

Friday, May 28, 2021
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kratzert, jones & associates, inc.

CIVIL ENGINEERS • LAND SURVEYORS
SITE PLANNERS • BUILDING ENGINEERS

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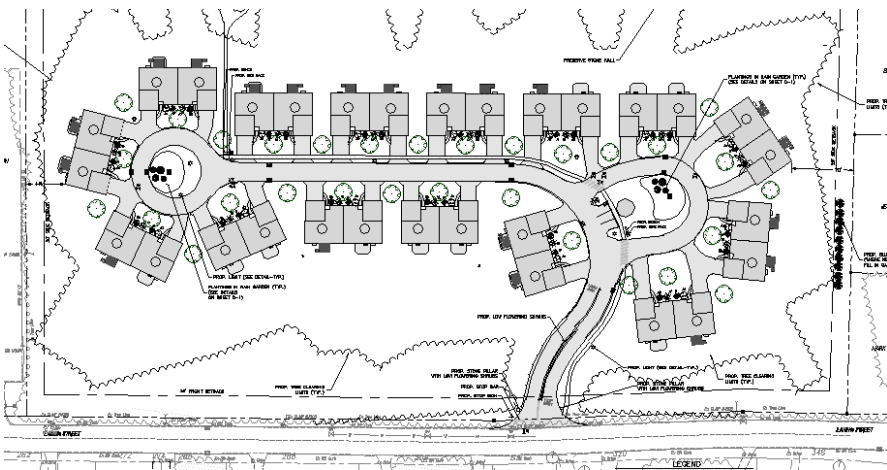
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SOUTHINGTON FIRE TRUCK ACCESS STUDY

for
LANING OAKS
AN AGE RESTRICTED
8-30g AFFORDABLE
HOUSING PLAN FOR
FRANK & MARY
FRAGOLA
295 LANING STREET
SOUTHINGTON, CT

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SITE OVERVIEW



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FIRE TRUCK DESIGN VEHICLE

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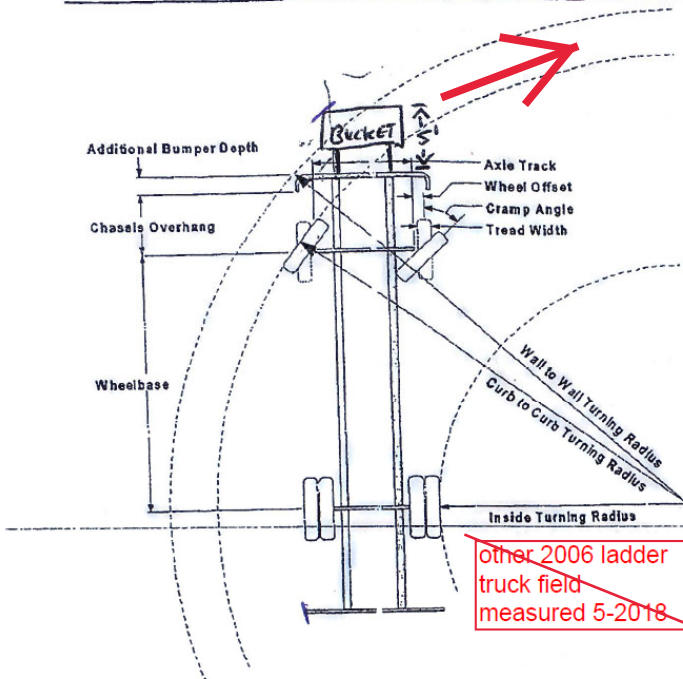
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Turning Performance Analysis

10/25/06



Parameters:

Parameter	FEET	INCHES
Inside Cramp Angle:	33.00 °	
Axle Track:	6.93	83.11 in.
Wheel Offset:	0.44	5.25 in.
Tread Width:	1.45	17.40 in.
Chassis Overhang:	5.50	65.99 in.
Additional Bumper Depth:	2.08	25.00 in.
Front Overhang:	12.47	149.60 in.
Wheelbase:	21.17	254.00 in.

Calculated Turning Radii:

Inside Turn:	27'	31 ft. 5 in.
Curb to Curb:	42'	46 ft. 0 in.
Wall to Wall:	49'	52 ft. 9 in.

Comments:

Aerial Application

SOUTHINGTON 100' PLATFORM
PIERCE JOB #E-7364 (1992 BUILD)

other 2006 ladder truck field measured 5-2018

1992 ladder truck calculated

Components	PRIDE #	Description
Front Axle	0000295	Axle, Front, Meritor-FL-941, 21,000-lb
Front Tires	0052978	Tires, Goodyear, 425/65R22.50 20 ply G286 tread
Chassis	0060025	Lance-2000 Chassis, PAP/SkyArm/Midmount
Front Bumper	0012247	Bumper, 25" extended - Dash, Lance
Aerial Device	0022160	Aerial, 100' Pierce Platform

Notes:

Actual Inside Cramp Angle may be less due to highly specialized options.

Curb to Curb turning radius calculated for a 9.00 inch curb.

METHODS OF ANALYSIS USED - AUTOTURN SOFTWARE

AutoTURN is vehicle swept path analysis software used by government agencies and leading transportation engineering firms to assess road, highway, and site vehicle movements and clearances.

<https://www.transoftsolutions.com/vehicle-swept-path/autoturn-select/autoturn/>

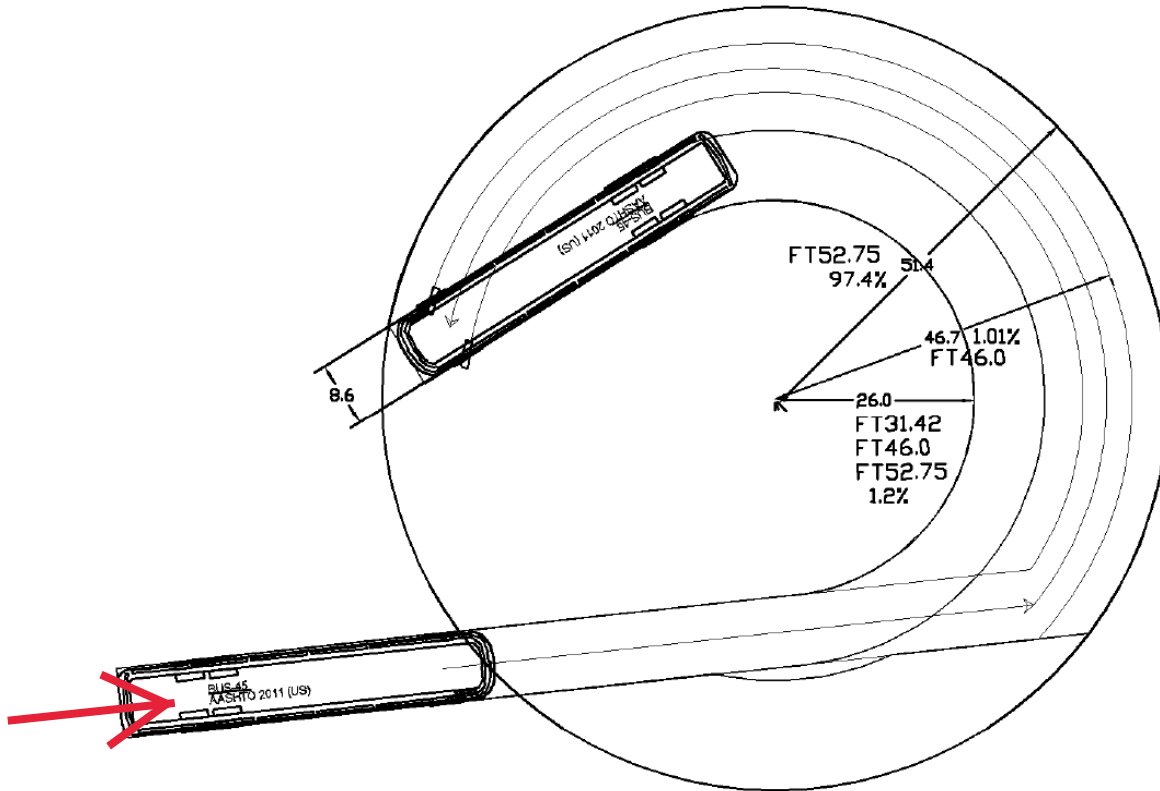
DESIGN VEHICLE USED BY AUTOTURN ANALYSIS

AS SHOWN BELOW -

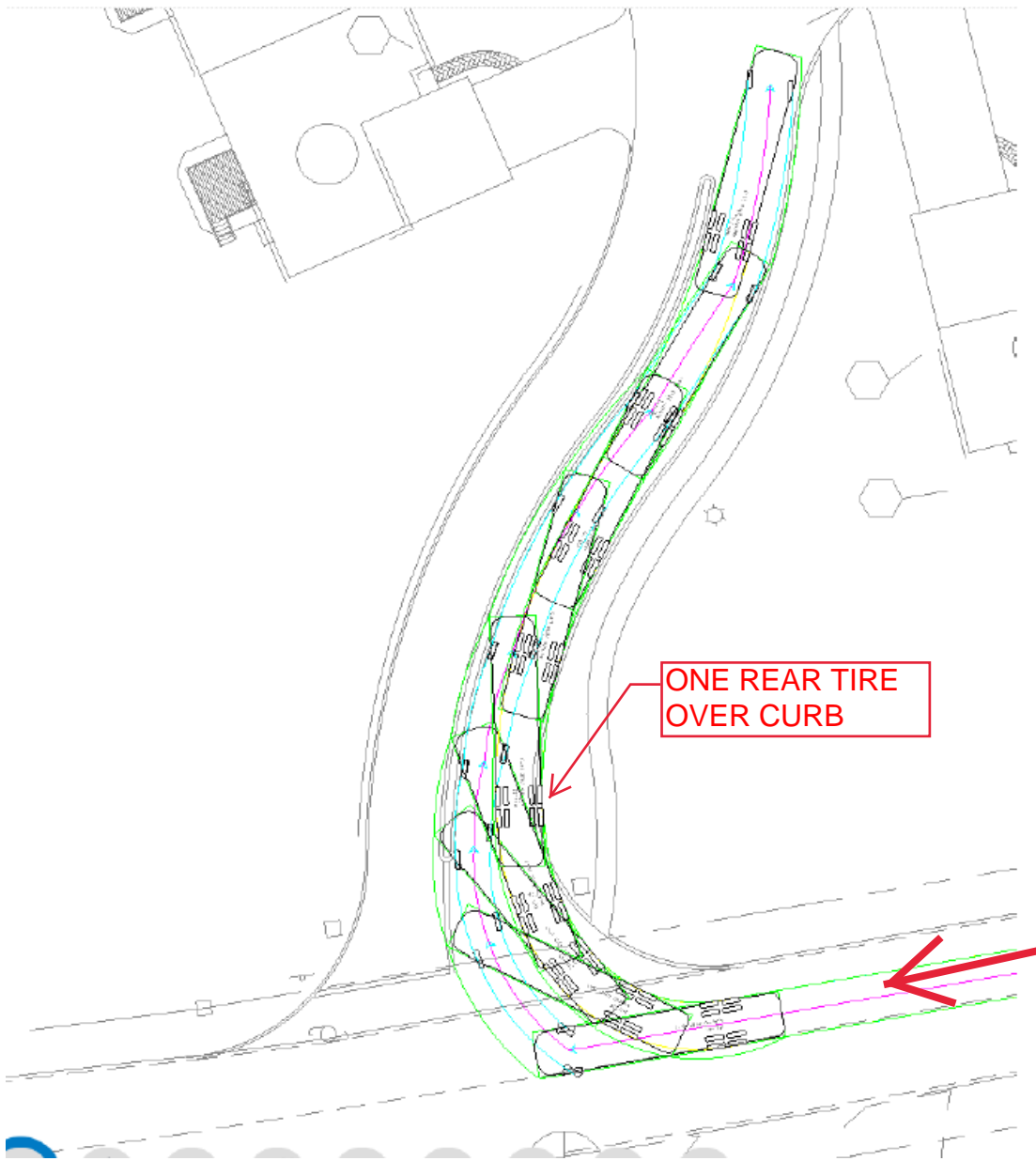
INSIDE TIRE AT CURB - 31.42 FEET NEEDED - 26 FOOT ASSUMED BY AUTOTURN (CONSERVATIVE)

OUTSIDE TIRE AT CURB 46. FEET NEEDED - 46.7 FOOT ASSUMED BY AUTOTURN (CONSERVATIVE)
(CONSERVATIVE)

FIRE TRUCK OVERHANG FRONT 52.75 FEET NEEDED - 51.4 FOOT ASSUMED BY AUTOTURN
(BUT LAYOUT SHOWS NO OBSTRUCTIONS WOULD BE ENCOUNTERED IN THE ADDED 1.35 FOOT)



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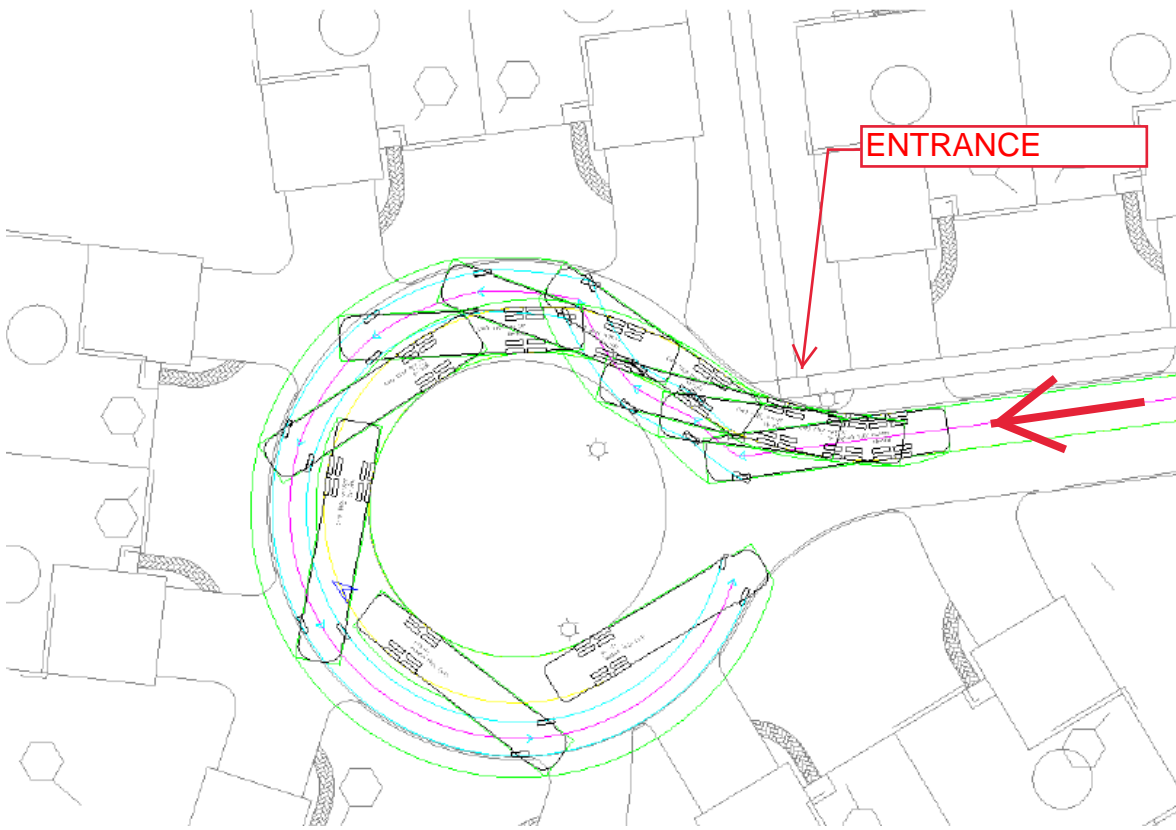
FIRE LADDER TRUCK ENTERING SITE



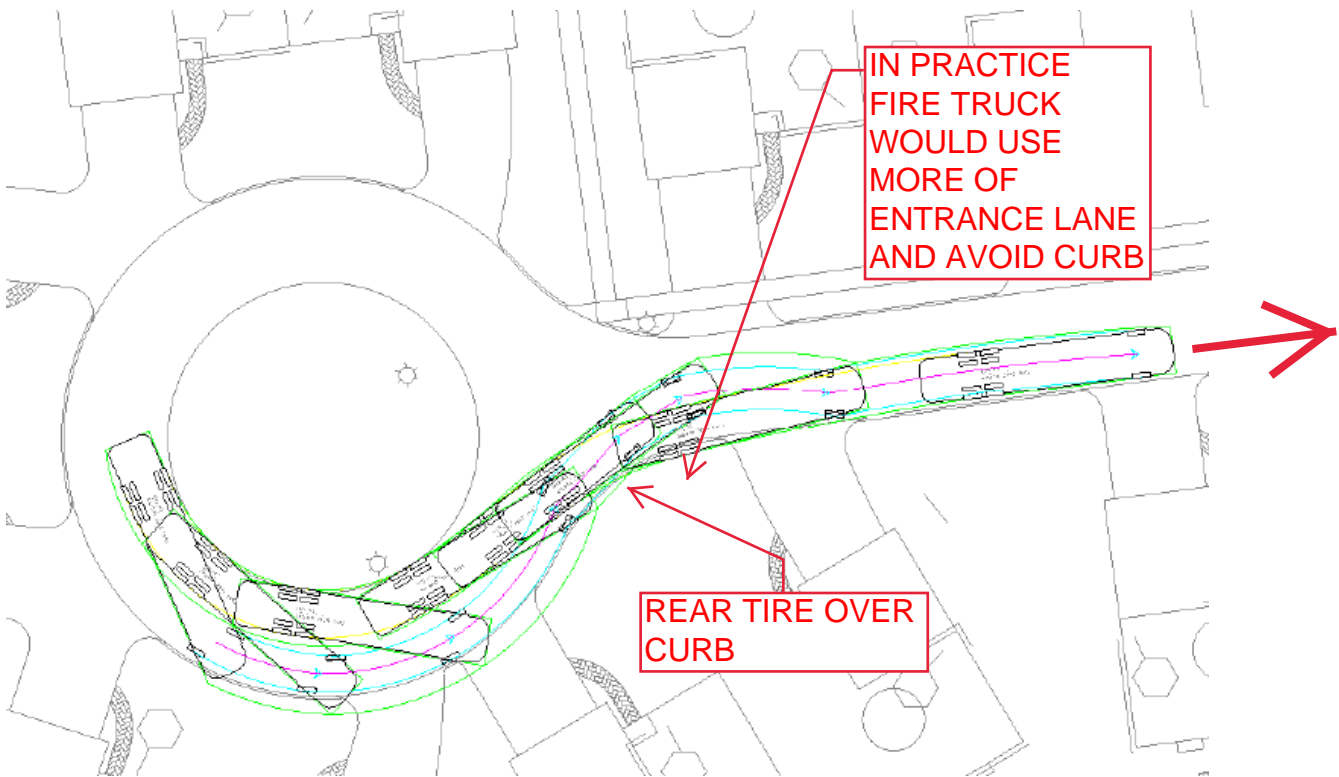
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FIRE LADDER TRUCK FIRST CURVE

NO ISSUES

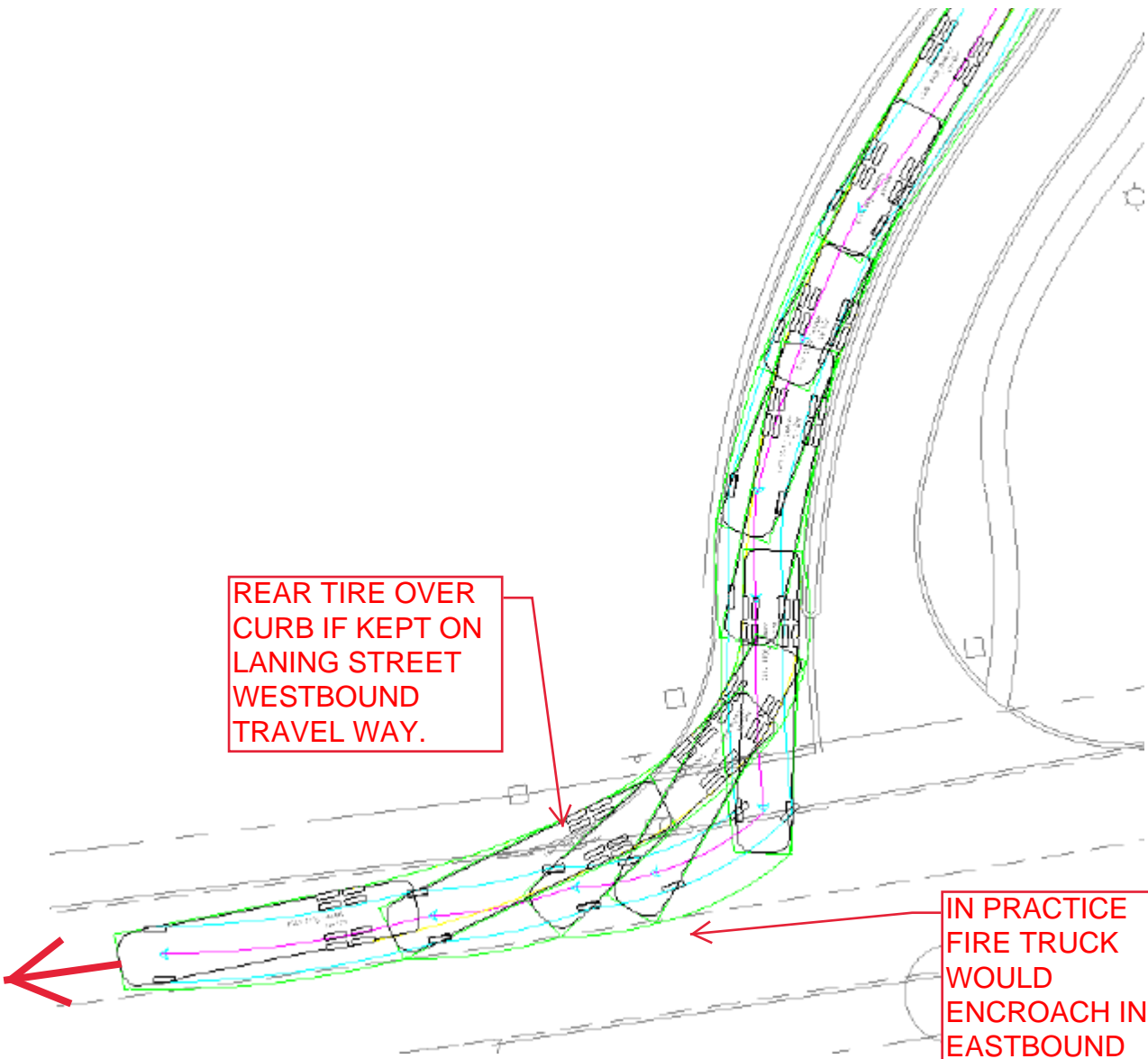


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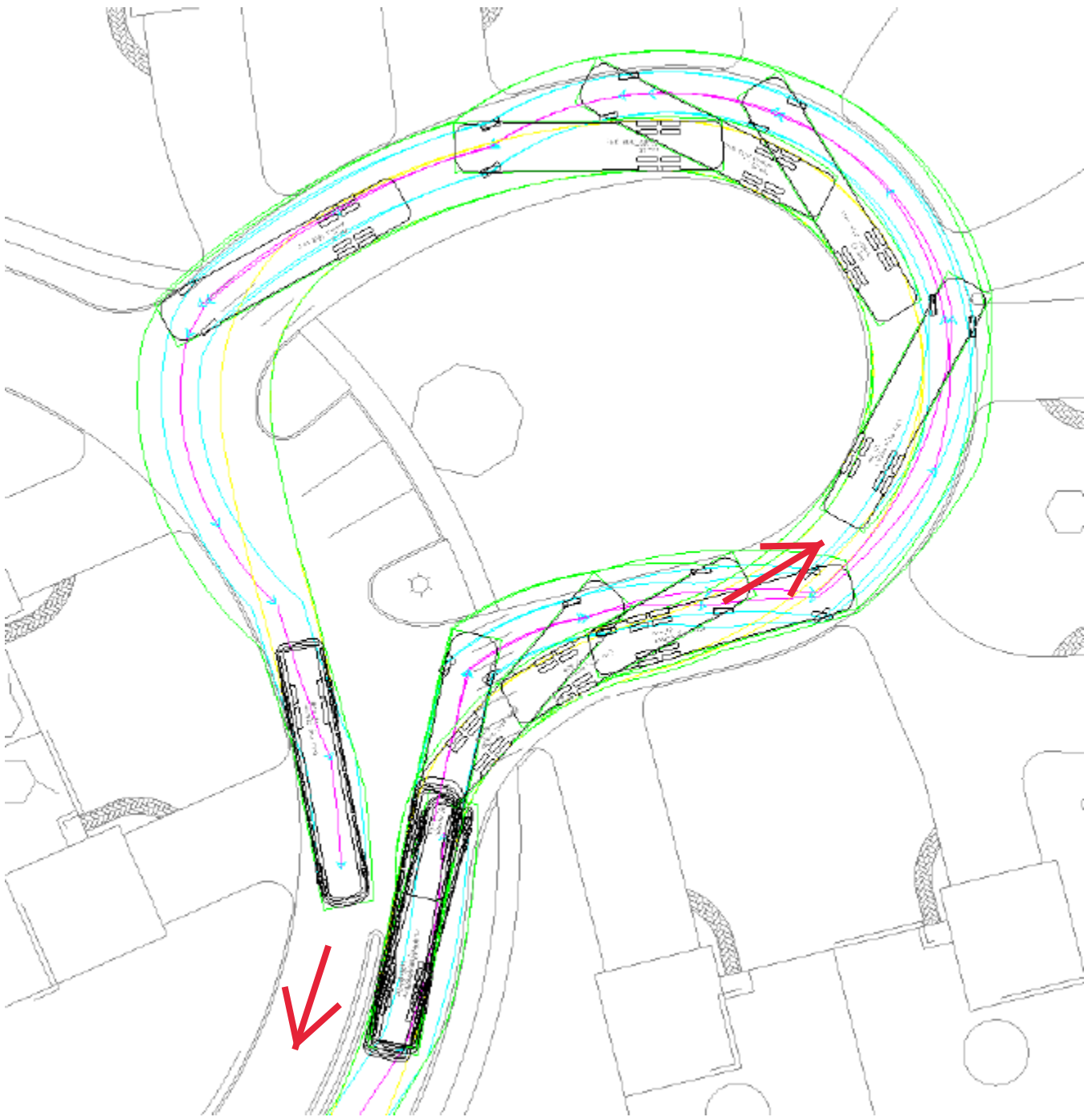
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FIRE LADDER TRUCK AROUND CUL-DE-SAC



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FIRE LADDER TRUCK LEAVING SITE



Screen clipping taken: 5/28/2021, 2:17 PM

FIRE LADDER TRUCK AROUND LOOP ROAD

SUMMARY - SITE CAN HANDLE FIRE LADDER TRUCK
ACCESS PROVIDED NO PARKING FIRE LANE SIGNS ARE INSTALLED

SUBMITTED BY

JAMES SAKONCHICK PE LS 11302