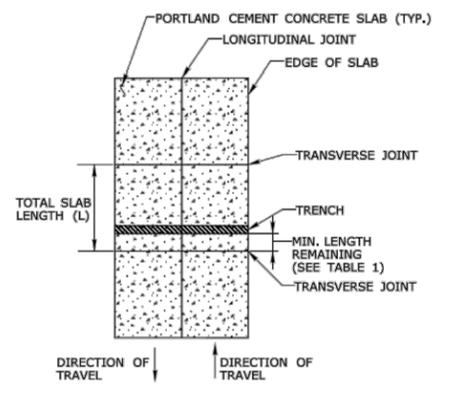
- LONGITUDINAL TRENCHING FOR JOINTED CONCRETE PAVEMENT:
  - IF THE LONGITUDINAL TRENCH FALLS BETWEEN THE SLAB CENTERLINE AND THE EDGE OF SLAB, REMOVE CONCRETE AND BITUMINOUS CONCRETE PAVEMENT FROM THE TRENCH EDGE TO THE EDGE OF ROAD. IF THE LONGITUDINAL TRENCH FALLS BETWEEN THE LONGITUDINAL JOINT AND THE SLAB CENTERLINE, REMOVE THE ENTIRE CONCRETE SLAB AND BITUMINOUS CONCRETE PAVEMENT TO THE EDGE OF ROAD. IN EITHER CASE REBUILD WITH THE FOLLOWING:
    - PLACE HMA S1.0 TRAFFIC LEVEL 2 IN TWO EQUAL 4" - 5" LIFTS TO MATCH EXISTING CONCRETE PAVEMENT THICKNESS,
    - PLACE HMA S0.5 TRAFFIC LEVEL 2 IN 2" - 3" LIFTS TO MATCH EXISTING BITUMINOUS CONCRETE PAVEMENT THICKNESS, WITH THE FINAL LIFT BEING 2"
- TRANSVERSE TRENCHING FOR JOINTED CONCRETE PAVEMENT:
 

TOTAL SLAB LENGTH (L)	MIN. LENGTH REMAINING
40' OR LONGER	1/4 L
15' - 40'	10'
15' OR SHORTER	REBUILD TO NEAREST JOINT

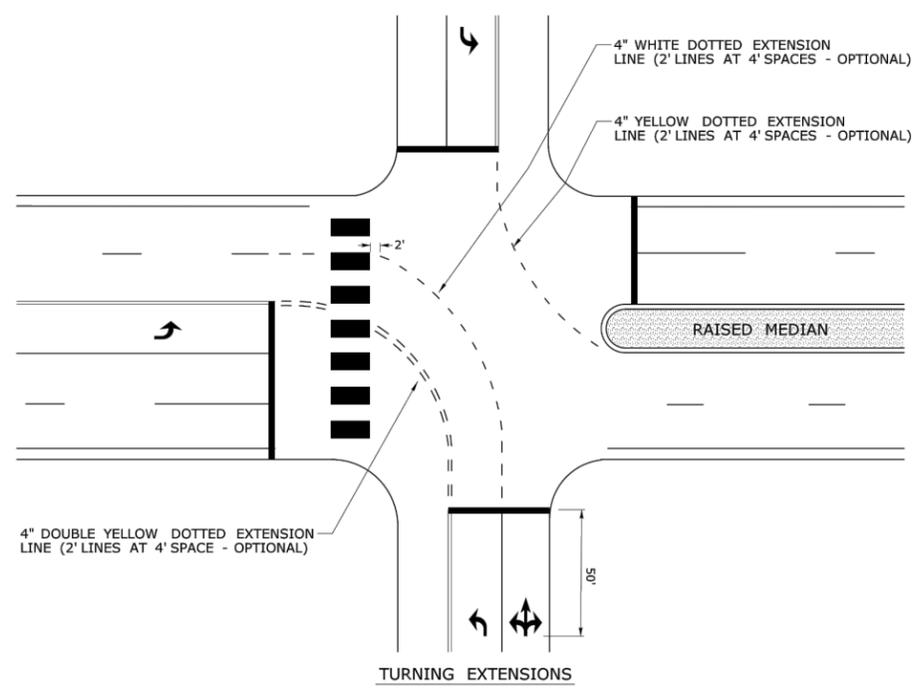
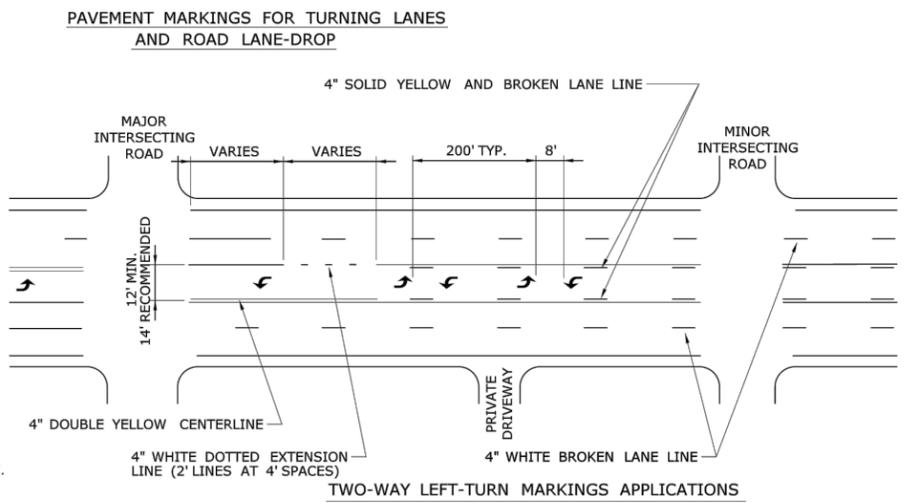
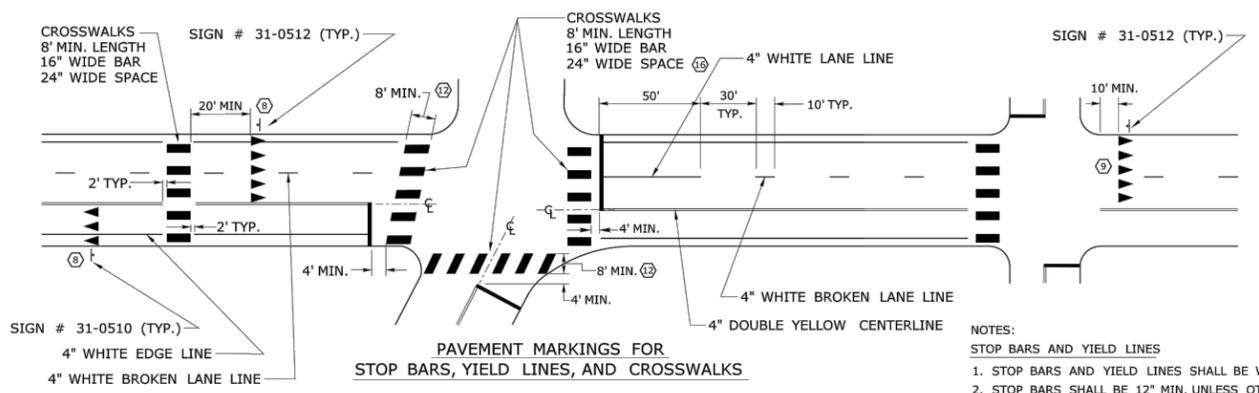
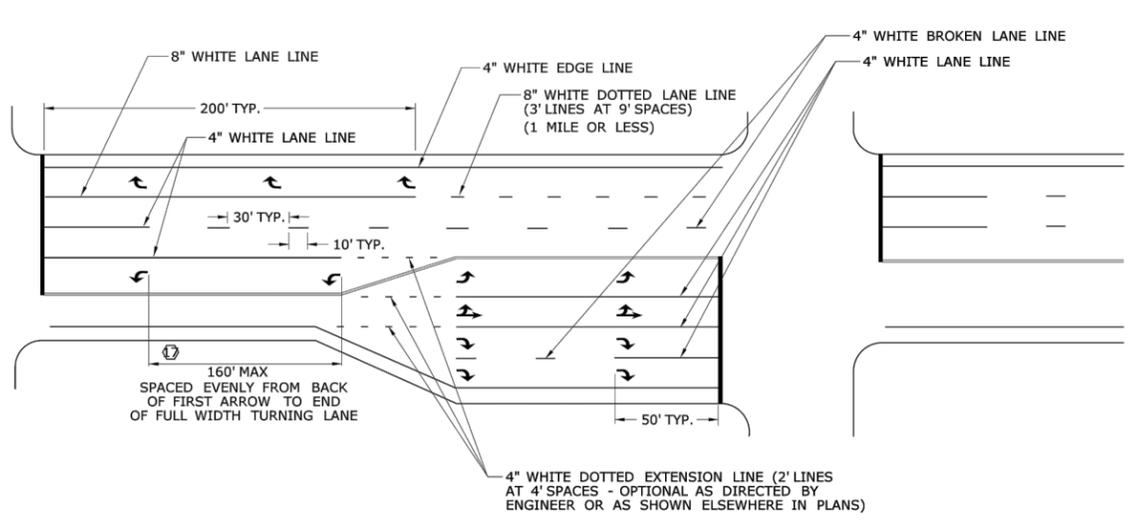
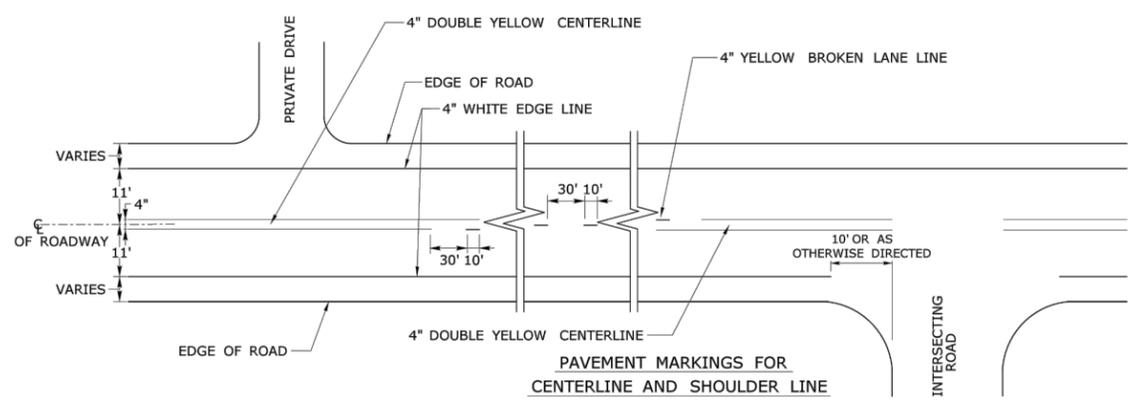
  - FOR TRANSVERSE TRENCHES, THE MINIMUM SLAB LENGTH AS SHOWN IN TABLE 1 SHALL BE LEFT IN PLACE TO THE NEAREST TRANSVERSE JOINT. IF THIS CRITERIA CANNOT BE MET, THE EXISTING SLAB AREA FROM THE TRENCH EDGE TO THE NEAREST TRANSVERSE JOINT SHALL BE REMOVED AND REBUILT AS FOLLOWS:
    - PLACE HMA S1.0 TRAFFIC LEVEL 2 IN TWO EQUAL 4" - 5" LIFTS TO MATCH EXISTING CONCRETE PAVEMENT THICKNESS,
    - PLACE HMA S0.5 TRAFFIC LEVEL 2 IN 2" - 3" LIFTS TO MATCH EXISTING BITUMINOUS CONCRETE PAVEMENT THICKNESS, WITH THE FINAL LIFT BEING 2"



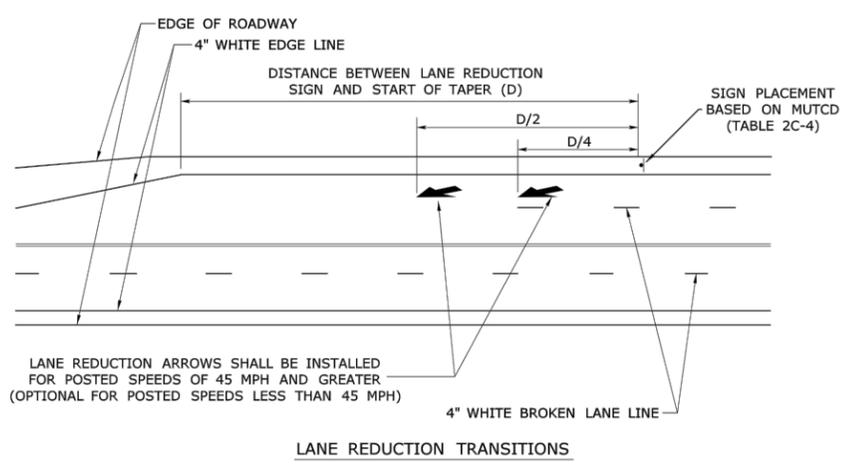
**LONGITUDINAL TRENCHING FOR JOINTED CONCRETE PAVEMENT (SEE NOTE 1)**



**TRANSVERSE TRENCHING FOR JOINTED CONCRETE PAVEMENT (SEE NOTE 2)**



- NOTES:**  
**STOP BARS AND YIELD LINES**  
 1. STOP BARS AND YIELD LINES SHALL BE WHITE.  
 2. STOP BARS SHALL BE 12" MIN. UNLESS OTHERWISE NOTED ON PLANS.  
 3. STOP BARS TO BE PLACED A MINIMUM OF 4' IN ADVANCE OF THE NEAREST EDGE OF CROSSWALK AND SHOULD BE PLACED 90° TO THE CENTERLINE OF THE ROADWAY. TO  
 4. IN THE ABSENCE OF A MARKED CROSSWALK THE STOP BAR SHOULD BE PLACED 90° THE CENTERLINE OF THE ROADWAY, AT THE DESIRED STOPPING POINT AT LEAST 5' AND NO MORE THAN 30' FROM THE NEAREST EDGE OF THE INTERSECTING ROADWAY.  
 5. THE STOP SIGN SHOULD BE PLACED IN LINE WITH THE STOP BAR. HOWEVER, IF THE STOP SIGN CANNOT BE LOCATED EXACTLY WHERE VEHICLES ARE EXPECTED TO STOP, THE STOP BAR SHOULD BE PLACED AT THE STOPPING POINT.  
 6. FOR STOP BARS AT RAMP SEE DETAILS "R", "S", "T", & "U" AND NOTES ON TRAFFIC STANDARD SHEET TR-1210 07 "PAVEMENT MARKINGS FOR DIVIDED HIGHWAYS EXIT RAMP".  
 7. FOR YIELD LINE INSTALLATIONS, ONLY FULL TRIANGLES ARE TO BE INSTALLED.  
 8. MID-BLOCK CROSSWALKS ARE CROSSWALKS LOCATED MORE THAN 50 FEET FROM A SIGNALIZED OR UNSIGNALIZED INTERSECTION. YIELD LINES ASSOCIATED WITH MID-BLOCK CROSSWALKS SHALL BE INSTALLED AND SHOULD BE LOCATED 20 TO 50 FEET IN ADVANCE OF THE NEAREST CROSSWALK LINE OR AS DIRECTED BY THE ENGINEER.  
 WHERE A YIELD LINE EXISTS ON AN APPROACH TO A CROSSWALK, THE APPROPRIATE "YIELD TO PEDESTRIANS" SIGN IS REQUIRED.  
 9. FOR CROSSWALKS AT UNSIGNALIZED INTERSECTIONS WITH MINOR STREET STOP CONTROL, YIELD LINES SHALL BE INSTALLED ON MULTI-LANE APPROACHES, BUT NOT SINGLE LANE APPROACHES.  
 10. THE YIELD SIGN SHOULD BE PLACED IN LINE WITH A YIELD LINE. HOWEVER, IF THE YIELD SIGN CANNOT BE LOCATED EXACTLY WHERE VEHICLES ARE EXPECTED TO YIELD, THE YIELD LINE SHOULD BE PLACED AT THE YIELDING POINT.
- CROSSWALKS**  
 11. CROSSWALK MARKINGS SHALL BE WHITE.  
 12. AT LOCATIONS WHERE THE CROSSWALK IS SKEWED, BARS TO BE PARALLEL TO  $\phi$  AND ENDS OF BARS TO BE PARALLEL. THE LENGTH OF THE BARS WILL VARY DEPENDING ON THE ANGLE OF SKEW.  
 13. BARS SHOULD BE NO CLOSER THAN 1' FROM EDGE OF ROAD.  
 14. ONLY FULL LENGTH BARS ARE TO BE INSTALLED.  
 15. DECORATIVE CROSSWALKS SHALL BE BANDED FROM CURB TO CURB WITH A MINIMUM 12" WIDE WHITE TRANSVERSE LINE ALONG EACH EDGE.  
 16. 24" WIDE SPACE TO BE CENTERED ON YELLOW CENTERLINE.
- PAVEMENT MARKINGS FOR TURNING LANES**  
 17. INSTALL AT LEAST TWO ARROWS PER LANE WHERE STORAGE LENGTH IS GREATER THAN 150 FEET.



PREPARED BY:  
 City of Bristol  
 Department of Public Works  
 Tel: 860-584-6125  
 Fax: 860-584-3838  
 ci.bristol.ct.us

No.	DATE	COMMENTS:

DESIGN BY: WRS  
 DRAFTED BY: WRS  
 CHECKED BY: ---  
 SCALE: -  
 DATE: JULY 3, 2023  
 PROJECT No.: 0170-3513

**COMMUNITY CONNECTIVITY PROGRAM**  
 Bristol, Connecticut  
 STANDARD DETAILS

DRAWING NO.:  
 SD-08

PREPARED BY:

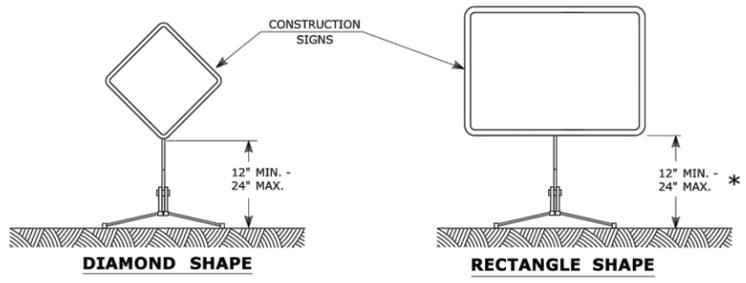
COMMENTS:

DESIGN BY: WRS  
 DRAFTED BY: WRS  
 CHECKED BY: ---  
 SCALE: -  
 DATE: JULY 3, 2023  
 PROJECT No.: 0170-3513

**COMMUNITY  
 CONNECTIVITY PROGRAM**  
 Bristol, Connecticut  
**STANDARD DETAILS**

DRAWING NO.:

SD-09

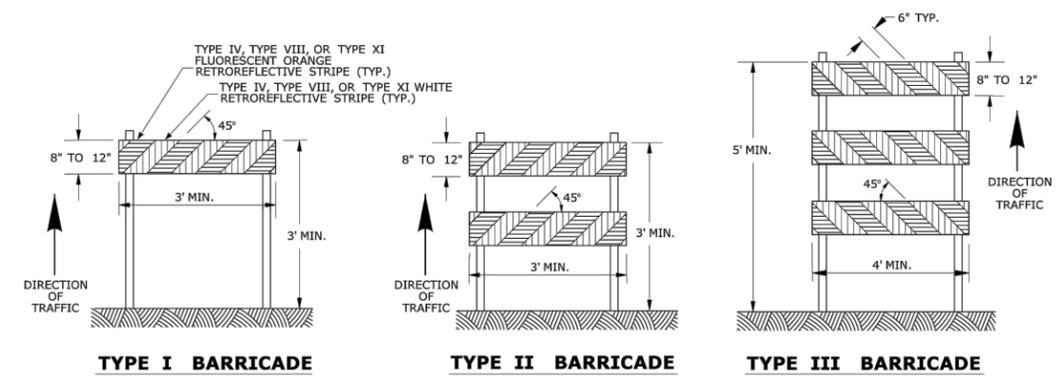


**PORTABLE CONSTRUCTION SIGNS**

NOTES FOR PORTABLE SIGN SUPPORTS:

- SIGNS AND THEIR PORTABLE SUPPORTS SHALL CONFORM TO THE REQUIREMENTS OF NCHRP REPORT 350 (TL-3) OR THE AASHTO MASH FOR CATEGORY 2 DEVICES AND THE LATEST EDITION OF THE MUTCD.
- MOUNTING HEIGHT OF SIGNS SHALL BE A MINIMUM OF 12" AND A MAXIMUM OF 24". SIGNS SHALL BE MOUNTED HIGHER AS NEEDED TO MEET FIELD CONDITIONS OR AS DIRECTED BY THE ENGINEER.
- THE ENGINEER RESERVES THE RIGHT TO REJECT ANY SUPPORT DEEMED UNSUITABLE FOR THE PURPOSE INTENDED.
- PORTABLE SIGN SUPPORTS SHALL BE STABILIZED IN A MANNER THAT WILL NOT AFFECT THEIR COMPLIANCE WITH NCHRP REPORT 350 (TL-3) OR THE AASHTO MASH FOR CATEGORY 2 DEVICES.
- PORTABLE CONSTRUCTION SIGN SUPPORTS SHOULD NOT BE USED FOR DURATION OF MORE THAN 3 DAYS EXCEPT FOR R9-8 THROUGH R9-11a SERIES, R11 SERIES, W1-6 THROUGH W1-8 SERIES, M4-10, AND E5-1. SEE STANDARD SHEET TR-1220.01 - "SIGNS FOR CONSTRUCTION AND PERMIT OPERATIONS" FOR SIGN DETAILS.

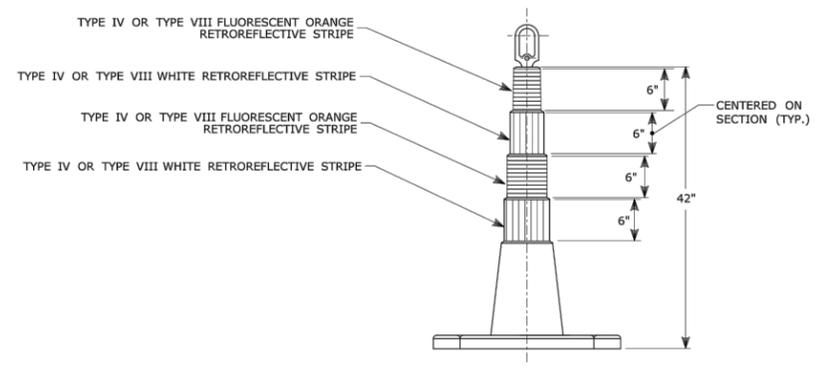
\* FOR E5-1 (EXIT SIGNS) USE MIN 48".



**CONSTRUCTION BARRICADES**

NOTES:

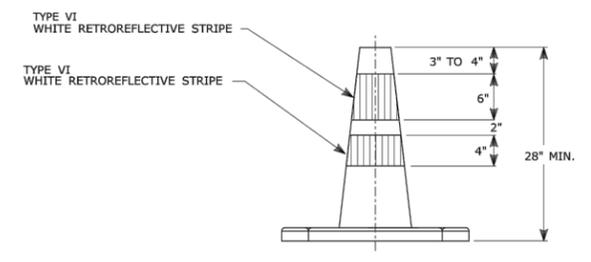
- CONSTRUCTION BARRICADES SHALL CONFORM TO THE REQUIREMENTS OF NCHRP REPORT 350 (TL-3) OR THE AASHTO MASH AND THE LATEST EDITION OF THE MUTCD.
- MARKINGS FOR BARRICADE RAILS SHALL BE ALTERNATE FLUORESCENT ORANGE AND WHITE STRIPES SLOPING DOWNWARD IN THE DIRECTION TRAFFIC IS TO PASS. 6" WIDE STRIPES SHALL BE USED.
- THE ENTIRE AREA OF FLUORESCENT ORANGE AND WHITE STRIPES SHALL BE RETROREFLECTIVE SHEETING AS REQUIRED IN THE SPECIFICATIONS. THE SIDES OF BARRICADES FACING TRAFFIC SHALL HAVE RETROREFLECTIVE RAIL FACES.
- THE ENGINEER RESERVES THE RIGHT TO REJECT ANY BARRICADE DEEMED UNSUITABLE FOR THE PURPOSE INTENDED.
- CORNERS OF BARRICADE RAILS SHALL BE ROUNDED.
- SIGNS MAY ONLY BE INSTALLED ON TYPE III BARRICADES AND SHALL BE PLACED SO AS TO COVER NO MORE THAN ONE BARRICADE RAIL.



**42" TRAFFIC CONE**

NOTES:

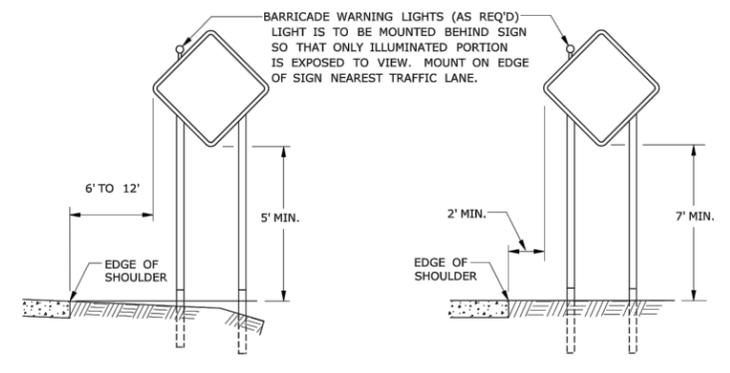
- TRAFFIC CONES SHALL CONFORM TO THE REQUIREMENTS OF NCHRP REPORT 350 (TL-3) OR THE AASHTO MASH FOR CATEGORY 1 DEVICES AND THE LATEST EDITION OF THE MUTCD.
- IF RUBBER CONES ARE USED, THEY SHALL HAVE INTERIOR RIBS FOR RIGIDITY.
- IF PLASTIC CONES ARE USED, THEY SHALL BE COLOR IMPREGNATED.
- THE ENGINEER RESERVES THE RIGHT TO REJECT ANY CONE DEEMED UNSUITABLE FOR THE PURPOSE INTENDED.
- THE ENTIRE AREA OF FLUORESCENT ORANGE AND WHITE STRIPES SHALL BE RETROREFLECTIVE SHEETING AS REQUIRED IN THE SPECIFICATIONS.
- THE SECTIONS OF CONES NOT COVERED WITH RETROREFLECTIVE STRIPES SHALL BE ORANGE.



**TRAFFIC CONE**

NOTES:

- TRAFFIC CONES SHALL CONFORM TO THE REQUIREMENTS OF NCHRP REPORT 350 (TL-3) OR THE AASHTO MASH FOR CATEGORY 1 DEVICES AND THE LATEST EDITION OF THE MUTCD.
- IF RUBBER CONES ARE USED, THEY SHALL HAVE INTERIOR RIBS FOR RIGIDITY.
- IF PLASTIC CONES ARE USED, THEY SHALL BE COLOR IMPREGNATED.
- THE ENGINEER RESERVES THE RIGHT TO REJECT ANY CONE DEEMED UNSUITABLE FOR THE PURPOSE INTENDED.
- THE ENTIRE AREA OF WHITE STRIPES SHALL BE RETROREFLECTIVE SHEETING AS REQUIRED IN THE SPECIFICATIONS.
- TRAFFIC CONES NOT USED AT NIGHT MAY UTILIZE TYPE III SHEETING.
- THE SECTIONS OF CONES NOT COVERED WITH RETROREFLECTIVE STRIPES SHALL BE ORANGE.



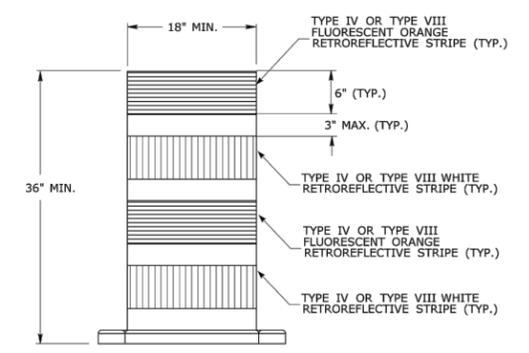
**RURAL AREA**

**URBAN AREA**

**PLACEMENT OF CONSTRUCTION SIGNS  
 TYPICAL LONG TERM INSTALLATION**

NOTES:

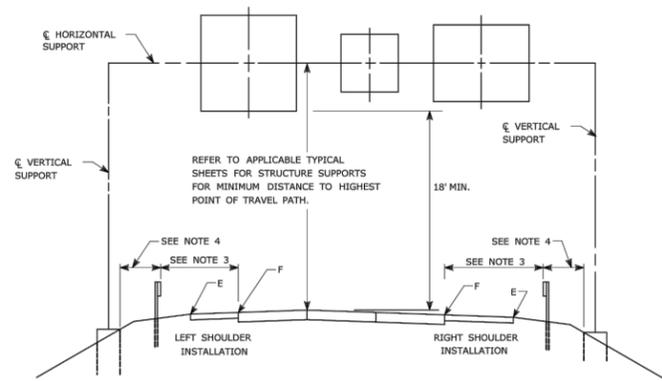
- SUPPORTS SHALL BE METAL SIGN POSTS AND HAVE BREAK-AWAY FEATURES.
- REFER TO STANDARD SHEETS:  
 TR-1208.01 - "SIGN PLACEMENT AND RETROREFLECTIVE STRIP DETAILS."  
 TR-1208.02 - "METAL SIGN POSTS AND SIGN MOUNTING DETAILS."



**TRAFFIC DRUM  
 FRONT VIEW**

NOTES:

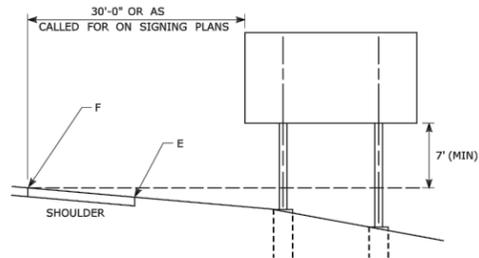
- TRAFFIC DRUM SHALL CONFORM TO THE REQUIREMENTS OF NCHRP REPORT 350 (TL-3) OR THE AASHTO MASH FOR CATEGORY 1 DEVICES AND THE LATEST EDITION OF THE MUTCD.
- THE ENGINEER RESERVES THE RIGHT TO REJECT ANY DRUM DEEMED UNSUITABLE FOR THE PURPOSE INTENDED.
- THE ENTIRE AREA OF FLUORESCENT ORANGE AND WHITE STRIPES SHALL BE RETROREFLECTIVE SHEETING AS REQUIRED IN THE SPECIFICATIONS.
- THE SECTIONS OF DRUMS NOT COVERED WITH RETROREFLECTIVE STRIPES SHALL BE ORANGE.



**TYPICAL PLACEMENT OF OVERHEAD SIGNS ON SIGN SUPPORTS**

**NOTES:**

- 1) FOR PLACEMENT OF CANTILEVER SIGN SUPPORT USE APPLICABLE PORTION OF ABOVE DETAIL.
- 2) BARRIER SYSTEMS MAY BE REQUIRED FOR BOTH SIDES OF SUPPORTS IN MEDIANS.
- 3) IMPACT PROTECTION SHALL BE PROVIDED FOR THE SIGN SUPPORTS LOCATED WITHIN CLEAR ZONE.
- 4) SIGN SUPPORT FOUNDATIONS SHALL BE LOCATED OUTSIDE OF BARRIER SYSTEMS DEFLECTION AREA.
- 5) ALL SIGNS ARE TO BE LEVEL, REGARDLESS OF CAMBER IN SUPPORT.



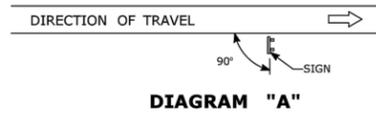
**TYPICAL PLACEMENT OF SIDE MOUNTED SIGNS ON STRUCTURAL STEEL BREAKAWAY SIGN SUPPORTS**

**NOTES:**

- 1) MIN. VERTICAL CLEARANCE ABOVE SIDEWALKS SHALL BE 7'.
- 2) WHERE GUIDE RAIL IS USED, THE OFFSET TO THE NEAR EDGE OF SIGN FACE SHALL BE AS SHOWN ELSEWHERE IN THE CONTRACT PLANS.
- 3) ON INTERSECTING ROADS AT RAMP TERMINI, THE OFFSET TO THE NEAR EDGE OF SIGN FACE SHALL BE 6' MIN. FROM POINT "E".
- 4) IF 30'-0" MIN. CANNOT BE MET, PLEASE CONTACT THE ENGINEER.

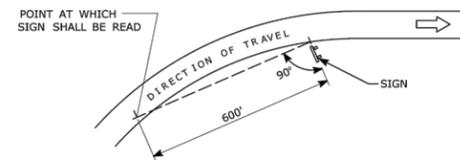
FOR MAXIMUM EFFECTIVENESS, POSITION SIDE MOUNTED SIGNS ON STRUCTURAL STEEL BREAKAWAY SIGN SUPPORTS AS FOLLOWS:

ON A TANGENT SECTION, POSITION THE SIGN SO THE VERTICAL AXIS IS PLUMB AND THE HORIZONTAL AXIS IS AT AN ANGLE OF 90° WITH THE TRAFFIC LANE WHICH THE SIGN SERVES. SIGNS LOCATED 30 FT OR MORE FROM THE EDGE OF THE ROAD SHALL BE TURNED APPROXIMATELY 3° TOWARD THE ROAD.



**DIAGRAM "A"**

ON A HORIZONTAL CURVE SECTION, POSITION THE SIGN SO THE VERTICAL AXIS IS PLUMB AND THE HORIZONTAL AXIS IS AT AN ANGLE OF 90° WITH A STRAIGHT LINE BETWEEN THE SIGN AND THE POINT AT WHICH THE SIGN SHALL BE READ.



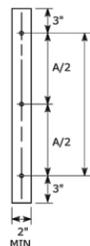
**DIAGRAM "B"**

**SIGN ORIENTATION DETAILS FOR SIDE MOUNTED SIGNS ON STRUCTURAL STEEL BREAKAWAY SIGN SUPPORTS**

RETROREFLECTIVE STRIPS  
48" LONG OR LESS:



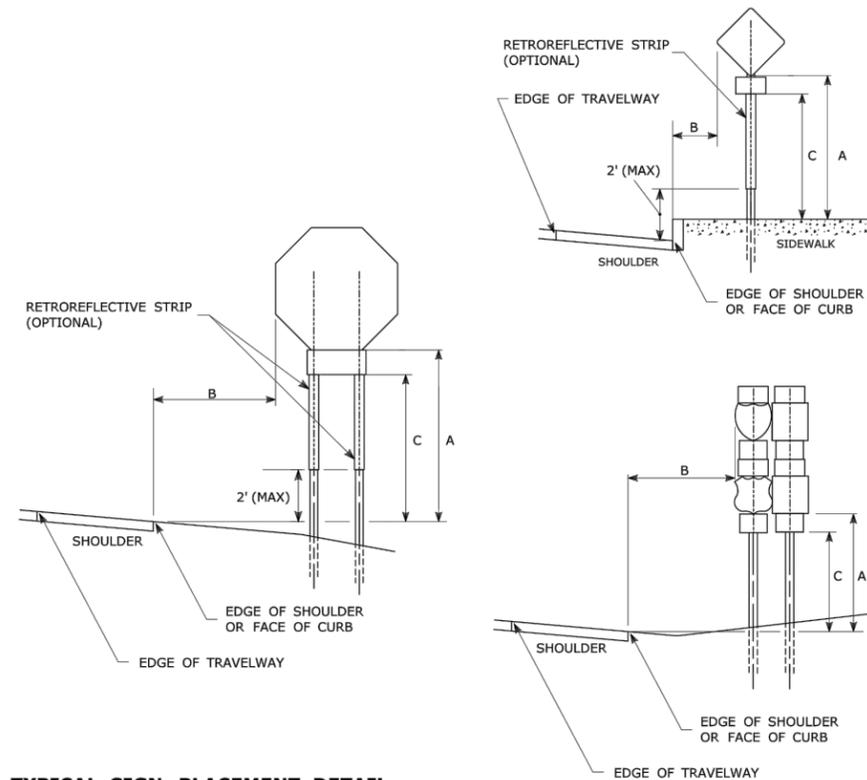
RETROREFLECTIVE STRIPS  
OVER 48" LONG:



**RETROREFLECTIVE STRIP DETAIL**

**NOTES:**

RETROREFLECTIVE STRIPS WHICH ARE 48 IN LONG OR LESS SHALL BE ATTACHED USING 2 BOLTS AND RETROREFLECTIVE STRIPS OVER 48 IN LONG SHALL BE ATTACHED USING 3 BOLTS AS SHOWN ON THE DETAILS ABOVE.  
REFER TO STANDARD SHEET No. TR-1208.02 "METAL SIGN POSTS AND SIGN MOUNTING DETAILS" FOR MOUNTING DETAILS.  
RETROREFLECTIVE STRIP COLOR SHALL MATCH THE BACKGROUND COLOR OF THE SIGN, EXCEPT THAT THE COLOR OF THE STRIP FOR "YIELD" AND "DO NOT ENTER" SIGNS SHALL BE RED.



**TYPICAL SIGN PLACEMENT DETAIL**

**NOTES:**

ALL SIGNS AND SHIELDS ON DIRECTIONAL ASSEMBLIES SHALL ABUT VERTICALLY.

REFER TO STANDARD SHEET No. TR-1208.02 "METAL SIGN POSTS AND SIGN MOUNTING DETAILS" FOR SIGN POSTS AND SIGN MOUNTING.

IF A RETROREFLECTIVE STRIP IS USED ON SIGN SUPPORT, IT SHALL BE PLACED FOR THE FULL LENGTH OF THE SUPPORT FROM THE BOTTOM OF THE SIGN TO WITHIN 2 FT ABOVE THE EDGE OF THE ROADWAY.

PARKING SIGNS TYPICALLY USE 45° MOUNTING BRACKET.

DIM."A" MIN SIGN HEIGHT	DIM."B" MIN LATERAL OFFSET ①	DIM."C" MIN PLAQUE HEIGHT ①	ASSEMBLY LOCATION
7' ②	6' 12' ③	5'	SIGNS ON FREEWAYS AND EXPRESSWAYS EXCEPT CHEVRON ALIGNMENT SIGNS, ONE-DIRECTION LARGE ARROW SIGNS, DO NOT ENTER SIGNS, AND WRONG WAY SIGNS
5'	2'	4'	• SIGNS IN RURAL AREAS • DO NOT ENTER AND WRONG WAY SIGNS ALONG EXIT RAMP • DO NOT ENTER AND WRONG WAY SIGNS ON LIMITED ACCESS HIGHWAYS
5'	2'	N/A	• CHEVRON ALIGNMENT SIGNS LOCATED ON FREEWAYS, EXPRESSWAYS, RAMP, AND IN RURAL AREAS • ONE-DIRECTION LARGE ARROW SIGNS LOCATED ON FREEWAYS, EXPRESSWAYS, RAMP, AND IN RURAL AREAS
4'	6' 12' ③	N/A	INCIDENT MANAGEMENT SIGNS AND MILE POST MARKER ASSEMBLIES LOCATED ON FREEWAYS AND EXPRESSWAYS
4'	2'	4'	CENTRAL ISLANDS OF ROUNDABOUTS
7'	2' ④	6'	BUSINESS & RESIDENTIAL AREAS WHERE PARKING OR OTHER OBSTRUCTIONS LIMIT VISIBILITY
7'	2' ④	7'	SIDEWALKS ⑤

① OR AS DIRECTED BY THE ENGINEER

② 8 FT MINIMUM HEIGHT REQUIRED IF A SUPPLEMENTAL PLAQUE IS SUBMOUNTED BELOW THE MAJOR SIGN.

③ 6 FT FROM EDGE OF SHOULDER, WHEN SHOULDER IS OVER 6 FT WIDE  
12 FT FROM EDGE OF TRAVELWAY, WHEN SHOULDER IS LESS THAN 6 FT WIDE.

④ A LATERAL OFFSET OF AT LEAST 1 FT FROM THE FACE OF THE CURB MAY BE USED WHERE SIDEWALK WIDTH IS LIMITED OR WHERE EXISTING UTILITY POLES ARE CLOSE TO THE CURB.

⑤ A CLEAR PATH OF NOT LESS THAN 4 FT SHALL BE PROVIDED IN SIDEWALK AREAS.



City of Bristol  
Department of Public Works  
Tel. 860-584-6125  
Fax 860-584-3838  
ci.bristol.ct.us

PREPARED BY:

COMMENTS:

DATE:

No.:

DESIGN BY: WRS

DRAFTED BY: WRS

CHECKED BY: ---

SCALE: -

DATE: JULY 3, 2023

PROJECT No.: 0170-3513

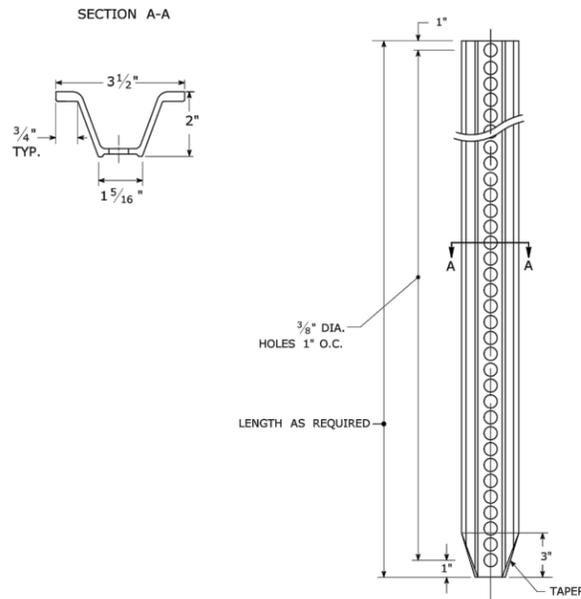
**COMMUNITY  
CONNECTIVITY PROGRAM**  
Bristol, Connecticut  
**STANDARD DETAILS**

DRAWING NO.:

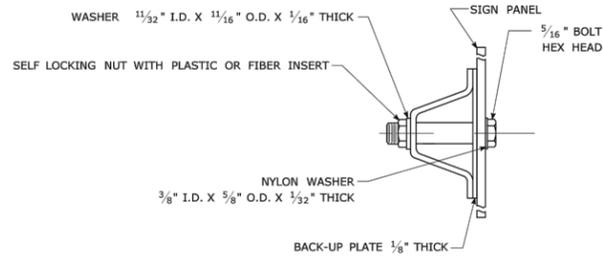
**SD-10**



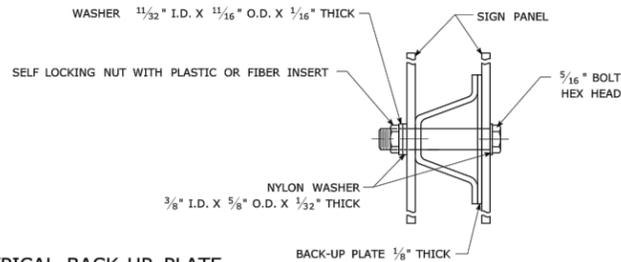
**TYPICAL METAL SIGN POSTS**



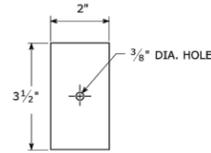
**TYPICAL SIGN PANEL ATTACHMENT**



**TYPICAL BACK TO BACK SIGN PANEL ATTACHMENT**



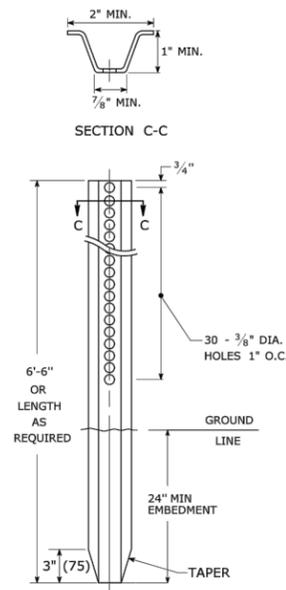
**TYPICAL BACK-UP PLATE**



BOLTS - STAINLESS STEEL CONFORMING TO ASTM F593, ALLOY GROUP 1 OR 2 (ALLOY TYPES 304 OR 316).  
 SELF LOCKING NUTS - STAINLESS STEEL CONFORMING TO ASTM F594, ALLOY GROUP 1 OR 2 (ALLOY TYPES 304 OR 316).  
 WASHERS - STAINLESS STEEL CONFORMING TO ASTM A240, (ALLOY TYPES 304 OR 316).

**METAL DELINEATOR POST**

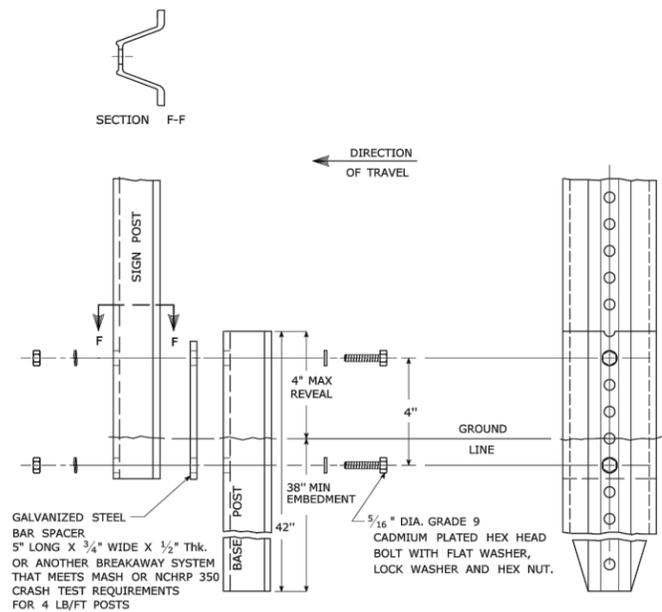
WT./FT. = 1.12 LBS./FT. MIN.



**GENERAL NOTES:**

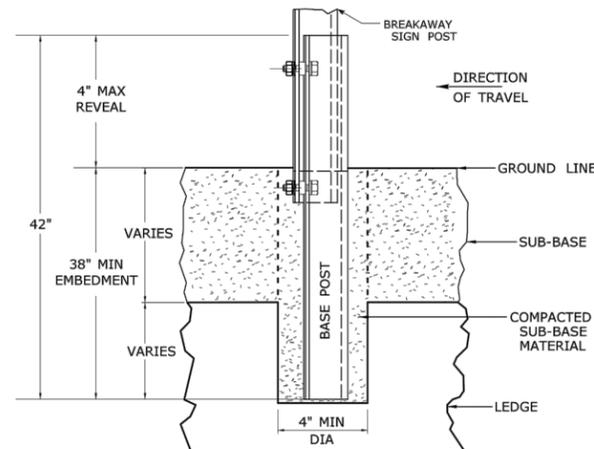
1. STEEL FOR DELINEATOR POSTS SHALL BE ASTM A36 STEEL. STEEL FOR ALL OTHER POSTS SHALL CONFORM TO THE MECHANICAL REQUIREMENTS OF ASTM A 499 GRADE 80 AND TO THE CHEMICAL REQUIREMENTS OF ASTM A1 CARBON STEEL TEE RAIL HAVING NOMINAL WEIGHT (MASS) OF 91 LBS. OR GREATER PER LINEAR YARD.
2. AFTER FABRICATION, ALL STEEL POSTS, STRAPS AND PLATES SHALL BE GALVANIZED TO MEET THE REQUIREMENTS OF ASTM A123.
3. WASHERS FOR BREAKAWAY INSTALLATIONS SHALL MEET ASTM F436, TYPE 1.
4. SPACER BAR FOR BREAKAWAY INSTALLATION SHALL CONFORM TO THE MECHANICAL REQUIREMENTS OF ASTM A36.
5. ALL BOLTS, NUTS, AND WASHERS FOR BREAKAWAY INSTALLATIONS SHALL BE GALVANIZED TO MEET THE REQUIREMENTS OF ASTM A153.
6. ALL SIGN POSTS SHALL HAVE BREAKAWAY FEATURES THAT MEET AASHTO REQUIREMENTS CONTAINED IN THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS." THE BREAKAWAY FEATURES SHALL BE STRUCTURALLY ADEQUATE TO CARRY THE SIGNS SHOWN IN THE PLANS AT 60 MPH WIND LOADINGS. INSTALLATIONS SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
7. SIGN POSTS SHALL BE 4 LBS./FT.

**BREAKAWAY INSTALLATION FOR 4 LBS./FT. POSTS**

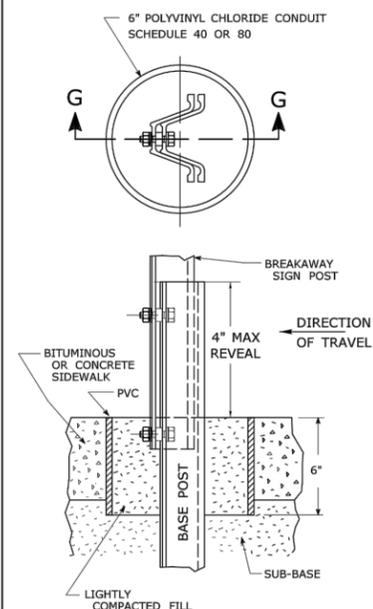


**TYPICAL SIGN POST INSTALLATION IN LEDGE**

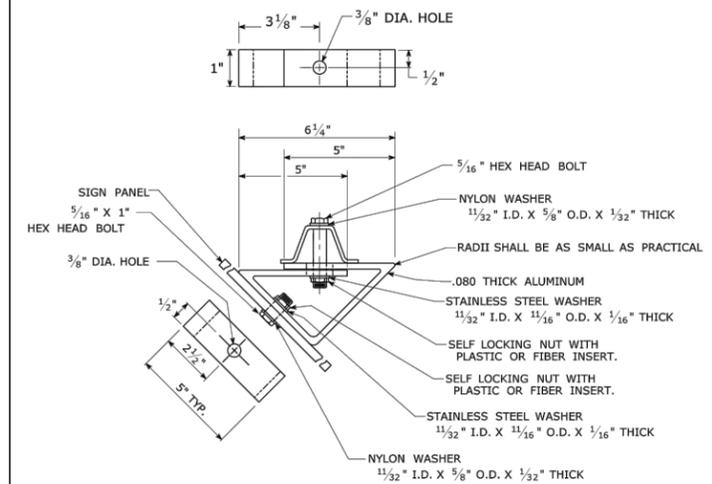
LEDGE SHALL BE REMOVED TO DRIVE THE BASE POST TO A DEPTH OF 38".  
 HOLE SHALL BE FILLED WITH SUB-BASE MATERIAL AND COMPACTED WITH A TAMPING BAR, OR TECHNIQUE APPROVED BY THE ENGINEER, PRIOR TO BASE POST INSTALLATION.



**TYPICAL SLEEVE FOR PAVED AREAS**



**45° MOUNTING BRACKET FOR INSTALLATION OF PARKING SIGNS**



City of Bristol  
 Department of Public Works  
 Tel: 860-584-6125  
 Fax: 860-584-3838  
 ci.bristol.ct.us

PREPARED BY:

COMMENTS:

DATE:

DESIGN BY: WRS  
 DRAFTED BY: WRS  
 CHECKED BY: ---  
 SCALE: -  
 DATE: JULY 3, 2023  
 PROJECT No.: 0170-3513

COMMUNITY CONNECTIVITY PROGRAM  
 Bristol, Connecticut  
 STANDARD DETAILS

DRAWING NO.:

SD-12