TRAFFIC IMPACT STUDY

For

440 Warehouse Developers, LLC
Proposed Warehouse Development

Property Located at:

NJSH Route 440 and NJSH Route 185
Block 30305 – Lots 2, 3, 4, & 5
City of Jersey City, Hudson County, NJ

Prepared by:

1904 Main Street
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July 28, 2021
Revised: October 7, 2021

3783-99-001T

TLV;CGH

INTRODUCTION

It is proposed to construct a warehouse on a parcel of land currently developed with a tank farm, located along the southbound side of Route 440 just south of its interchange with Route 185 in the City of Jersey City, Hudson County, New Jersey (see Figure 1 in Appendix A). The site is designated as Block 30305 – Lots 2, 3, 4, & 5 on the City Tax Maps. The existing use consists of a tank farm with 9 total tanks. It is proposed to raze the existing site and construct a 2-story 579,282 SF warehouse inclusive of 92,540 SF of office space (The Project). It should be noted that these areas are representative of the building footprint, whereas the usable floor area equates to 442,818 SF of warehouse space and 82,271 SF of office space for a total of 525,089 SF. The site is located within the PI – Port Industrial District. Access to the site is currently provided via one (1) right turn ingress/right turn egress driveway at the northern end of the site along Route 440 Southbound. It is proposed to reconstruct the driveway and maintain the existing access configuration. Additionally, a full width deceleration lane is proposed to better facilitate ingress into the site from Route 440. Parking will be provided via one thousand five hundred forty-eight (1,548) on-site parking spaces. Additionally, one hundred two (102) loading spaces will be provided.

Dynamic Traffic, LLC has been retained to prepare this study to assess the traffic impact associated with the construction of The Project on the adjacent roadway network. This study documents the methodology, analyses, findings and conclusions of our study and includes:

- A detailed field inspection was conducted to obtain an inventory of existing roadway geometry, traffic control, and location and geometry of existing driveways and intersections.
- Automatic traffic recorder (ATR) counts were performed along Route 440 Southbound for a period of seven (7) days.
- Projections of traffic to be generated by The Project were prepared utilizing trip generation data as published by the Institute of Transportation Engineers. Site traffic was then assigned to the adjacent street system based upon the anticipated directional distribution
- A capacity analysis was conducted for the Build condition for the study intersection.
- The proposed point of ingress and egress was inspected for adequacy of geometric design, spacing and/or alignment to streets and driveways on the opposite side of the street, relationship to other driveways adjacent to the development, and conformance with accepted design standards.
- The site plan as designed was reviewed for sufficiency in accommodating large wheel base vehicles such as delivery trucks, refuse trucks, and emergency vehicles.
- The parking layout and supply was assessed based on accepted design standards, local requirements, and demand experienced at similar developments.

EXISTING CONDITIONS

A review of the existing roadway conditions near the proposed site was conducted to provide the basis for assessing the traffic impact of the development. This included field investigations of the surrounding roadways and intersections, collection of traffic volume data, and extensive analyses.

Existing Roadway Conditions

The following are descriptions of the roadways in the study area:

NJ Route 440 is an Urban Principal Arterial roadway under NJDOT jurisdiction with a general north/south orientation. In the vicinity of the site the posted speed limit is 35 MPH and the roadway generally provides two travel lanes in each direction, with three travel lanes provided in each direction along a portion of the site frontage. Curb is provided along both sides of the roadway, while sidewalk is not provided along either side of the roadway. Route 440 provides a straight horizontal alignment along the majority of the site frontage and a slightly downhill vertical alignment from north to south. The land uses along Route 440 in the vicinity of The Project are primarily industrial.

Existing Traffic Volumes

Automatic traffic recorder (ATR) counts were conducted along Route 440 Southbound from Wednesday, July 7, 2021 to Thursday, July 15, 2021. Review of the collected traffic data reveals that the weekday morning peak street hour (PSH) occurs between 7:15 – 8:15 AM and the weekday evening PSH occurs between 5:00 - 6:00 PM. Figure 2, located in Appendix A, shows the existing peak hour traffic volumes at the study intersection. All traffic counts are contained in Appendix B.

It should be noted that conditions associated with the COVID-19 pandemic may have still been in effect as of the time of the traffic counts. As a result, current traffic volumes on the surrounding roadways may be atypical at this time and would not be representative of "existing" traffic conditions. Therefore, adjustment factors of 1.45 and 1.72 were utilized during the respective AM and PM peak hours. These adjustment factors were developed by comparing other recent traffic count data collected by this firm within the surrounding area to pre-pandemic traffic volumes. The adjustment factors were then applied to the ATR county data in order to provide a conservative analysis. Figure 3, located in Appendix A, shows the adjusted peak hour traffic volumes at the study intersection.

FUTURE CONDITIONS

Traffic volumes and operational analyses were developed for both the future No Build and Build conditions. The No Build conditions provide a baseline for assessing the impact of the site development traffic on the roadway system. The process of developing the No Build and Build traffic volumes and the subsequent analyses is outlined below.

Regardless of whether the subject site is developed or not, traffic volumes on the surrounding roadways are expected to increase as a result of developments throughout the region. A growth rate for roadways within the study area was obtained from the NJDOT Annual Background Growth Rate Table, which indicates a growth rate of 1.0% per year.

It is to our knowledge that there are numerous developments in the vicinity of the site in various stages of development that are identified as potential significant traffic generators, shown below. The Adjacent Development Traffic Volumes passing the site are shown on Figure 4.

- A development consisting of an 88,811 SF Shopping Center known as Harbor View Marketplace, located at Goldsborough Drive & NJ-440 in the City of Bayonne.

- A development consisting of 625 Mid-Rise Units with 1st floor commercial use known as Bay 151, located at 151 East Centre Street in the City of Bayonne.

- A development consisting of 4,500 Residential units, a 218 Room Hotel, and 75,000 SF of retail known as MOTBY Redevelopment, located along Goldsborough Drive in the City of Bayonne.

Future No Build traffic volumes were developed by applying the background growth rate of 1.0% for two (2) years to the study area roadways existing traffic volumes and adding the adjacent development traffic volumes. Figure 5, in Appendix A, shows the No Build traffic volumes.

Traffic Generation

Projections of future traffic volumes were developed utilizing data as published in the Institute of Transportation Engineers (ITE) publication *Trip Generation, 10th Edition* for Land Use Code (LUC) 155 – High Cube Fulfillment Center (Non-Sort). It should be noted that the usable floor area was utilized for trip generation purposes. Table I indicates the trip generation of the proposed development utilizing the ITE data.

Table I
Trip Generation

Land Use	AM PSH			PM PSH		
	In	Out	Total	In	Out	Total
525,089 SF Warehouse	64	15	79	33	51	84

Once the magnitude of traffic to be generated to the site is known, it is necessary to assign that traffic to the adjacent street system. The distribution of traffic to the surrounding roadways is based on the location of primary arterial roadways, major signalized intersections and existing traffic patterns. Located in Appendix A, Figure 6 illustrates the percent distribution of car site generated trips, Figure 7 illustrates the car site generated volumes, Figure 8 illustrates the percent distribution of truck site generate trips, Figure 9 illustrates the truck site generated volumes and Figure 10 illustrates the total site generated volumes assigned to the study area network. The site generated volumes were then added to the No Build traffic volumes to generate the Build traffic volumes, which are shown in Figure 11.

Future Capacity Analysis

The methodology utilized in the capacity analyses is described in the *Highway Capacity Manual*, published by the Transportation Research Board. In general, the term Level of Service (LOS) is used to provide a "qualitative" evaluation of capacity based upon certain "quantitative" calculations related to empirical values, such as traffic volume and intersection control.

An unsignalized (STOP sign controlled) driveway or side street along a through route is seldom critical from an overall capacity standpoint, however, it may be of great significance to the capacity of the minor cross-route, and it may influence the quality of traffic flow on both. When analyzing an unsignalized intersection, it is assumed that both the major street through and right turn movements are unimpeded and have the right-of-way over all side street traffic and left turns from the major street. All other turning movements in the intersection cross, merge with, or are otherwise impeded by major street movements. Traffic delays at unsignalized intersections are determined by sequentially processing these impeded movements. Table II describes the Level of Service ranges for unsignalized (stop controlled) intersections.

Table II
Level of Service Criteria
for Unsignalized Intersections

Level of Service	Average Control Delay (seconds per vehicle)
A	0.0 to 10.0
B	10.1 to 15.0
C	15.1 to 25.0
D	25.1 to 35.0
E	35.1 to 50.0
F	greater than 50.0

All capacity analyses were performed utilizing Synchro 11 software. Table III summarizes the future Levels of Service (LOS) and delays. All capacity analysis calculation worksheets are contained in Appendix C.

Table III
Future Levels of Service

Intersection	Direction/ Movement		AM PSH		PM PSH	
			No Build	Build	No Build	Build
Route 440 and Site Driveway	EB	R	-	B (13)	-	C (19)

A (#) - Unsignalized Intersection Level of Service (seconds of delay per vehicle)

The following are discussions pertaining to the intersection analyzed.

Route 440 and Site Driveway

The site driveway is proposed to intersect Route 440 Southbound to form an unsignalized T-intersection with the site driveway operating under stop control. The southbound approach of Route 440 is proposed to provide a dedicated through lane and a shared through/right turn lane. The eastbound approach through lane and shared through/right turns lane. The eastbound approach of the site driveway is proposed to provide a single lane for right turns only.

As designed, the individual intersection movements are anticipated to operate at Levels of Service "C" or better during the analyzed peak hours. See Table III for the individual movement Levels of Service and delays.

SITE PLAN

Site Access and Circulation

The site plan was reviewed with respect to the site access and on-site circulation design. As noted previously, access to The Project will be provided via one (1) right turn ingress/right turn egress driveway along Route 440 Southbound.

The newly constructed parking areas will be serviced by parking aisles with a minimum width of 24', which satisfy the Ordinance's minimum requirement of 22'. These aisles will allow for two-way circulation and 90 degree parking. Review of the site plan design indicates that the site can sufficiently accommodate, within paved areas, a large wheel base vehicle, such as tractor trailers along with the automobile traffic anticipated.

Parking

The City of Jersey City Ordinance sets forth a parking requirement of 1 parking space per 5,000 SF for warehouses and 1 parking space per 600 SF of office use. This equates to a parking requirement of 253 spaces for the proposed 486,742 SF of warehouse and 92,540 SF of office. The site as proposed provides 1,548 parking spaces and as such the Ordinance requirement is exceeded.

It is proposed to provide parking stalls with dimensions of 9'x18', which satisfy the Ordinance's minimum requirement of 8.5'x18'. The Ordinance also sets forth a loading requirement of 1 loading space for the first 5,000 SF plus 3 spaces for each additional 40,000 SF for warehouses, and 1 loading space for the first 10,000 SF plus 3 spaces for each additional 100,000 SF for office uses. This equates to a loading requirement of 42 loading spaces for the Project. The site as proposed provides 102 loading spaces and as such the Ordinance requirement is exceeded.

FINDINGS & CONCLUSIONS

Findings

Based upon the detailed analyses as documented herein, the following findings are noted:

- The proposed 579,282 SF warehouse (525,089 SF of usable floor area) is projected to generate 64 entering trips and 15 exiting trips during the weekday morning peak hour and 33 entering trips and 51 exiting trips during the evening peak hour.

- Access to the site is proposed to be provided the one (1) right turn ingress/right turn egress driveway along Route 440 southbound. Additionally, a full width deceleration lane is proposed to better facilitate ingress into the site from Route 440.

- As designed and with the addition of site generated traffic, the individual intersection movements of Route 440 and the site driveway are anticipated to operate at Levels of Service "C" or better during the peak hours studied.

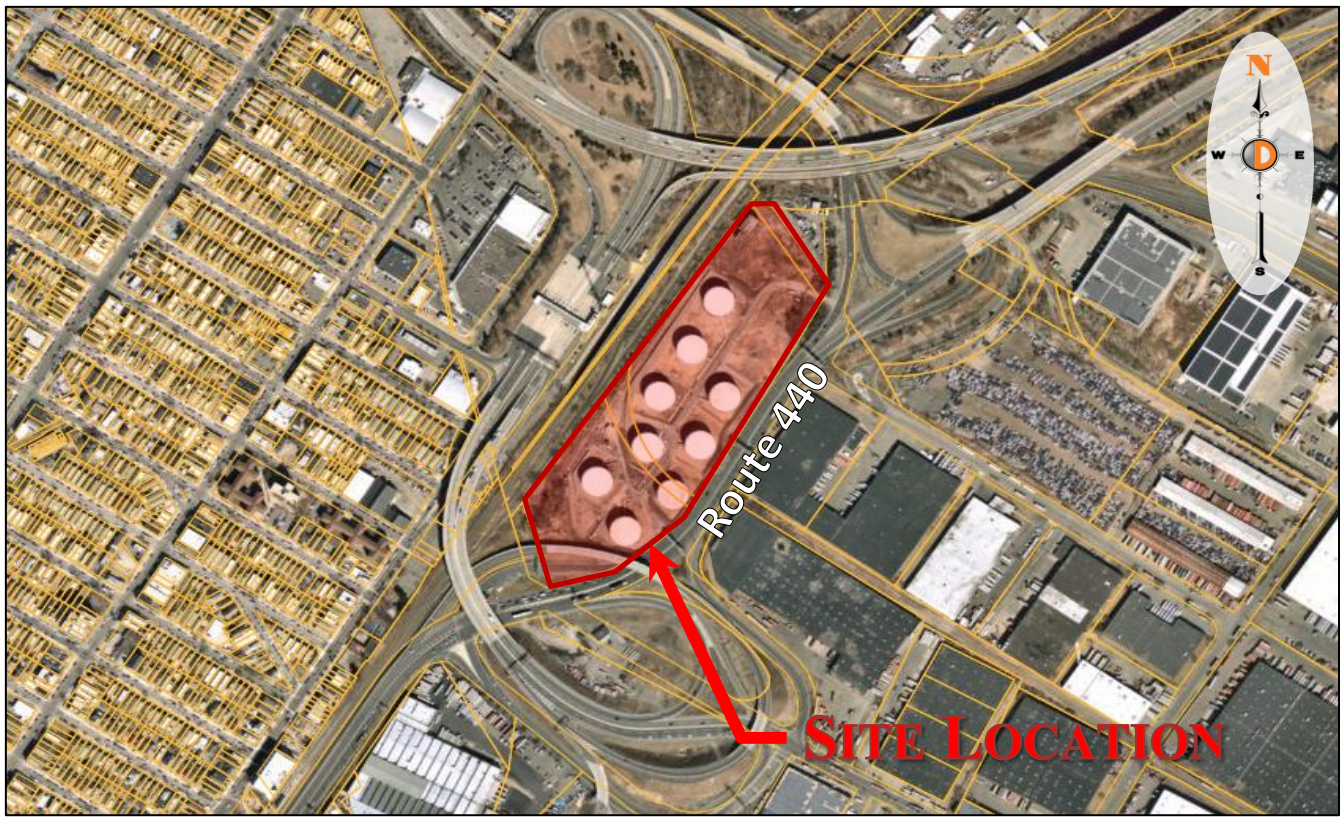
- As proposed, The Project's site driveway and internal circulation have been designed to provide for safe and efficient movement of automobiles and large wheel base vehicles.

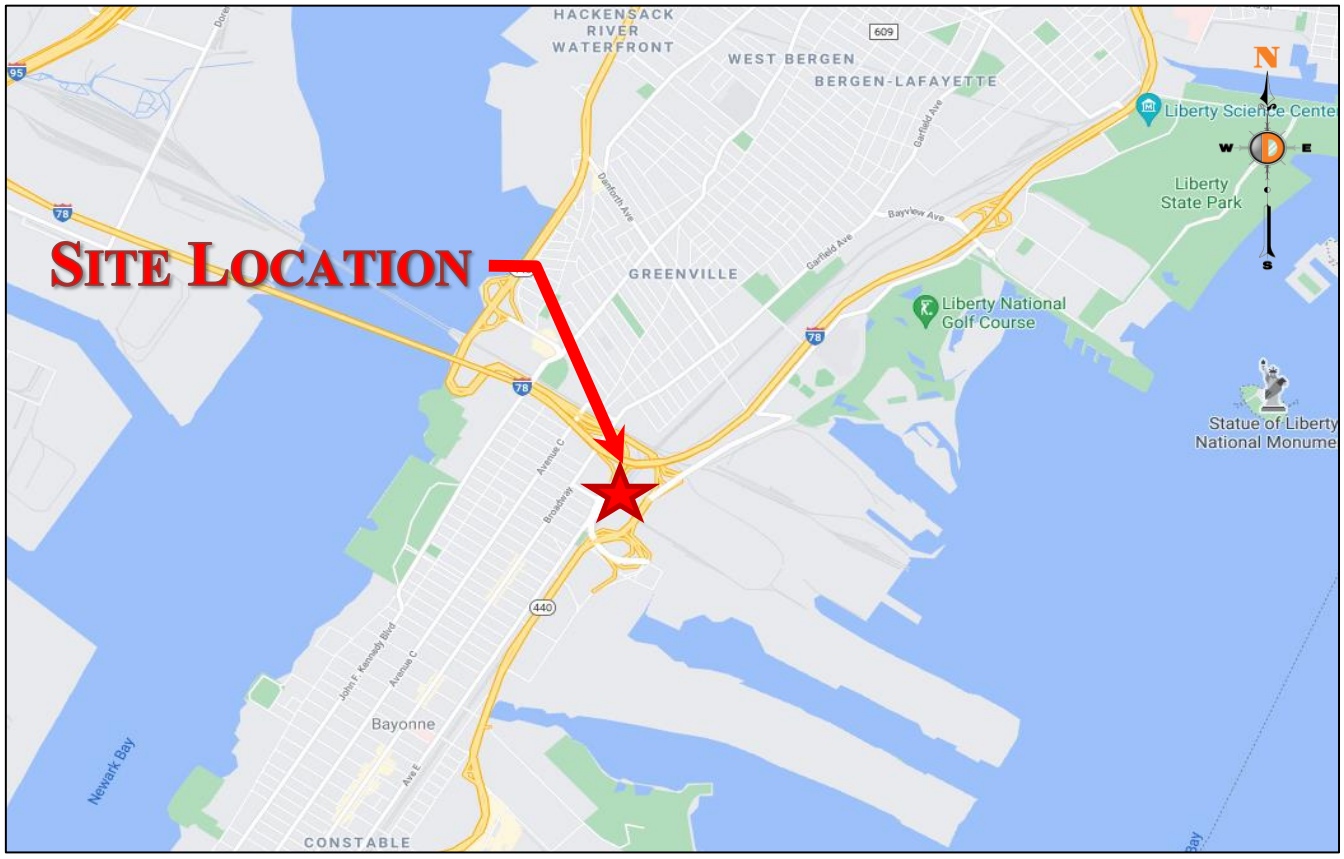
- The proposed parking supply and design is sufficient to support the projected demand and exceeds the Ordinance requirements.

Conclusions

Based upon our Traffic Impact Study as detailed in the body of this report, it is the professional opinion of Dynamic Traffic, LLC that the adjacent street system of the City of Jersey City and NJDOT will not experience any significant degradation in operating conditions with the construction of The Project. The site driveway is located to provide safe and efficient access to the adjacent roadway system. The site plan as proposed provides for good circulation throughout the site and provides adequate parking to accommodate The Project's needs.

Appendix A
Traffic Volume Figures

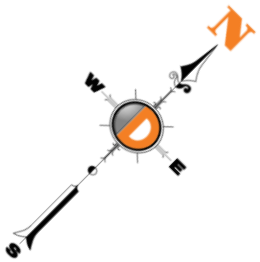




Proposed Warehouse
Traffic Impact Study
3783-99-001T

Figure 1

Site Location Map



Site

Site Driveway

Route 440

673 (828)

LEGEND

Existing Roadway

Proposed Roadway

AM (PM)

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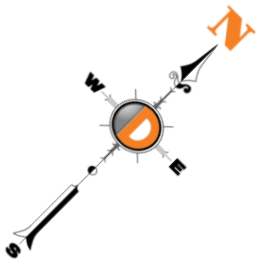
Figure 2

Existing Traffic Volumes



Site

Site Driveway

Route 440

976 (1424)

LEGEND

Existing Roadway

Proposed Roadway

AM (PM)

Proposed Warehouse
Traffic Impact Study
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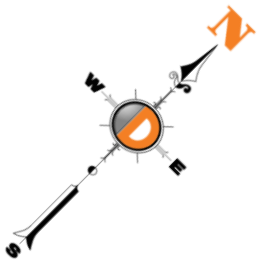
Figure 3

Adjusted Existing Traffic Volumes



Site

Site Driveway

Route 440

90 (318)

LEGEND

Existing Roadway

Proposed Roadway

AM (PM)

Proposed Warehouse
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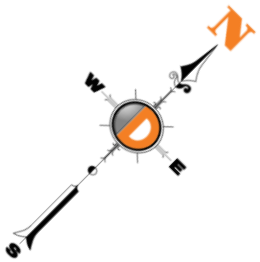
Figure 4

Adjacent Development Traffic Volumes



Site

Site Driveway

Route 440

← 1086 (1771)

LEGEND

Existing Roadway

Proposed Roadway

AM (PM)

Proposed Warehouse
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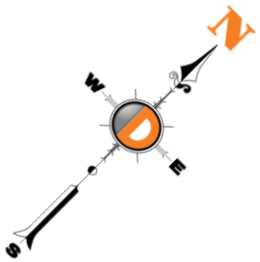
Figure 5

No Build Traffic Volumes



Site

Site Driveway

(100%)
0%

100% (0%)

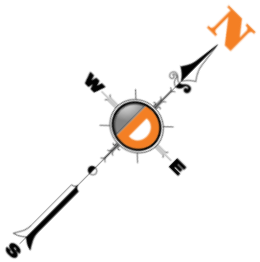
Route 440

LEGEND

Existing Roadway
Proposed Roadway
IN (OUT)

Figure 6

Percent Distribution - Cars



Site

Site Driveway

14 (47)

58 (31)

Route 440

LEGEND

Existing Roadway

Proposed Roadway

AM (PM)

Proposed Warehouse
Traffic Impact Study
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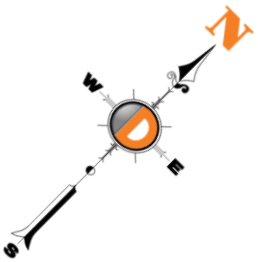
Figure 7

Site Generated Trips - Cars



Site

Site Driveway

(100%)

0%

100% (0%)

Route 440

LEGEND

Existing Roadway

Proposed Roadway

IN (OUT)

Proposed Warehouse
Traffic Impact Study
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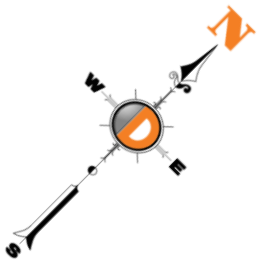
Figure 8

Percent Distribution - Trucks



Site

Site Driveway

(4)

1

6

(2)

Route 440

LEGEND

Existing Roadway

Proposed Roadway

AM (PM)

Proposed Warehouse
Traffic Impact Study
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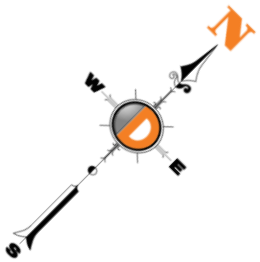
Figure 9

Site Generated Trips - Trucks



Site

Site Driveway

15 (51)

64 (33)

Route 440

LEGEND

Existing Roadway

Proposed Roadway

AM (PM)

Proposed Warehouse
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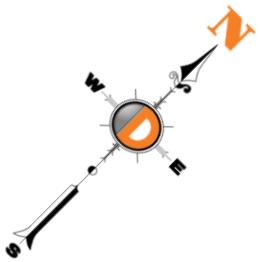
Figure 10

Total Site Generated Trips



Site

Site Driveway

15 (51)

64 (33)

1086 (1771)

Route 440

LEGEND

Existing Roadway

Proposed Roadway

AM (PM)

Proposed Warehouse
Traffic Impact Study
3783-99-001T

Figure 11

Build Traffic Volumes

Appendix B
Project Information

Dynamic Traffic, LLC

1904 Main Street, Lake Como, NJ 07719
245 Main Street - Suite #110, Chester, NJ 07930
732-681-0760

Locations: Route 440 SB Off Ramp
Cross Street: to Route 185 SB
Town/County: Jersey City/Hudson
Job #: 3783-99-001T

Site Code: 3001
Station ID:

Latitude: 0' 0.0000 Undefined

Start	05-Jul-21		Tue		Wed		Thu		Fri		Sat		Sun		Average	Da
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	*	*	*	*	206	54	221	53	212	71	160	139	124	79	185
12:15	*	*	*	*	*	172	44	172	55	213	32	162	73	137	51	171
12:30	*	*	*	*	*	172	30	206	47	232	41	166	52	115	42	178
12:45	*	*	*	*	*	180	38	178	32	230	34	166	44	132	37	177
01:00	*	*	*	*	*	225	28	193	28	204	18	170	39	137	28	186
01:15	*	*	*	*	*	174	19	186	28	254	32	170	32	**144**	28	186
01:30	*	*	*	*	*	176	18	190	28	200	42	178	34	**150**	30	179
01:45	*	*	*	*	*	194	14	191	26	180	20	169	144	**136**	51	174
02:00	*	*	*	*	*	207	20	217	7	200	23	162	40	**150**	22	187
02:15	*	*	*	*	*	222	18	**221**	22	228	27	**185**	26	134	23	**198**
02:30	*	*	*	*	*	200	18	**232**	18	193	24	**190**	25	126	21	**188**
02:45	*	*	*	*	*	191	28	**198**	30	222	27	**194**	26	134	28	**188**
03:00	*	*	*	*	*	210	28	**237**	24	215	26	**180**	24	136	26	**196**
03:15	*	*	*	*	*	205	18	191	24	206	18	165	20	122	20	178
03:30	*	*	*	*	*	184	24	214	19	222	18	164	13	142	18	185
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04:15	*	*	*	*	*	191	35	231	46	231	11	152	18	135	28	188
04:30	*	*	*	*	*	218	50	207	40	**238**	27	180	14	98	33	188
04:45	*	*	*	*	*	196	46	226	74	**234**	16	176	17	132	38	193
05:00	*	*	*	*	*	214	82	202	85	**226**	28	184	18	109	53	187
05:15	*	*	*	*	*	**223**	116	183	94	**243**	35	176	15	98	65	185
05:30	*	*	*	*	*	**217**	142	206	137	212	46	168	21	106	86	182
05:45	*	*	*	*	*	**230**	166	208	164	237	56	176	28	96	104	189
06:00	*	*	*	*	*	**218**	146	183	**184**	202	32	171	28	110	98	177
06:15	*	*	*	*	*	220	**178**	201	**194**	172	42	139	24	96	110	166
06:30	*	*	*	*	*	218	**226**	176	**226**	177	58	136	30	112	135	164
06:45	*	*	*	*	*	218	**210**	166	**190**	130	64	133	44	106	127	151
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07:15	*	*	*	*	*	193	169	168	182	94	68	108	39	102	114	133
07:30	*	*	*	*	*	206	198	174	203	86	83	104	46	96	132	133
07:45	*	*	*	*	*	164	166	143	189	103	72	132	55	70	120	122
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08:45	*	*	*	*	*	122	160	100	159	94	81	100	76	94	119	102
09:00	*	*	*	*	*	116	191	126	196	97	123	92	87	83	149	103
09:15	*	*	*	*	*	118	164	93	162	67	96	103	62	106	121	97
09:30	*	*	*	*	*	80	191	90	164	50	119	95	80	86	138	80
09:45	*	*	*	*	*	76	186	64	192	54	119	96	94	84	148	75
10:00	*	*	*	*	*	76	175	72	190	81	136	84	94	69	149	76
10:15	*	*	*	*	*	70	163	80	188	80	140	75	97	94	147	80
10:30	*	*	*	*	*	64	200	84	170	70	137	88	112	84	155	78
10:45	*	*	*	*	*	84	186	77	184	62	146	64	118	80	158	73
11:00	*	*	*	*	*	73	182	70	187	62	**122**	49	**116**	109	**152**	73
11:15	*	*	*	*	*	62	201	60	188	57	**143**	72	**124**	94	**164**	69
11:30	*	*	*	*	190	46	188	47	182	45	**169**	70	**128**	77	**171**	57
11:45	*	*	*	*	159	51	190	43	210	54	**178**	102	**119**	74	**171**	65
Total	0	0	0	0	349	7881	5443	7627	5483	7517	3139	6626	2680	5315	4185	6995
Day Total	0		0		8230		13070		13000		9765		7995		11180	
% Splits	0.0%	0.0%	0.0%	0.0%	4.2%	95.8 %	41.6 %	58.4 %	42.2 %	57.8 %	32.1 %	67.9 %	33.5 %	66.5 %	37.4 %	62.6%
Peak	-	-	-	-	-	05:15	06:15	02:15	06:00	04:30	11:00	02:15	11:00	01:15	11:00	02:15
Vol.	-	-	-	-	-	888	796	888	794	941	612	749	487	580	658	770
P.H.F.						0.965	0.881	0.937	0.878	0.968	0.860	0.965	0.951	0.967	0.962	0.972

Locations: Route 440 SB Off Ramp
Cross Street: to Route 185 SB
Town/County: Jersey City/Hudson
Job #: 3783-99-001T

Dynamic Traffic, LLC

1904 Main Street, Lake Como, NJ 07719
245 Main Street - Suite #110, Chester, NJ 07930
732-681-0760

Site Code: 3001
Station ID:

Latitude: 0' 0.0000 Undefined

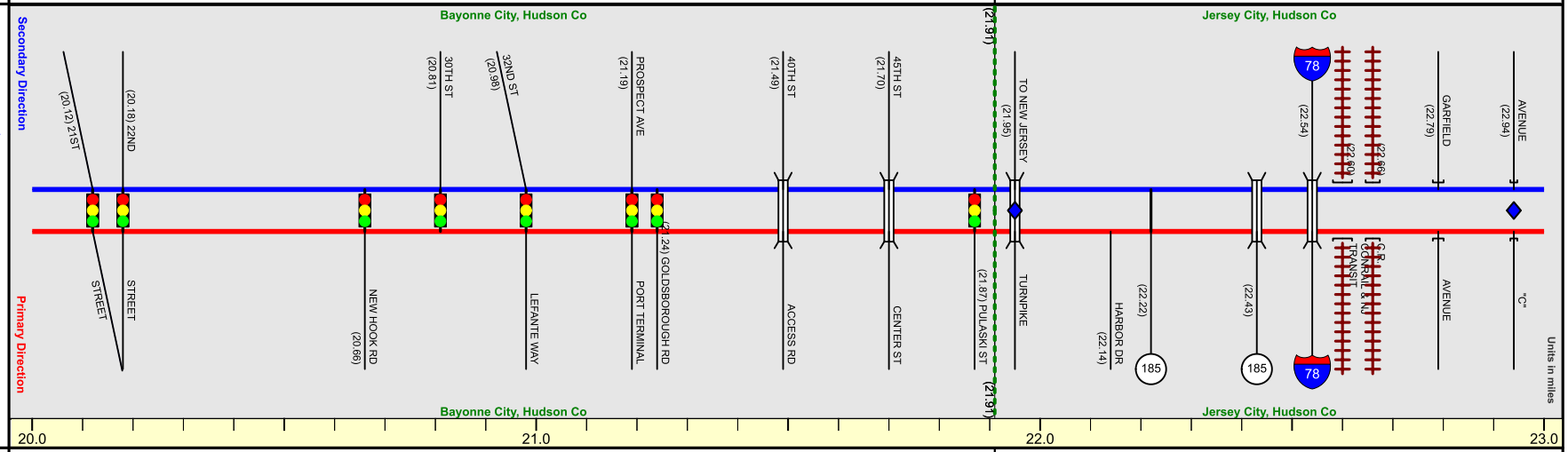
Start	12-Jul-21		Tue		Wed		Thu		Fri		Sat		Sun		Average	Da
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	71	148	41	196	54	188	59	*	*	*	*	*	*	*	56	177
12:15	59	182	38	210	34	210	43	*	*	*	*	*	*	*	44	201
12:30	52	144	44	226	36	158	44	*	*	*	*	*	*	*	44	176
12:45	72	139	38	179	30	208	32	*	*	*	*	*	*	*	43	175
01:00	49	158	27	182	19	186	34	*	*	*	*	*	*	*	32	175
01:15	61	155	27	214	22	240	19	*	*	*	*	*	*	*	32	203
01:30	41	162	28	228	16	199	17	*	*	*	*	*	*	*	26	196
01:45	35	180	20	185	16	204	15	*	*	*	*	*	*	*	22	190
02:00	32	148	19	136	9	195	26	*	*	*	*	*	*	*	22	160
02:15	29	**194**	15	223	15	192	16	*	*	*	*	*	*	*	19	203
02:30	20	**159**	16	145	13	228	21	*	*	*	*	*	*	*	18	177
02:45	24	**185**	18	148	20	209	26	*	*	*	*	*	*	*	22	181
03:00	19	**184**	26	148	20	186	26	*	*	*	*	*	*	*	23	173
03:15	14	158	14	140	20	231	20	*	*	*	*	*	*	*	17	176
03:30	13	156	25	144	25	220	34	*	*	*	*	*	*	*	24	173
03:45	17	160	28	191	30	200	34	*	*	*	*	*	*	*	27	184
04:00	20	196	25	216	34	200	29	*	*	*	*	*	*	*	27	204
04:15	16	150	33	214	50	222	56	*	*	*	*	*	*	*	39	195
04:30	12	162	54	226	53	198	58	*	*	*	*	*	*	*	44	195
04:45	22	168	56	210	56	191	78	*	*	*	*	*	*	*	53	190
05:00	19	158	76	212	96	**214**	58	*	*	*	*	*	*	*	62	195
05:15	22	158	104	213	104	**228**	121	*	*	*	*	*	*	*	88	**200**
05:30	35	146	130	214	170	**218**	154	*	*	*	*	*	*	*	122	**193**
05:45	44	170	154	**238**	169	**203**	206	*	*	*	*	*	*	*	143	**204**
06:00	31	167	144	**215**	**195**	207	**166**	*	*	*	*	*	*	*	134	**196**
06:15	42	148	**218**	**203**	**222**	218	**244**	*	*	*	*	*	*	*	182	190
06:30	51	166	**240**	**228**	**225**	190	**234**	*	*	*	*	*	*	*	188	195
06:45	47	156	**214**	166	**215**	227	**228**	*	*	*	*	*	*	*	176	183
07:00	51	150	**160**	162	141	197	158	*	*	*	*	*	*	*	128	170
07:15	45	125	200	156	166	182	237	*	*	*	*	*	*	*	162	154
07:30	50	139	232	124	230	175	202	*	*	*	*	*	*	*	178	146
07:45	58	137	215	115	231	179	186	*	*	*	*	*	*	*	172	144
08:00	62	139	178	125	170	163	166	*	*	*	*	*	*	*	144	142
08:15	68	125	185	114	143	138	182	*	*	*	*	*	*	*	144	126
08:30	64	102	165	88	201	124	190	*	*	*	*	*	*	*	155	105
08:45	76	95	182	94	178	126	180	*	*	*	*	*	*	*	154	105
09:00	90	98	182	79	189	122	166	*	*	*	*	*	*	*	157	100
09:15	90	124	197	93	190	104	176	*	*	*	*	*	*	*	163	107
09:30	108	96	152	61	163	92	182	*	*	*	*	*	*	*	151	83
09:45	99	96	208	78	190	93	216	*	*	*	*	*	*	*	178	89
10:00	116	100	206	66	170	105	178	*	*	*	*	*	*	*	**168**	90
10:15	110	96	187	74	186	74	196	*	*	*	*	*	*	*	**170**	81
10:30	134	86	160	70	193	76	174	*	*	*	*	*	*	*	**165**	77
10:45	122	75	201	66	208	60	206	*	*	*	*	*	*	*	**184**	67
11:00	**130**	58	157	60	188	85	195	*	*	*	*	*	*	*	168	68
11:15	**148**	64	221	49	184	61	6	*	*	*	*	*	*	*	140	58
11:30	**136**	60	204	47	184	52	*	*	*	*	*	*	*	*	175	53
11:45	**149**	37	164	48	212	51	*	*	*	*	*	*	*	*	175	45
Total	2875	6559	5628	7219	5685	8029	5294	0	0	0	0	0	0	0	4960	7270
Day Total		9434		12847		13714		5294		0		0		0		12230
% Splits	30.5 %	69.5 %	43.8 %	56.2 %	41.5 %	58.5 %	100.0 %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	40.6 %	59.4%
Peak	11:00	02:15	06:15	05:45	06:00	05:00	06:00	-	-	-	-	-	-	-	10:00	05:15
Vol.	563	722	832	884	857	863	872	-	-	-	-	-	-	-	687	793
P.H.F.	0.945	0.930	0.867	0.929	0.952	0.934	0.893								0.933	0.972

ADT ADT 11,668 AADT 11,668

NJ 440 (South to North)

Mile Posts: 20.000 - 23.000

Pavement	24	24	24
Shoulder	12	10	10
Number of Lanes	2		
Speed Limit	50	40	
Street Name	Joseph A Lefante Memorial Highway	NJ 440	



Street Name	Joseph A Lefante Memorial Highway	NJ 440	
Jurisdiction	N.J.D.O.T.		
Functional Class	Urban Principal Arterial		
Federal Aid - NHS Sy	NHS	STRAHNET Conn.	NHS
Control Section	0921	0913	
Speed Limit	50	40	
Number of Lanes	2 / 3	2 / 1	2
Med. Type	Curbed	Positive	
Med. Width	12	VAR	
Pavement	24	12	24
Shoulder	12 / 14	10	10
Traffic Volume	33,074 (2017)		
Traffic Sta. ID	3-1-020		
Structure No.	0913151 / 1505 (DMS) 0913152 / N00353F	0922150 / 0913158 0913153 / 0913160 / 0913157	
Enlarged Views			

SRI = 00000440__

Date last inventoried: May 2016

Page Created: June, 2020

Appendix C
Capacity Analysis

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	15	0	0	1086	64
Future Vol, veh/h	0	15	0	0	1086	64
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-5	-	-	0	-2	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	2	0	0	2	2
Mvmt Flow	0	17	0	0	1207	71

Major/Minor	Minor2			Major2	
Conflicting Flow All	-	604		-	0
Stage 1	-	-		-	-
Stage 2	-	-		-	-
Critical Hdwy	-	6.44		-	-
Critical Hdwy Stg 1	-	-		-	-
Critical Hdwy Stg 2	-	-		-	-
Follow-up Hdwy	-	3.32		-	-
Pot Cap-1 Maneuver	0	480		-	-
Stage 1	0	-		-	-
Stage 2	0	-		-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	-	480		-	-
Mov Cap-2 Maneuver	-	-		-	-
Stage 1	-	-		-	-
Stage 2	-	-		-	-

Approach	EB	SB
HCM Control Delay, s	12.8	0
HCM LOS	B	

Minor Lane/Major Mvmt	EBLn1	SBT	SBR
Capacity (veh/h)	480	-	-
HCM Lane V/C Ratio	0.035	-	-
HCM Control Delay (s)	12.8	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	51	0	0	1771	33
Future Vol, veh/h	0	51	0	0	1771	33
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-5	-	-	0	-2	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	2	0	0	2	2
Mvmt Flow	0	53	0	0	1826	34

Major/Minor	Minor2			Major2	
Conflicting Flow All	-	913		-	0
Stage 1	-	-		-	-
Stage 2	-	-		-	-
Critical Hdwy	-	6.44		-	-
Critical Hdwy Stg 1	-	-		-	-
Critical Hdwy Stg 2	-	-		-	-
Follow-up Hdwy	-	3.32		-	-
Pot Cap-1 Maneuver	0	313		-	-
Stage 1	0	-		-	-
Stage 2	0	-		-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	-	313		-	-
Mov Cap-2 Maneuver	-	-		-	-
Stage 1	-	-		-	-
Stage 2	-	-		-	-

Approach	EB	SB
HCM Control Delay, s	18.8	0
HCM LOS	C	

Minor Lane/Major Mvmt	EBLn1	SBT	SBR
Capacity (veh/h)	313	-	-
HCM Lane V/C Ratio	0.168	-	-
HCM Control Delay (s)	18.8	-	-
HCM Lane LOS	C	-	-
HCM 95th %tile Q(veh)	0.6	-	-