

TRAFFIC REPORT CHECKLIST

Owner's Name: _____

Engineer's Name: _____

Site Address: _____

Date: _____

The following checklist is not all-inclusive, but is generally representative of the requirements of the Marlborough Site Plan Review and Approval Ordinance (SPR&A), the Subdivision Rules and Regulations (S/D R&R) and Directive 2005-1 of the Engineering Division of the DPW. In all cases, you should use the checklist in conjunction with the SPR&A, S/D R&R and Directive 2005-1 as appropriate.

Report Cover

- ☐ Site address
- ☐ Site map and parcel
- ☐ Owner's name, address, and telephone number
- ☐ Developer's name, address, fax and telephone number
- ☐ Engineer's and Surveyor's names, address, fax and telephone number
- ☐ Engineer's stamp

Project Overview

- ☐ Project site general discussion, including:
 - o Approach
 - o Zoning
 - o Size
 - o Roadways effected
 - o Other specifics
- ☐ Site Locus (showing site in relation to existing roadways for radius of at least 0.5 miles)
- ☐ Existing uses, including generating a site plan showing the following information:
 - o Zoning elements in regards to square footage of use
 - o No. & type of units, employment
 - o Ordnances that exist
 - o Proposed access
 - o Parking supply
 - o Traffic Flow
 - o Site circulation
- ☐ Proposed uses (traffic flow with a site plan showing zoning elements in regards to square footage of use, no. & type of units, employment, ordnances that exist, proposed access, parking supply, site circulation)

Existing Conditions

- ☐ Descriptions of the roadways and intersection improvements proposed in the area
 - o Geometric
 - o Traffic control
 - o Regulatory
 - o jurisdictional aspects
- ☐ Traffic and pedestrian volumes
 - o 48 hour period for access
 - o 7 AM to 9 AM weekdays
 - o 4 PM to 6 PM weekdays
 - o 11 AM TO 2 PM weekends
- ☐ Accident History all available sources (3 year period)

Project Trip Generation

- ☐ Summary table and description relative to proposed use for peak and daily periods (by ITE).

Trip Distribution

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- ☐ Estimates of percentage distribution of trips from the proposed development to destinations in all directions.
- ☐ Provide the following to support these assumptions where available:
 - o Market studies,
 - o planning data,
 - o driveway counts at adjacent uses,
 - o U.S. census or other info to justify origin of trip to proposed development.
- ☐ A distribution map showing percentage of site traffic on each street shall be provided.

Trip assignment

- ☐ Assignment of site-generated peak hour vehicle trips to study area roadways and intersections shall be presented in graphical format.
- ☐ Routes determined by following means:
 - o Location of proposed access points to site
 - o Building location
 - o Access location
 - o Observation of travel patterns to existing land uses in the study area
 - o Shortest travel time path
 - o Other means defensible by analysis presented

Future Conditions

- ☐ Preparation of future-year peak hour traffic volume network for “no-build” and “build” scenarios based on 5-year horizon from existing conditions.
- ☐ No Build – to include average annual growth and projects approved in the area with summary provided.
- ☐ Build – represent no-build traffic volumes adjusted to add site generated traffic volumes.

Analysis of Impacts

- ☐ Capacity (AM and PM peak rates and LOS provided)
- ☐ Queuing and lane storage capacities available for the following:
 - o Existing traffic conditions
 - o future no-build traffic conditions
 - o build traffic conditions
- ☐ Traffic Signal Warrant Analysis (show if meets warrants or not)
- ☐ Pedestrian & Bicycle Impacts
 - o Include efforts to minimize
 - Conflict between vehicles and pedestrians
 - Routing of traffic through streets
 - Left turn movements,
 - Number of curb cuts,
 - Number of vehicle trips in street
 - o Include efforts to maximize
 - distances between curb cuts
 - sharing of curb cuts and common driveways
 - separation of pedestrian, bicycle and vehicular circulation
 - enhancement of pedestrian or public transportation
 - site distance
 - connections of off site sidewalks
 - building entrances
- ☐ Sight Line Evaluation
 - o Documentation of posted speed limits
 - o measurement of ambient travel speeds
 - o Calculation of stopping sight distance for both directions of approach for each access
 - o Calculation of intersection sight distance
 - o Conduct field measurements of available sight distances at each proposed access point
 - o Create a tabular comparison of measured sight distances

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Assessment of Mitigation

- ☐ Criteria for mitigation
 - Newly constructed roadways
 - LOC "D" or below
 - Existing roadways
 - LOC "E" or below
- ☐ Mitigation required
 - Newly constructed roadways
 - Develop improvement alternative to restore roadway to LOC "C" or better
 - Existing roadways
 - Develop improvement alternative to restore roadway to LOC "D" or better
- ☐ Improvement alternatives
 - Shall include measure to offset impacts to the following transportation systems if the City Engineer determines they are exacerbating high accident locations, resulting in pedestrian conflict, or create potentially hazardous conditions.
 - Vehicular
 - Pedestrian
 - Bicycle
 - Non-Structural improvements
 - TSM considerations including modification of existing traffic signals.
 - TDM considerations including mass transit, van pooling, ride sharing and employee incentives.
 - Development Alternatives including other land use types and reduced densities
 - Structural improvements
 - Describe
 - location
 - nature
 - extent of proposed mitigation
 - Provide sketch including
 - Length
 - Width
 - Other geometric information
 - Include capacity and queuing analysis and associated tabular summaries compared to no-build conditions.
 - Shall be compatible with long range goals of the City of Marlborough
 - Identify costs associated with proposed improvements, responsible party, timing of improvements, duration and funding.

Revisions to study

Shall be provided as required by City Engineer

Executive Summary

- ☐ Needs to be a clear, short, concise and complete in itself description of the study findings.
- ☐ Describe of the following:
 - Data
 - Project
 - Scope
 - Purpose
 - Findings
 - Conclusions
 - Mitigation measures

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- Recommendations

Required Technical Data of Final Report

- ☐ Traffic count data and tabular summaries
 - Turning movement counts
 - Automatic traffic recorder counts
 - Calculated peak hour factors for the intersection
 - Travel speed survey data and calculations
- ☐ Permit sketches and layouts
- ☐ Seasonal Adjustment factors
- ☐ Growth factor data and layouts (traffic signals, lane widening, etc)
- ☐ Trip generation land use code sheets, calculations and adjustments
- ☐ Plotted sight distance measurements
- ☐ Signal warrant analysis
- ☐ Capacity and vehicle queue analysis data and outputs
- ☐ Maps and improvement plans
 - Size (24" x 36")
 - Graphical scale 1" = 40"
 - Geometries
 - Bus stops
 - Parking areas
 - Pedestrian crossings
 - Site distance obstructions
 - Driveway restrictions
 - North Arrow
 - Title block
 - Street names
 - AutoCAD file of map compatible with most recent version