

VILLAGE OF LOMBARD
REQUEST FOR BOARD OF TRUSTEES ACTION

For Inclusion on Board Agenda

 X Resolution or Ordinance (Blue) X Waiver of First Requested
 Recommendations of Boards, Commissions & Committees (Green)
 Other Business (Pink)

TO: PRESIDENT AND BOARD OF TRUSTEES

FROM: Scott Niehaus, Village Manager

DATE: February 2, 2023 (COW) (B of T) **Date:** February 16, 2023

TITLE: Recommendations from the Transportation and Safety Committee

SUBMITTED BY: Mike Barbier, PE, Civil Engineer II

BACKGROUND/POLICY IMPLICATIONS:

Right Turn on Red Signal Prohibition for 2 Intersections

The sight distances for westbound traffic at both Main at Parkside and Main at Hickory have been reduced below the acceptable safety thresholds due to new development adjacent to those intersections.

The Transportation and Safety Committee voted to prohibit right turns on red signals for westbound traffic at the intersections of Main at Parkside and Main at Hickory.

The Transportation and Safety Committee requests the restriction adjustment and to update the Village ordinance at the above intersections.

FISCAL IMPACT/FUNDING SOURCE:

Time and Materials

Review (as necessary):

Village Attorney X _____ Date _____
Finance Director X _____ Date _____
Village Manager X _____ Date _____

NOTE: All materials must be submitted to and approved by the Village Manager's Office by 12:00 noon, Wednesday, prior to the Agenda Distribution.



January 5, 2023

TO: Village President and Board of Trustees
THROUGH: Carl Goldsmith, Director of Public Works
FROM: Mike Barbier, Civil Engineer II
SUBJECT: **No Right Turns on Red Traffic Signals – Main at Parkside and Main at Hickory**

Request

Staff recommends that the Village amend Section 10-14-3 of the Traffic Code to prohibit right turns on red traffic signals on westbound Parkside at Main and westbound Hickory at Main.

Background

Right turns on red traffic signals are generally permitted at intersections. In practice, this leads to reduced delay for the right turning vehicles and increased efficiency of the intersection. However, there are situations when the safety risk outweighs those benefits.

The Manual on Uniform Traffic Control Devices (MUTCD) Section 2B.45 states that: "A NO TURN ON RED sign should be considered when an engineering study finds that one or more of the following conditions exists:

- A) **Inadequate sight distance to vehicles approaching from the left** (or right, if applicable);
- B) Geometrics or operational characteristics of the intersection that might result in unexpected conflicts;
- C) An exclusive pedestrian phase;
- D) An unacceptable number of pedestrian conflicts with right-turn-on-red maneuvers, especially involving children, older pedestrians, or persons with disabilities; and
- E) More than three right-turn-on-red accidents reported in a 12-month period for the particular approach."

The Village currently has right turn on red signal prohibitions at 10 intersections. These locations are:

1. Eastbound traffic on St. Charles Rd. at Westmore Avenue
2. Northbound and southbound traffic on Highland Ave. at Roosevelt Rd.
3. Northbound and southbound traffic on Main St. at Roosevelt Rd.
4. Westbound traffic on Madison at Main Street.

5. Eastbound traffic on St. Charles Road at Main Street 6:00 a.m. to 9:00 a.m. and 4:00 p.m. to 7:00 p.m.
6. Westbound traffic on Route 64 (North Avenue) at Main Street between the hours of 12:00 p.m. to 1:00 p.m. and 4:00 p.m. to 6:00 p.m. on Monday - Friday.
7. All approaches: Main Street and 22nd Street, when pedestrians are present.
8. All approaches: Main Street and 16th Street, when pedestrians are present.
9. Westbound traffic on Parkside Avenue at Main Street between the hours of 6:00 a.m. to 9:00 a.m. and 4:00 p.m. to 7:00 p.m.
10. All approaches: Westmore-Meyers Avenue at Madison Street 8:00 a.m. to 4:00 p.m., Monday - Friday

The issue at the subject intersections is condition A from the MUTCD Section 2B.45, sight distance for vehicles approaching from the left. With the construction of Lilac Station at the southeast corner of Main at Parkside and the new Library at Main at Hickory, the intersection sight distances at those intersections will be reduced.

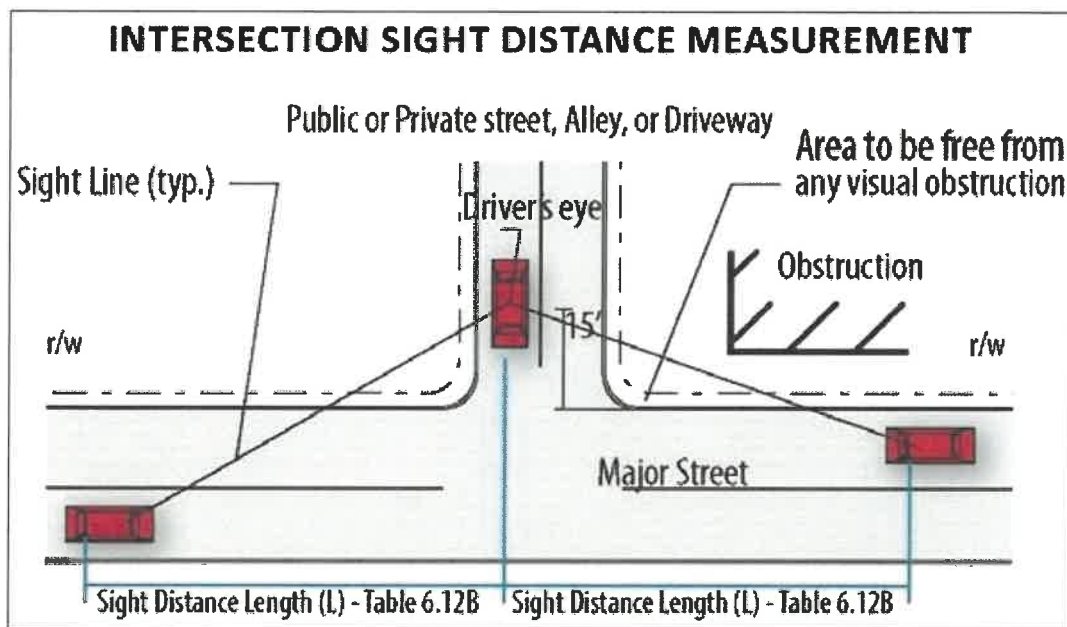


Figure 1: Intersection Sight Distance (AASHTO 2011)

The minimum intersection sight distance (ISD) required varies based on the speed limit. The IDOT Bureau of Local Roads & Streets provides the equation for intersection sight distance:

$$ISD = 1.47 * V_{Major} * t_g$$

Where:

V_{Major} = design speed of major road, mph

t_g = time gap for minor road to enter, assumed to be 7.5 seconds
(IDOT BLRS Equation 28-3.1)

The governing site distance equation (IDOT BLRS 28-3.1) corresponds to the following table:

US Customary	
Design Speed (V_{major}) (mph)	ISD (ft) ⁽¹⁾⁽²⁾
20	225
25	280
30	335
35	390
40	445
45	500
50	555
55	610
60	665

For both of these intersections, the posted speed limit is 25 MPH on Main Street. Our design speed is 5 MPH above the posted speed, which results in a minimum sight distance of 335 feet. Each permitted right turn on red signal movement should have a clear sight line of 335 feet for a vehicle approaching from their left.

Analysis

Exhibit A1 and A2 show the Intersection Sight Triangles for Main at Parkside and Main at Hickory with their respective development plans. Both intersections will provide less than the required 335 feet of sight distance for westbound vehicles when construction is completed. While the building and support structures create a sight line obstruction on Parkside, the sight distance issue at Hickory is due to the proposed plantings along Main Street.

This recommendation was presented to the Public Safety and Transportation Committee at the February 1, 2023 meeting. The Committee unanimously supported the proposed amendments to the Lombard Traffic Code and requested that this matter be placed on the Village Board agenda for the February 16, 2023 for consideration.

Recommendation

The Public Safety and Transportation Committee and staff recommend an ORDINANCE AMENDING SCHEDULE XII OF THE LOMBARD TRAFFIC CODE TO PROHIBIT RIGHT TURN ON RED AT THE INTERSECTIONS OF PARKSIDE AND MAIN AND HICKORY AND MAIN.

HELEN PLUM PUBLIC LIBRARY

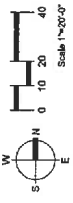
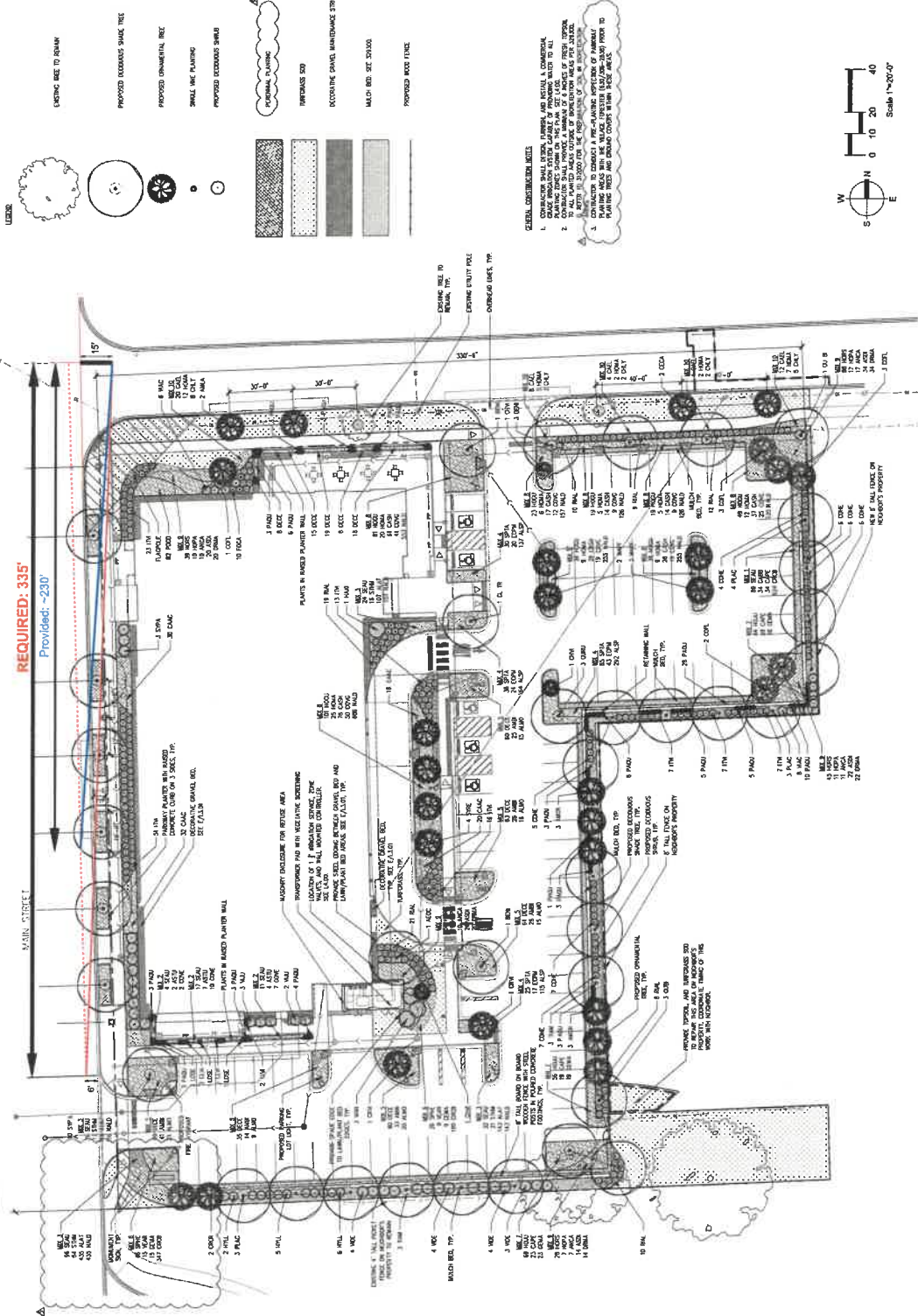
Helen Plum Public Library
 403 S. Main St.
 Chicago, IL 60648

PROJECT NUMBER: 152483

ISSUED FOR: BP-3 (BID SET)
 DATE: 06/27/2021
 REVISION FOR: NO. DESCRIPTION
 DATE
 Δ BP-3 AJS-JDA 07/07/2021

DRAWN BY: BP
 CHECKED BY: JC

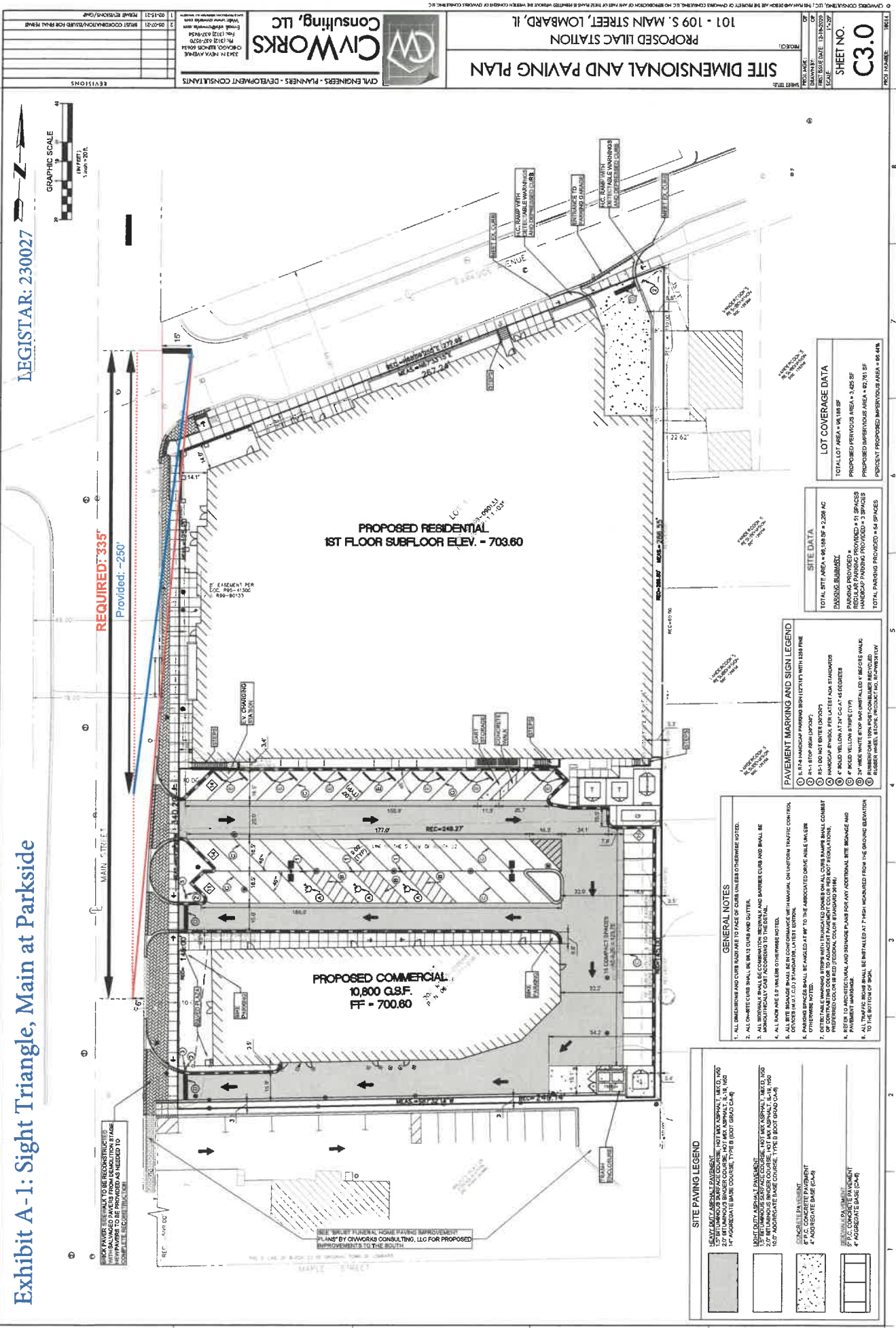
PLANTING PLAN



GENERAL CONSTRUCTION NOTES

1. CONTRACTOR SHALL VERIFY, TURN IN, AND ACTUAL A CONDITION STATE INSURANCE POLICY COVER OF WORKMANSHIP.
2. CONTRACTOR SHALL VERIFY A MINIMUM OF A POLICY OF PROFESSIONAL LIABILITY INSURANCE FOR THE PROJECT.
3. CONTRACTOR TO CONDUCT A PRE-PLANTING INSPECTION OF ALL PLANTING AREAS AND RECORD COVER WITH THESE NOTES.

Exhibit A-1: Sight Triangle, Main at Parkside



Ordinance No. _____

ORDINANCE AMENDING SCHEDULE XII OF THE LOMBARD TRAFFIC CODE TO PROHIBIT RIGHT TURN ON RED AT THE INTERSECTIONS OF PARKSIDE AND MAIN AND HICKORY AND MAIN

WHEREAS, the President and Board of Trustees of the Village of Lombard have heretofore passed and approved Ordinance 1186, An Ordinance Regulating Traffic in the Village of Lombard (hereinafter the Lombard Traffic Code); and

WHEREAS, the President and Board of Trustees of the Village of Lombard find that the Lombard Traffic Code has been amended from time to time; and

WHEREAS, the Public Safety and Transportation Committee has reviewed the appropriate traffic studies and recommends certain changes to the Lombard Traffic Code; and

WHEREAS, the Corporate Authorities of the Village of Lombard concur in the recommendation of the Transportation and Safety Committee.

NOW, THEREFORE, BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF LOMBARD, DU PAGE COUNTY, ILLINOIS, as follows:

Section 1: That Schedule XIII of the Lombard Traffic Code (Ordinance 1186) prohibiting right turns on red is amended as follows:

“i. westbound traffic on Parkside Avenue shall not turn right on red onto Main Street”
and:

“k. westbound traffic on Hickory Street shall not turn right on red onto Main Street”

Section 2: That this Ordinance shall be in full force and effect from and after its passage, approval, publication in pamphlet form and the posting of appropriate signs as provided by law.

Passed on first read this ____ day of _____, 2023.

First reading waived by action of the Board of Trustees this ____ day of _____, 2023.

Passed on second read this ____ day of _____, 2023.

Ayes: _____

Nays: _____

Absent: _____

Approved this ____ day of _____, 2023.

Keith T. Giagnorio
Village President

Attest:

Elizabeth Brezinski
Village Clerk

Published by me in pamphlet form this ____ day of _____, 2023.

Elizabeth Brezinski, Village Clerk