



Sight Distance Analysis

To: Woodbridge Town Plan & Zoning Commission

From: Matthew Baldino, P.E., PTOE / Solli Engineering

Subject: Sight Distance Analysis
804 Fountain Street, Woodbridge, CT
Solli Project #: 25111001

Date: 12/05/2025

CC: John Knuff

Dear Commissioners:

Solli Engineering has provided this analysis to evaluate the available intersection sight distance and stopping sight distance for the proposed development located at 804 Fountain Street in Woodbridge, CT. The project site (Site) located at 804 Fountain Street consists of approximately 5.71 acres, bound by Woodbridge Land Trust to the north, Fountain Street (Route 243) to the east, Wilbur Cross Parkway (Route 15) to the south, and wooded property to the west. The project proposes to construct a four-story residential building with 96 residential units with 146 parking spaces and associated paved driveways, sidewalks, utilities, drainage, landscape, and lighting improvements. The proposed development will be accessed via a singular stop-controlled full movement driveway in the north-east corner of the property. This analysis has been completed per guidance provided in the Connecticut Department of Transportation (CTDOT) Highway Design Manual, which is consistent with the American Association of State Highway and Transportation Officials (AASHTO) Policy on Geometric Design of Highways and Streets.

Solli Engineering concurs with the requirement of grading within the Right-Of-Way to improve sight lines from the proposed site driveway as indicated by the Town of Woodbridge traffic peer review consultant VN Engineers Inc. Solli Engineering reviewed available speed data collected on Fountain Street published by CTDOT at count station WDBR-077 located at the Woodbridge/New Haven town line. Data published by CTDOT was collected in January 2025 and reported 85th percentile speeds of 51.1 mph eastbound and 46.2 mph westbound. Intersection sight distance (ISD) at the proposed driveway was evaluated per guidance provided in the 2025 edition of the CTDOT Highway Design Manual. ISD was calculated based on a stop-controlled approach with main line free-flowing traffic and speed data collected by CT DOT in January 2025. Based on an 85th percentile speed of 51.1 miles per hour eastbound, an ISD of 565 feet is required looking left for passenger vehicles exiting the site driveway and based on an 85th percentile speed of 46.2 miles per hour westbound, an ISD of 510 feet looking right is required for passenger vehicles exiting the site driveway onto Fountain Street. Under the proposed conditions, with the recommended clearing and regrading within the right-of-way across the property frontage, the anticipated available ISD looking left is 585 feet and the anticipated available ISD looking right is 665 feet. The available intersection sight distance will exceed the

required intersection sight distance, looking both left and right out of the proposed site driveway. See the Intersection Sight Distance Plan, ISD-2, included as a supporting document in this assessment for additional details.

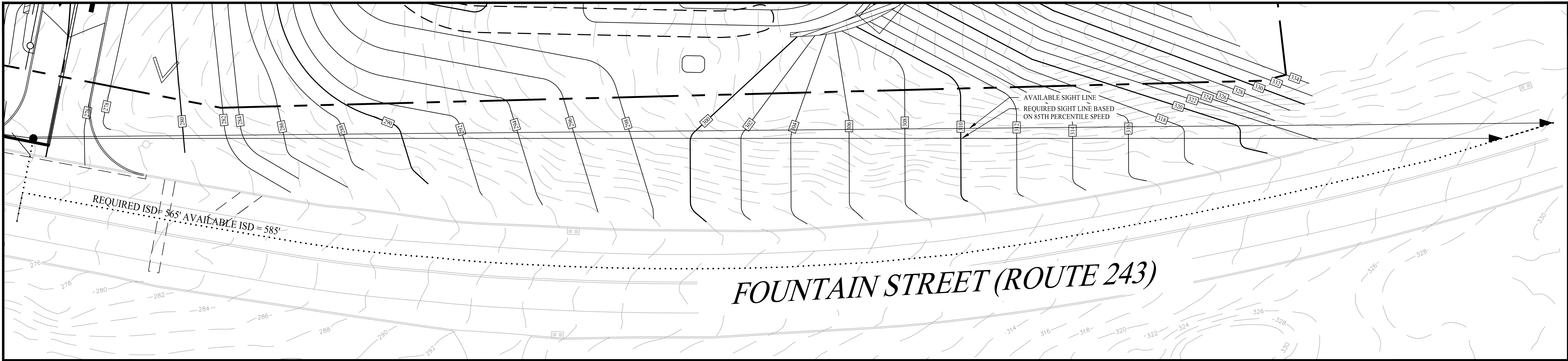
Stopping sight distances approaching the site driveway traveling eastbound and westbound on Fountain Street were also evaluated per guidance provided in the CTDOT Highway Design Manual. Based on the 85th percentile speed of 51.1 mph traveling down gradient at a 9% slope eastbound, a stopping sight distance of 530 feet would be required. With the proposed clearing and regrading within the right-of-way across the property frontage, the available stopping sight distance would be 600 feet, which exceeds the minimum required stopping sight distance. Based on the 85th percentile speed of 46.2 mph traveling up gradient at a 9% slope westbound, a stopping sight distance of 335 feet would be required. With the proposed clearing and regrading within the right-of way across the property frontage, the available stopping sight distance would be 675 feet, which exceeds the minimum required stopping sight distance. The available stopping sight distance will exceed the required stopping sight distance, approaching the site driveway from the eastbound and westbound directions on Fountain Street. See the Stopping Sight Distance Plan, SSD-1, included as a supporting document in this assessment for further details.

It is the professional opinion of Solli Engineering that the site driveway has been designed with adequate intersection sight distance and stopping distance to meet the design requirements set forth by the CTDOT and AASHTO.

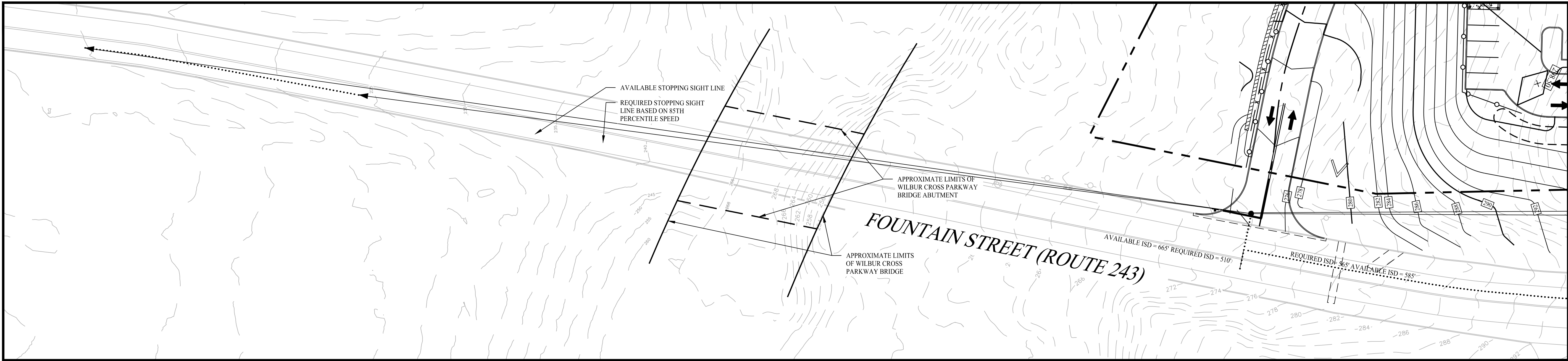
Enclosures

Intersection Sight Distance Figure (Figure ISD-2)

Stopping Sight Distance Figure (Figure SSD-1)



INTERSECTION SIGHT DISTANCE - FOUNTAIN STREET LOOKING LEFT
SCALE 1" = 20'



INTERSECTION SIGHT DISTANCE - FOUNTAIN STREET LOOKING RIGHT
SCALE 1" = 30'

GENERAL NOTES:

1. INTERSECTION SIGHT DISTANCE IS MEASURED 15 FEET FROM THE EDGE OF TRAVEL WAY.
2. INTERSECTION SPEED DATA OBTAINED FROM CT DOT COUNTSTATION WDBR-077. BASED IN THE 85TH PERCENTILE SPEED WESTBOUND OF 46.2 MPH, THE MINIMUM REQUIRED SIGHT DISTANCE LOOKING RIGHT IS 510'. BASED ON 85TH PERCENTILE SPEED EASTBOUND OF 51.1 MPH, THE MINIMUM REQUIRED INTERSECTION SIGHT DISTANCE LOOKING LEFT IS 565'.
3. INTERSECTION SIGHT DISTANCE EVALUATED PER CTDOT HIGHWAY DESIGN MANUAL.



INTERSECTION SIGHT DISTANCE TABLE		
CTDOT Recommended ¹		
Approach / Travel Direction	Required ISD at Design Speed ²	Available ISD
Site Driveway		
Looking Right	600'	665'
Looking Left	675'	585'

¹Recommended sight distance based on CTDOT Highway Design Manual. Based on vehicle driver height of eye of 3.5ft.
²Design Speed (85th Percentile) 51.1 MPH
³Design Speed (85th Percentile) Southbound: 46.2 MPH

PERMIT APPROVED BY THE WOODBRIDGE TOWN PLANNING AND ZONING COMMISSION

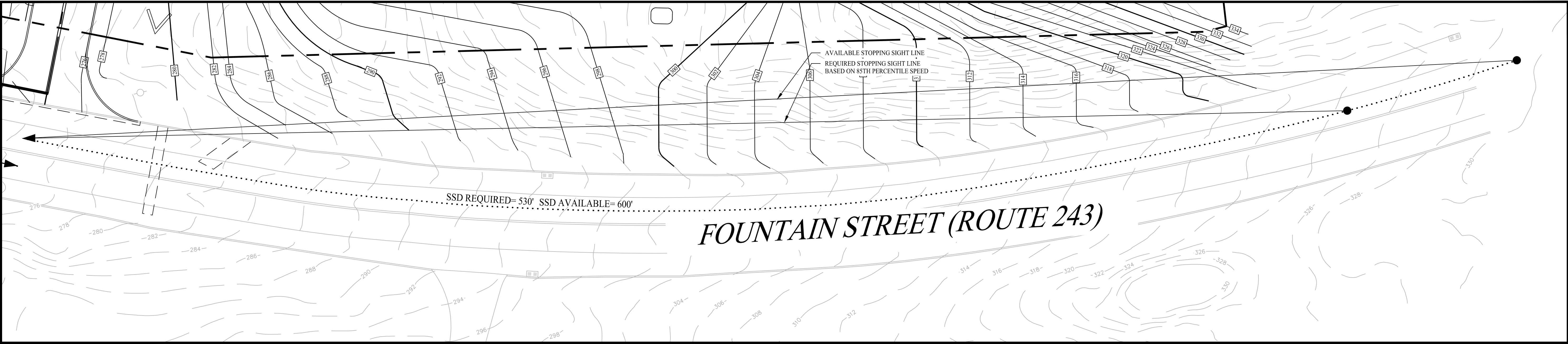
SIGNATURE _____ DATE _____

Rev. #:	Date	Description

Graphic Scale:

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Checked By: JMGM	
Approved By: KMS	
Project #: 25111001	
Plan Date: 08/18/25	
Scale: AS NOTED	PROPOSED RESIDENTIAL DEVELOPMENT 804 FOUNTAIN STREET WOODBIDGE, CONNECTICUT
Project:	
Sheet Title: INTERSECTION SIGHT DISTANCE PLAN	
Sheet #:	ISD-2



STOPPING SIGHT DISTANCE - FOUNTAIN STREET EASTBOUND

SCALE 1" = 20'

STOPPING SIGHT DISTANCE TABLE			
AASHTO Recommended ¹			
Approach / Travel Direction	Available SSD	Roadway Slope	SSD at Design Speed ²
Fountain Street (Route 243)			
Eastbound	600'	-9%	530'
Westbound	675'	9%	335'

¹Recommended sight distance based on AASHTO, A Policy on Geometric Design of Highways and Streets. Based on vehicle height of eye of 3.5 feet to object height of 2.0 feet.

²Design Speed (85th percentile) Eastbound: 51.1 MPH
Design Speed (85th Percentile) Westbound: 46.2 MPH

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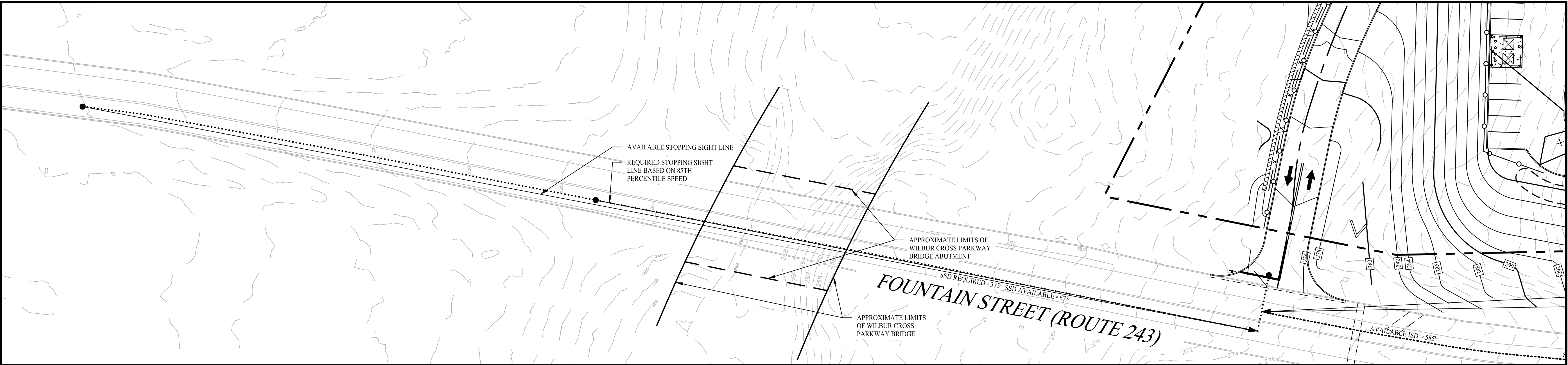
Project:
**PROPOSED
RESIDENTIAL
DEVELOPMENT**
804 FOUNTAIN STREET
WOODBRIDGE, CONNECTICUT

Sheet Title:

**STOPPING
SIGHT
DISTANCE
PLAN**

Sheet #:

SSD-1



STOPPING SIGHT DISTANCE - FOUNTAIN STREET WESTBOUND

SCALE 1" = 30'