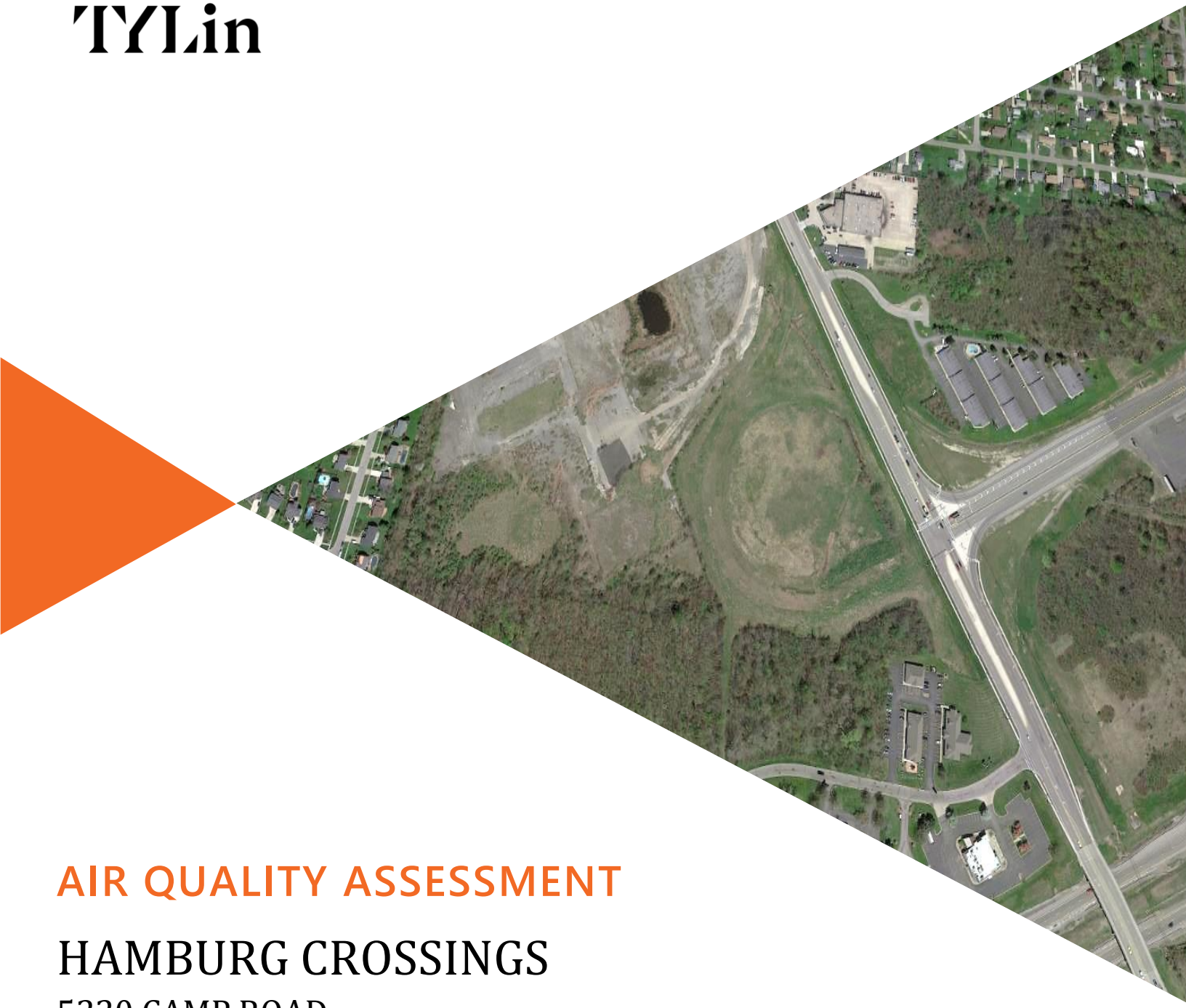
TYLin



AIR QUALITY ASSESSMENT

HAMBURG CROSSINGS

5220 CAMP ROAD

Prepared for:	**Benderson Development**
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TYLIN Project No.	**3012.0100247.000**
Delivery Date:	**January, 30 2023**

AIR QUALITY ASSESSMENT
Hamburg Crossings
5220 Camp Road
Hamburg, Erie County, New York

1. Introduction

Benderson Development is proposing to construct five warehouse buildings totaling 845,454 square feet on the vacant parcel of land at 5220 Camp Road in the Town of Hamburg. The project site is located on 79.91 acres along the southwest side of Camp Road between Interstate 90 and NYS Route 20. The project is comprised of five warehouse buildings ranging in size from 108,000 square feet to 351,699 square feet and replaces the 425,883 square foot retail development retail development that was previously approved for the parcel. Consistent with the retail development, two full access driveways are proposed for the development. The northernmost driveway is proposed on Camp Road and a second driveway is proposed as a connection to Commerce Street.

A location map and site plan dated June, 2022 provided by Carmina Wood Design are included in Appendix A for the proposed warehouse development. A site plan for the previously approved retail development is included in Appendix B.

This assessment examines the potential for significant adverse air quality impacts from the proposed project within the Town of Hamburg. Air quality impacts can be either direct or indirect. Direct impacts stem from emissions generated by stationary sources at a projected or potential development site, such as emissions from fuel burned on site for heating, ventilation, and air conditioning (HVAC) systems. Indirect impacts are caused by potential emissions due to mobile sources/vehicles generated by the development. This section presents the results of the air quality screening analysis that was performed for the proposed project and provides a comparison against the previously proposed retail development that was proposed for this parcel of land. As discussed below, the proposed project would not result in any significant adverse air quality impacts.

Pollutants for Analysis

Ambient air quality is affected by air pollutants produced by both motor vehicles and stationary sources. Emissions from motor vehicles are referred to as mobile source emissions, while emissions from fixed facilities are referred to as stationary source emissions. Typically, ambient concentrations of carbon monoxide (CO) and lead are predominantly influenced by mobile source emissions. Emissions of sulfur dioxide (SO_2) are associated mainly with stationary sources, but diesel-powered vehicles, primarily heavy-duty trucks and buses, also contribute these emissions. Particulate matter (PM) is emitted from both stationary and mobile sources. Fine particulate matter is also formed when emissions of nitric oxide (NOx), sulfur oxides (SOx), ammonia, organic compounds, and other gases react in the atmosphere. Ozone is formed in the atmosphere by complex

photochemical processes that include NOx and volatile organic compounds (VOCs), emitted mainly from industrial processes and mobile sources.

CARBON MONOXIDE

CO, a colorless and odorless gas, is produced in the urban environment primarily by the incomplete combustion of gasoline and other fossil fuels. In urban areas, approximately 80 to 90 percent of CO emissions are from motor vehicles. CO concentrations can vary greatly over relatively short distances. Elevated concentrations are usually limited to locations near crowded intersections, heavily traveled and congested roadways, parking lots, and garages. Consequently, CO concentrations must be predicted on a local, or microscale, basis.

Based on a Traffic Impact Study (TIS) performed by SRF Associates, the proposed development is anticipated to generate 168 entering trips and 48 exiting trips during the AM peak hour and 63 entering and 167 exiting trips during the PM peak hour.

The proposed warehouse is anticipated to have a maximum of 167 exiting trucks leaving the site by way of a signalized intersection and a stop-controlled access drive. This could result in localized increases in CO levels. Therefore, a mobile source screening analysis was performed to determine if a more detailed mobile source analysis may be required.

OZONE

Ozone is formed through a series of reactions that take place in the atmosphere in the presence of sunlight. Because the reactions are slow, and occur as the pollutants are diffusing downwind, elevated ozone levels are often found many miles from sources of the precursor pollutants. The effects from mobile sources are therefore generally examined on a regional basis, together with the emission of these pollutants from stationary sources. The change in regional mobile source emissions of these pollutants is related to the total number of vehicle trips and the vehicle miles traveled throughout the New York area. The proposed project would not have a significant effect on the overall volume of vehicular travel in the area. Therefore, it would not have any measurable impact on regional ozone levels. An analysis of project-related impacts from mobile sources for these pollutants was therefore not warranted.

LEAD

Lead emissions in air are principally associated with industrial sources and motor vehicles that use gasoline containing lead additives. Most U.S. vehicles produced since 1975, and all produced after 1980, are designed to use unleaded fuel. As these newer vehicles have replaced the older ones, motor vehicle related lead emissions have decreased. As a result, ambient concentrations of lead have declined significantly. Nationally, the average measured atmospheric lead level in 1985 was only about one–quarter the level in 1975.

In 1985, EPA announced new rules drastically reducing the amount of lead permitted in leaded gasoline. The maximum allowable lead level in leaded gasoline was reduced from the previous limit of 1.1 to 0.5 grams per gallon effective July 1, 1985, and to 0.1 grams per gallon effective January 1, 1986. Monitoring results indicate that this action has been effective in significantly reducing atmospheric lead levels. Even at locations in the New York City area where traffic volumes are very high, atmospheric lead concentrations are far below the national standard of 1.5 micrograms per cubic meter (3–month average).

No significant sources of lead are associated with the proposed project, and, therefore, analysis was not warranted.

RESPIRABLE PARTICULATE MATTER—$PM_{2.5}$

Particulate matter (PM) is a broad class of air pollutants that includes discrete particles of a wide range of sizes and chemical compositions, as either liquid droplets (aerosols) or solids suspended in the atmosphere. The constituents of PM are both numerous and varied, and they are emitted from a wide variety of sources (both natural and anthropogenic). Natural sources include the condensed and reacted forms of natural organic vapors: salt particles resulting from the evaporation of sea spray; wind–borne pollen, fungi, molds, algae, yeasts, rusts, bacteria, and material from live and decaying plant and animal life; particles eroded from beaches, soil, and rock; and particles emitted from volcanic and geothermal eruptions and from forest fires. Major anthropogenic sources include the combustion of fossil fuels (e.g., vehicular exhaust, power generation, boilers, engines and home heating), chemical and manufacturing processes, all types of construction, agricultural activities, as well as wood–burning stoves and fireplaces. Particulate matter also acts as a substrate for the adsorption of other pollutants, often toxic and some likely carcinogenic compounds.

Fine particulate matter, or $PM_{2.5}$, are fine particles with an aerodynamic diameter of less than or equal to 2.5 micrometers. This smaller fraction of the particle size range has the ability to reach the lower regions of the respiratory tract, delivering with it other compounds that adsorbed to the surfaces of the particles, and is extremely persistent in the atmosphere. $PM_{2.5}$ is mainly derived from combustion material that has volatilized and then condensed to form primary particulate matter (often soon after the release from an exhaust pipe or stack) or from precursor gases reacting in the atmosphere to form secondary particulate matter. Diesel–powered vehicles, especially heavy-duty trucks and buses, are a significant source of respirable PM; PM concentrations may, consequently, be locally elevated near roadways with high volumes of heavy diesel–powered vehicles.

SULFUR DIOXIDE

Sulfur dioxide (SO_2) emissions are primarily associated with the combustion of sulfur–containing fuels: oil and coal.

Due to the federal restrictions on the sulfur content in diesel fuel for on–road vehicles, no significant quantities are emitted from vehicular sources. This includes vehicles utilized during construction. Vehicular sources of SO_2 are not significant and therefore, an analysis of this pollutant from mobile sources was not warranted.

2. Methodology for Predicting Pollutant Concentrations

An assessment of the potential air quality effects of the proposed project on CO concentrations that would result from queuing vehicles within the proposed project site was performed following the procedures outlined in the New York State Department of Transportation (NYSDOT) Environmental Procedures Manual (EPM), 2021. The study area corresponds to that of the traffic analysis, described in Chapter I.I, for the CO microscale analysis. The screening criteria described below were applied to the traffic analysis results for the 2028 Full Build analysis year.

CO SCREENING CRITERIA

Screening criteria described in the TEM were employed to determine whether the proposed project requires a detailed air quality analysis. Before undertaking a detailed microscale modeling analysis of CO concentrations within the site, the screening criteria first determines whether the information from the traffic capacity analysis demonstrates that there is the potential for either significant impact from incremental traffic or from elevated air quality concentrations. The following multi-step procedure is suggested in the EPM is to determine if there is the potential for CO impacts from the proposed project:

- Level-of-Service (LOS) Screening: If the Build condition LOS is A, B, or C, no air quality analysis is required. For intersections operating at LOS D or worse, proceed to Capture Criteria.

- Capture Criteria: If the Build condition LOS is at D, E, or F, then the following Capture Criteria should be applied at each intersection or corridor to determine if an air quality analysis may be warranted:

    i. A 10 percent or more reduction in the source-to-receptor distance (e.g., street or highway widening); or
    ii. A 10 percent or more increase in traffic volume on affected roadways for the Build year; or
    iii. A 10 percent or more increase in vehicle emissions for the Build year using emission factors provided in the EPM; or
    iv. Any increase in the number of queued lanes for the Build year (this applies to intersections). It is not expected that intersections in the Build condition controlled by stop signs would require an air quality analysis; or

v. A 20 percent reduction in speed when future build average speeds are below 30 miles per hour (mph).

If the project does not meet the above criteria, a microscale analysis is not required. If the project is located within a half mile of any intersections evaluated in the CO SIP Attainment Demonstration, more stringent screening criteria are applied at project affected intersections. Should any one of the above criteria be met in addition to the LOS screening, then the additional traffic volume and emission factor criteria would need to be checked using specific volume thresholds established in the EPM.

Both the above Capture Criteria and Volume Threshold Screening were developed by the NYSDOT to be very conservative air quality estimates based on worst-case assumptions. The EPM states that if the project-related traffic volumes are below the volume threshold criteria or the Build condition is controlled by stop signs, then a microscale air quality analysis is unnecessary even if the other Capture Criteria are met for a LOS 'D' or worse location, since a violation of the NAAQS would be extremely unlikely.

3. Existing Conditions

Monitored ambient concentrations of CO, SO_2, particulate matter ($PM_{2.5}$), and ozone for the area are shown in **Table 1**. These values represent the most recent monitored data available that have been published by United States Department of Environmental Conservation for this location. Values of Carbon Monoxide, Sulfur Dioxide, Ozone, and Particulate Matter <2.5 ($PM_{2.5}$) were recorded at the monitoring stations in the City of Buffalo and in Amherst, Erie County, which are the closest monitoring stations to the site. The air quality values taken in the City of Buffalo are anticipated to be more than air quality values in the Town of Amherst, which has a smaller population of people. According to the 2020 Census, the population of the City of Buffalo was 278,349 while the Town of Amherst's population was 129,595 in 2020 (Source: United States Census Bureau).

There were no monitored violations of the NAAQS for the pollutants at these sites.

Table 1 identifies the monitored ambient air quality at the stations closest to the project site.

Table 1
Representative Monitored Ambient Air Quality Data

Pollutants	Location	Units	Period	Concentrations			Exceeds New York State and Federal Standards
				Mean	Highest	Second Highest	
CO	36-029-0005 Buffalo	ppm	1-hour average	-	1.10	1.10	0
			8-hour average	-	0.8	0.8	0
SO_2	36-029-0005 Buffalo	ppb	12-month average	0.32	-	-	0
			3-year Average	14.23	16.4	13.4	0
O_3	36-029-0001 Amherst	ppm	4th highest daily max. 8-hour average	0.066	0.068	0.066	0
Respirable Particulates ($PM_{2.5}$)	36-029-0005 Buffalo Filter	$\mu g/m^3$	3-year Annual	7.0	7.4	7.0	0
			98th-percentile average – 3 year	17.6	18.7	17.2	0
NO_2	36-029-0005 Buffalo	ppb	12-month average	8.24	-	-	0

Source: New York State Department of Environmental Conservation

*Lead monitoring is only done in New York City area. The last lead test performed in 2010 at the Rochester monitoring station 2701-22 had results of 0.00225 $\mu g/m^3$

The National Ambient Air Quality Standards (NAAQS) for Carbon Monoxide (CO) are a 1-hour average concentration of 35 parts per million (ppm) which cannot be exceeded more than once per year and an 8-hour average concentration of 9 ppm which cannot be exceeded more than once per year. Maximum CO values monitored in Buffalo, New York in 2021 are far below NAAQS concentrations, with the highest value at 1.10 ppm (1-hour average) and 0.8 ppm (8-hour average).

The NAAQS for Sulfur Dioxide are established that the 12-month average is not to exceed 500 ppb (changed from 30 ppb in 2010) and that the 99th percentile for the last 3 years is not to exceed 75 ppb. The 12-month average at the Buffalo site was 0.32 ppb, which is well below the 500 ppb maximum and the 99th percentile for the past 3 years was 14.23 ppb; below the 75 ppb not to be exceeded.

The NAAQS for Ozone are the 4th highest daily maximum 8-hour average cannot exceed an average of 0.070 ppm during the last 3-years. This value for the Amherst site is 0.068 ppm, which is below the maximum level.

The NAAQS for $PM_{2.5}$ are the average of last 3-years annual means not to exceed 15 µg/m^3 and an average 98th percentile for the last 3-years not to exceed 35 µg/m^3. For the Buffalo site, the average annual mean of the last 3-years is 7.0 µg/m^3 and the average 98th percentile for the last 3-years is 17.6 µg/m^3. These concentrations are well below the maximum allowed levels.

The NAAQS for Nitrogen Dioxide specifies that the 12-month average cannot exceed 53 ppb. For the Buffalo site, the average annual mean is 8.24 ppb, well below the 53 ppb maximum.

Air Quality reports for Region 9 are included in Appendix C

4. No Build Conditions

For the 2028 Background No Build year identified for the project site, no significant changes in air quality are expected to occur in Erie County, as pollutant concentrations are expected to remain in compliance with the NAAQS. In this scenario, the project site would remain unchanged and there would be no significant changes in air quality conditions at or near the project site.

5. Potential Impacts

Mobile Source Air Quality Screening Results

The area roadway intersections were reviewed based on NYSDOT's TEM criteria for determining locations that may warrant a CO microscale air quality analysis. The screening analysis examined the level of Service (LOS) and projected volume increase at the main site driveway and Camp Road and at the secondary site driveway at Camp Road and Commerce Place. The proposed warehouse development is the focus of this study and the previously approved retail development is included for the purpose of a comparison. As described below, the results of the screening analysis show that the proposed warehouse project would not require a detailed microscale air quality analysis.

LOS Screening Analysis

The LOS analysis is one criteria used as a screening tool to determine the potential need for a microscale CO air quality analysis. This screening criteria was first applied to identify whether the driveways are anticipated to operate at a LOS 'D' or worse.

Warehouse Development (Proposed)

As part of the TIS prepared for the warehouse development, a capacity analysis was performed and included analysis of the two project access points on Camp Road for the AM and PM peak hour periods with mitigation recommendations for the 2028 Full Build condition. Installation of a new traffic signal is recommended for the northernmost driveway at Camp Road and is projected to operate at an overall LOS 'A' during the AM and PM peak hours with the signal in place for the 2028 Future Build condition. Each approach is projected to operate at a LOS 'C' or better for both peak hours studied. The secondary access point from Commerce Place onto Camp Road was also included in the capacity analysis. The intersection is unsignalized and the eastbound

approach is controlled by a stop sign. Based on the projected 2028 build conditions, the eastbound approach is projected to operate at a LOS 'D' during the AM peak hour and is projected to fail during the PM peak hour. Each of the approaches are expected to operate at similar levels of service without the development in place. As such, volume added by the development does not present a change to the intersection's LOS as compared to the LOS without the development in place.

Retail Development (Previously Approved)

To provide a comparison of the LOS projected for the proposed warehouse development with the previously approved retail development, capacity analysis from 2009 TIS for retail development is presented below. Traffic for the development was analyzed during the PM and Saturday peak hours. Similar to the warehouse development that is currently proposed for the parcel, the retail development also utilized two access points on Camp Road; one near the north end of the site on Camp Road and another onto Commerce Place. With mitigation measures in place as described in the TIS for the 2011 Full Build condition with Alternative 2C, the signalized intersection driveway at Camp Road was projected to operate at an overall LOS 'C' for the PM and Saturday peak hours. Apart from the eastbound left turn lane (from the development) expected to operate at a LOS 'D' and the northbound left turn lane (from Camp Road) expected to operate at a LOS 'E,' each approach is projected to operate at a LOS 'C' or better for both peak hours. A new traffic signal was also proposed as part of the mitigation for the intersection of Commerce Place and Camp Road. The intersection was projected to operate at an overall LOS 'C' for the PM peak hour and an overall LOS 'C' for the Saturday peak hour. Several of the intersection approach movements are projected to operate at a LOS 'D' for the peak hours analyzed. If the focus of this study was an assessment the previously approved retail development, the intersections would have failed the LOS screening for the microscale analysis necessitating further investigation. This is primarily a result of the high volumes that were projected for the previously approved retail development.

For this study, all approaches for the warehouse driveway access at Camp Road is anticipated to operate at a LOS 'C' or better and no significant change is projected for the intersection of Commerce Place and Camp Road as a result of the proposed warehouse development. Therefore, a detailed CO microscale air quality analysis was not warranted at these locations.

Volume Threshold Screening

The volume threshold screening per the NYSDOT Environmental Procedures Manual for a two-way free flow site (with no traffic signal) is 8000 vph. Approximately 69 trucks (54 entering/15 exiting) are projected to travel along Commerce Place during the AM peak hour and approximately 74 trucks (20 entering/54 exiting) are projected to travel along Commerce Place during the PM peak hour.

The capture criteria listed above was not triggered; therefore a volume threshold screening analysis was not performed.

As discussed above, the results of screening analysis based on NYSDOT's EPM employed to determine whether the proposed project requires an air quality analysis, determined that detailed microscale air quality analysis is not required. Therefore, no significant adverse air quality impacts would be expected to occur as a result of the proposed project.

Consistency with the New York State Air Quality Implementation Plan

The proposed project is not expected to cause any new violations of air quality standards or exacerbate any existing violations for the projected 2028 Build conditions. Therefore, the proposed project would not have a significant adverse impact on local air quality and would be considered consistent with the requirements of the New York SIP. As a result, no mitigation measures are warranted.

6. Mitigation

No mitigation is proposed since the project is not anticipated to be an impact to air quality and the existing air quality levels exceed New York State and Federal Air Quality Standards.

APPENDICIES

Appendix A – Project Site Plan & Traffic Figure

Appendix B – Retail Development Site Plan & Traffic Figure

Appendix C - Air Quality Report, NYSDEC Region 9

REFERENCES

1. "New York State Ambient Air Quality Report for 2021," New York State Department of Environmental Conservation,

2. "Ambient Air Quality Standards, New York State and Federal Standards," New York State Department of Environmental Conservation,

3. "Idling Vehicle Emissions for Passenger Cars, Light-Duty Trucks, and Heavy-Duty Trucks," October, 2008, United States Environmental Protection Agency

Appendix A

Project Site Plan
&
Traffic Figures

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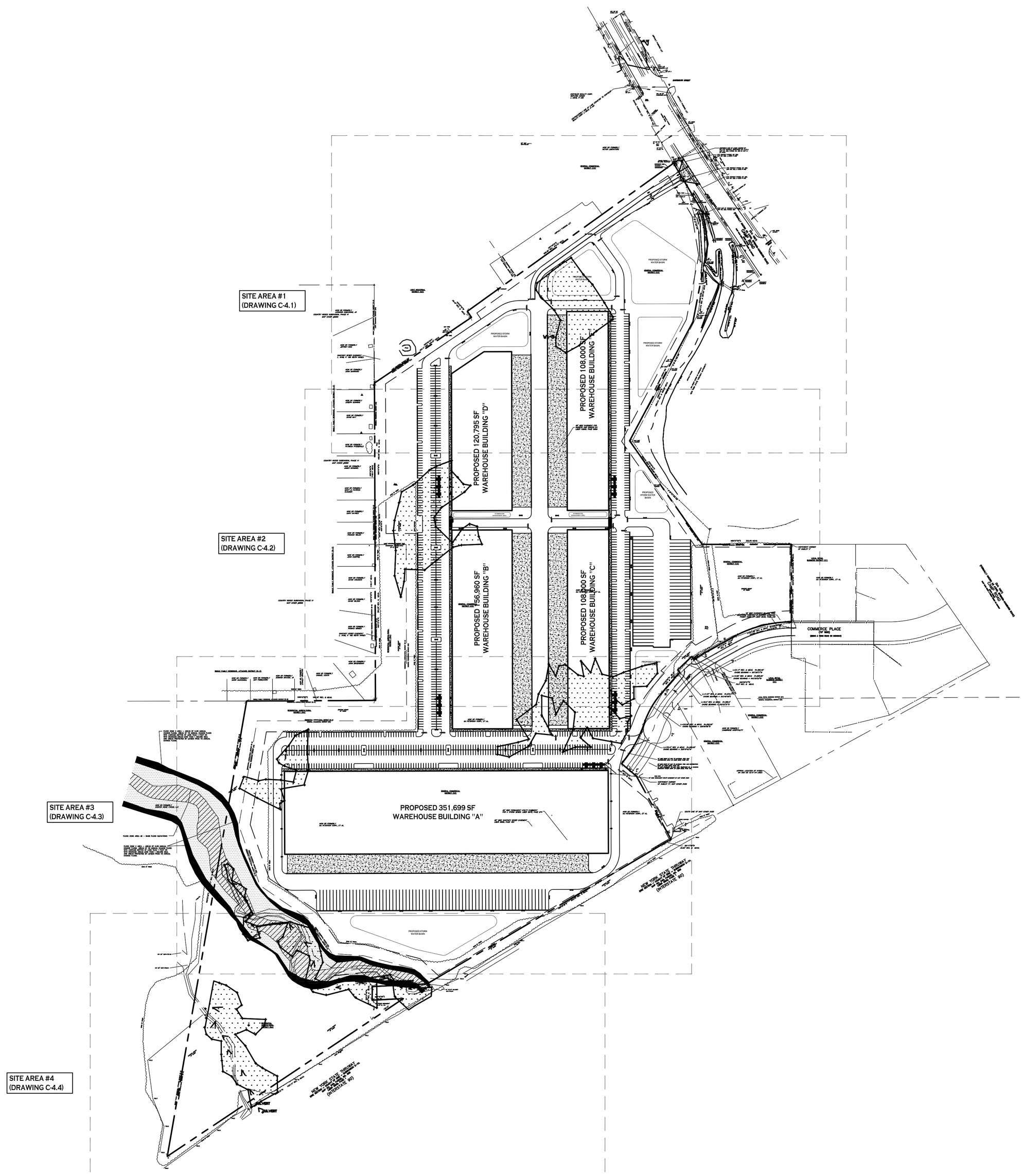

SITE DATA

SITE AREA = 79.91 ACRES
ZONED: C2 - GENERAL COMMERCIAL DISTRICT
BUILDINGS: 351,699 G.S.F. WAREHOUSE BLDG "A", 156,960 G.S.F. WAREHOUSE BLDG "B", 108,000 G.S.F. WAREHOUSE BLDG "C", 120,795 G.S.F. WAREHOUSE BLDG "D", & 108,000 G.S.F. WAREHOUSE BLDG "E"

SETBACKS - BUILDING	REQUIRED	PROVIDED
FRONT	40 FT	00.00 FT
SIDE	5 FT	> 5 FT
SIDE ABUTTING RESIDENTIAL	20 FT, OR HT. OF BLDG	40 FT MIN.
SIDE (VEHICULAR INGRESS OR EGRESS):	12 FT	> 12 FT
SIDE (VEHICULAR INGRESS AND EGRESS):	25 FT	25 FT MIN.
REAR	10 FT	> 10 FT
REAR ABUTTING RESIDENTIAL	20 FT, OR HT. OF BLDG	40 FT MIN.
SETBACKS - PARKING		
ANY STREET LINE	35 FT	> 35 FT
OTHER PROPERTY LINES	5 FT	> 5 FT
ANY RESIDENTIAL DISTRICT BOUNDARY	10 FT	> 10 FT
PARKING		
# OF SPACES	PER PLANNING BOARD	00
PARKING SPACE SIZE	9' x 18'	9' x 18'
MAX. LOT COVERAGE	85% MAX.	00.0%
MAX. BUILDING HEIGHT	35 FT MAX.	< 35 FT
LOT WIDTH AT THE BLDG LINE	100 FT MIN.	00.0 FT
LANDSCAPING		
INTERIOR PARKING AREA (10%, 41 OR MORE SPACES)	10% (0.15 AC)	00% (0.0AC)
TOTAL SITE	5% (4.0 AC)	00% (0.0AC)

N

OVERALL SITE PLAN

SCALE: 1"=200'

NOTE: BOUNDARY AND TOPOGRAPHIC INFORMATION PROVIDED BY OTHERS. CARMINA WOOD MORRIS, D.P.C. ASSUMES NO RESPONSIBILITY FOR ITS ACCURACY.

200' 200 0 200 400Ft.

CARMINAWOOD
DESIGN

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Phone: (716) 842-3165

111 Bain Street, Suite 332
Greensboro, North Carolina 27406
Phone: (336) 937-9009

Hamburg Crossings

5220 Camp Road
Hamburg, NY 14075
BDC Property ID # 4148

REVISIONS:

No.	Description	Date

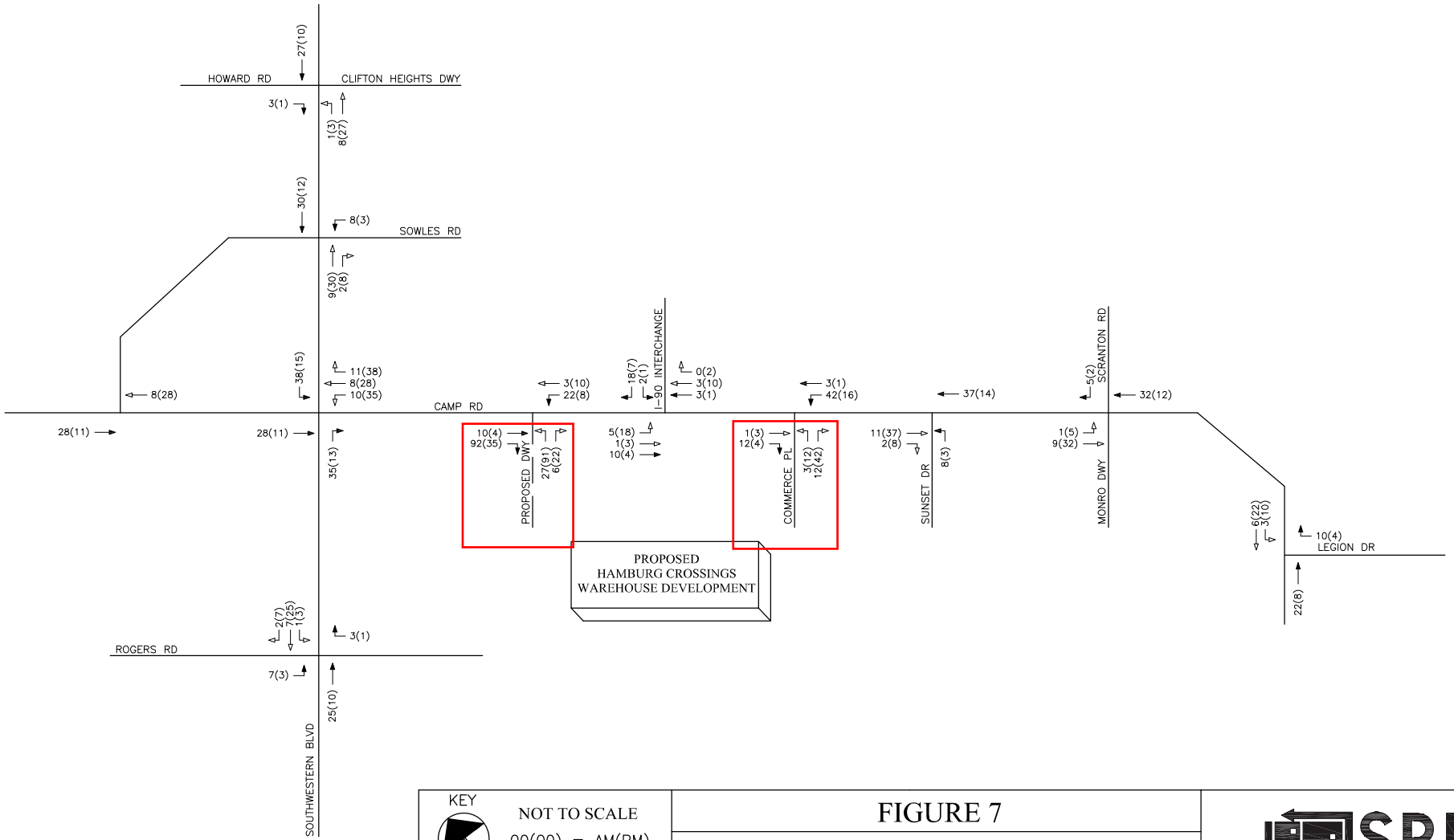
DRAWING NAME:
Overall
Site Plan

Date: 06/2022
Drawn By: JPB
Scale: As Noted

DRAWING NO.

C-4.0

Project No: 21.331



KEY

NOT TO SCALE

00(00) = AM(PM)

N

→ = ENTERING TRIPS

⇨ = EXITING TRIPS

FIGURE 7

SITE GENERATED TRIPS

PROPOSED HAMBURG CROSSINGS WAREHOUSE DEVELOPMENT
TOWN OF HAMBURG, NY

SRF ASSOCIATES
Transportation Planning / Engineering / Design
www.srfa.net / (585) 272-4660

PROJECT NO: 41114

Appendix B

Retail Development
Site Plan

TYLin

N

SHEET LEGEND

SCALE: NTS

SITE DATA - PHASE 1		
SITE AREA = 40.81 ACRES PHASE 1 (79.94 ACRES OVERALL)		
ZONED: C-2 (GENERAL COMMERCIAL DISTRICT)		
BUILDING AREA: 425,883 G.S.F. RETAIL		
SETBACKS - BUILDING	REQUIRED	PROVIDED
FRONT:	40 FT	40.0 FT MIN.
SIDE (ABUTTING NON-RESIDENTIAL):	*	39.67 FT MIN.
REAR (ABUTTING NON-RESIDENTIAL):	10 FT	N/A
SIDE (ABUTTING RESIDENTIAL):	**	N/A
REAR (ABUTTING RESIDENTIAL):	**	186.65 FT MIN.
SETBACKS - PARKING		
FRONT:	35 FT	> 35 FT
SIDE:	10 FT	> 10 FT
REAR:	10 FT	> 10 FT
GREENSPACE		
TOTAL SITE :	NONE	9.21AC
INTERIOR:	5%	1.69 AC (10%)
BUILDING HEIGHT:	35 FT	35 FT
PARKING	2,130	1,658
SEE CALCULATION BELOW		

* - NONE, EXCEPT THAT WHERE A SIDE YARD IS PROVIDED IT SHALL BE NO LESS THAN 5 FEET, WHERE A SIDE YARD IS USED FOR EITHER VEHICULAR INGRESS OR EGRESS, IT SHALL BE AT LEAST 12 FEET, WHERE A SIDE YARD IS USED FOR VEHICLE INGRESS AND EGRESS, IT SHALL NOT BE LESS THAN 25 FEET.

** - WHERE A SIDE OR REAR YARD ABUTS ANY R DISTRICT BOUNDARY, THE REQUIRED YARD SHALL BE NOT LESS THAN 20 FEET OR THE HEIGHT OF THE PRINCIPAL BUILDING, WHICHEVER IS GREATER

PARKING CALCULATION:
REGIONAL SHOPPING CENTERS:
REQ'D PARKING = 1 SPACE / 200 GROSS LEASABLE AREA
= 425,883 / 200 = 2,130 SPACES

NOTES:

1. ALL RADII SHALL BE 3'-0" UNLESS OTHERWISE NOTED.
2. ALL DISTURBED AREAS: SHALL HAVE 4" MIN. OF TOPSOIL AND SEED.
3. ALL DIMENSIONS FROM PROPERTY LINES SHALL BE MEASURED PERPENDICULAR TO THE PROPERTY LINE.
4. CENTER ENTRANCE SIDEWALKS ON DOOR OPENINGS.
5. BUILDING DIMENSIONS ARE APPROXIMATE, REFER TO ARCHITECTURAL DRAWINGS FOR LAYOUT DIMENSIONS.

GENERAL NOTES:

1. INSTALL ALL MATERIALS TO MANUFACTURER'S RECOMMENDATIONS AND BEST STANDARDS OF TRADE INVOLVED.
2. SUBSTITUTIONS SHALL BE MADE ONLY WITH OWNER'S APPROVAL AND BE OF EQUIVALENT QUALITY TO WHAT IS SPECIFIED.
3. WORK SHALL BE COMPLETED IN STRICT ACCORDANCE WITH ALL LOCAL CODES AND OSHA SAFETY RULES AND REGULATIONS.
4. VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS AT THE SITE. NOTIFY OWNER & ENGINEER OF DISCREPANCIES IN CONDITIONS SHOWN ON DRAWINGS PRIOR TO PROCEEDING WITH THE WORK.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF ANY EXISTING STRUCTURES TO REMAIN AND ANY FINISH MATERIAL INSTALLED WHILE WORKING ON OTHER COMPONENTS.
6. CONTRACTOR SHALL KEEP JOB FREE OF DEBRIS AND MAKE FINAL CLEANUP TO SATISFACTION OF OWNER.
7. CONTRACTOR SHALL ASCERTAIN THE LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION SO THAT THIS WORK WILL NOT DISTURB EXISTING LINES AND/OR INSTALLATIONS. COORDINATE ALL WORK WITH THE APPLICABLE UTILITY COMPANIES.
8. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS NECESSARY TO PERFORM THE WORK.

SITE LEGEND

- APPROXIMATE PROPERTY LINE
- PROPOSED CURB
- PROPOSED SIDEWALK / CONCRETE PAD
- NUMBER OF PARKING SPACES (27)
- PROPOSED SIGN
- PROPOSED LIGHT POLE W/ SINGLE FIXTURE
- PROPOSED LIGHT POLE W/ DOUBLE FIXTURE
- PROPOSED LIGHT POLE W/ TRIPLE FIXTURE
- PROPOSED WALL MOUNTED FIXTURE
- PROPOSED HEAVY DUTY ASPHALT
- PROPOSED PHASE 1 WORK LIMIT LINE
- TOWN OF HAMBURG CONSERVATION EASEMENT
- AREA DEEDED TO THE TOWN OF HAMBURG

N

SITE PLAN

SCALE: 1"=100'

NOTE: BOUNDARY AND TOPOGRAPHIC INFORMATION PROVIDED BY OTHERS, CARMINA WOOD MORRIS, P.C. ASSUMES NO RESPONSIBILITY FOR ITS ACCURACY.

100' 100 0 100 200FT.

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487 Main Street Suite 600
Buffalo, New York 14203
P 716.842.3165
F 716.842.0263

REVISIONS:

No.	Description	Date
1	Rev. Per Hamburg Eng. Dept.	1/7/10

PROJECT NAME:
Civil Plans for
Hamburg Crossings - Phase 1
Camp Road
Town of Hamburg, New York
Property # 4148

Date: 7/07
Drawn by: C. Wood
Scale: As Noted

DRAWING NAME:
Overall Site Plan

DRAWING NO.
C-4

Project no.: 07.021

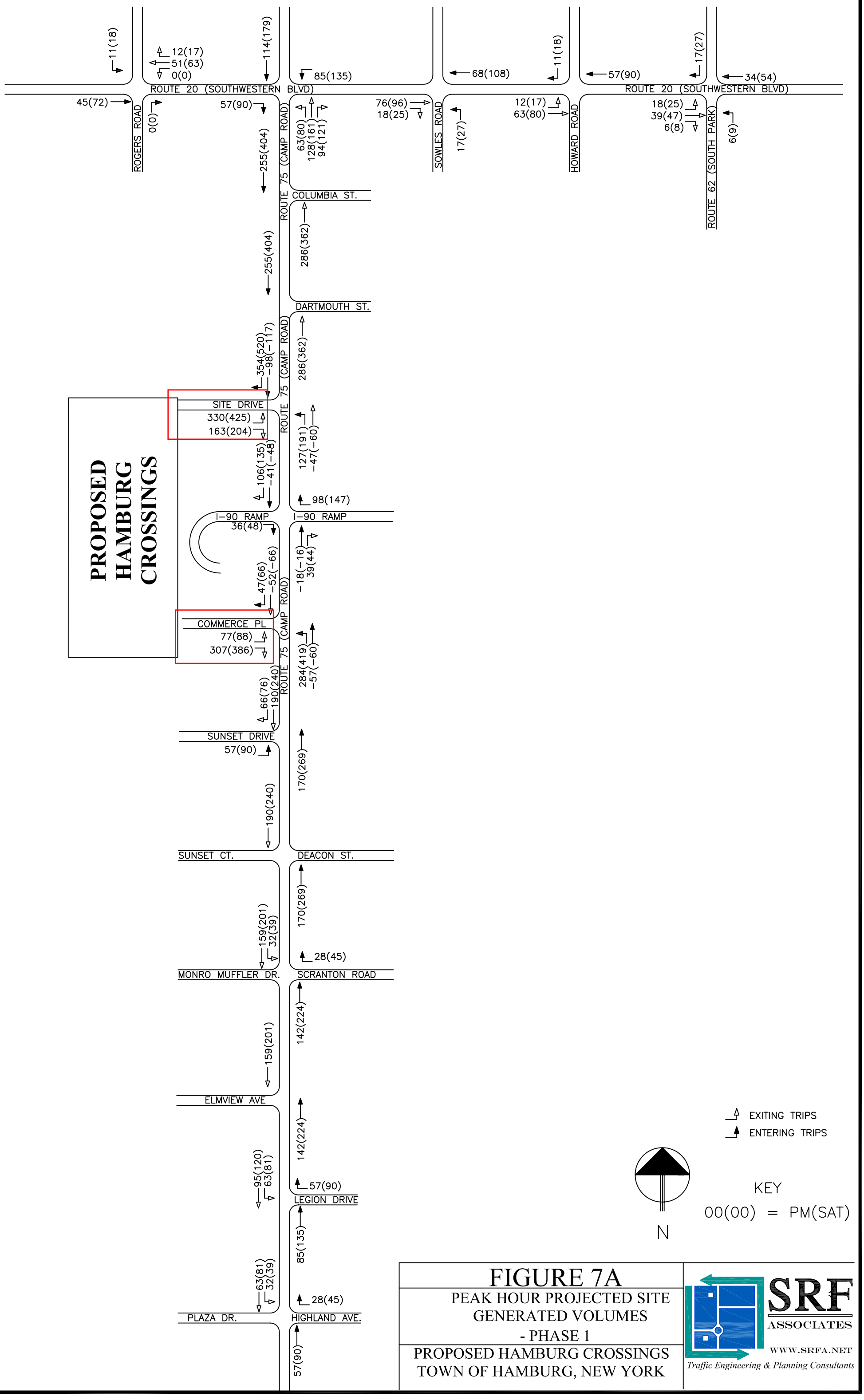


FIGURE 7A

PEAK HOUR PROJECTED SITE GENERATED VOLUMES
- PHASE 1

PROPOSED HAMBURG CROSSINGS
TOWN OF HAMBURG, NEW YORK

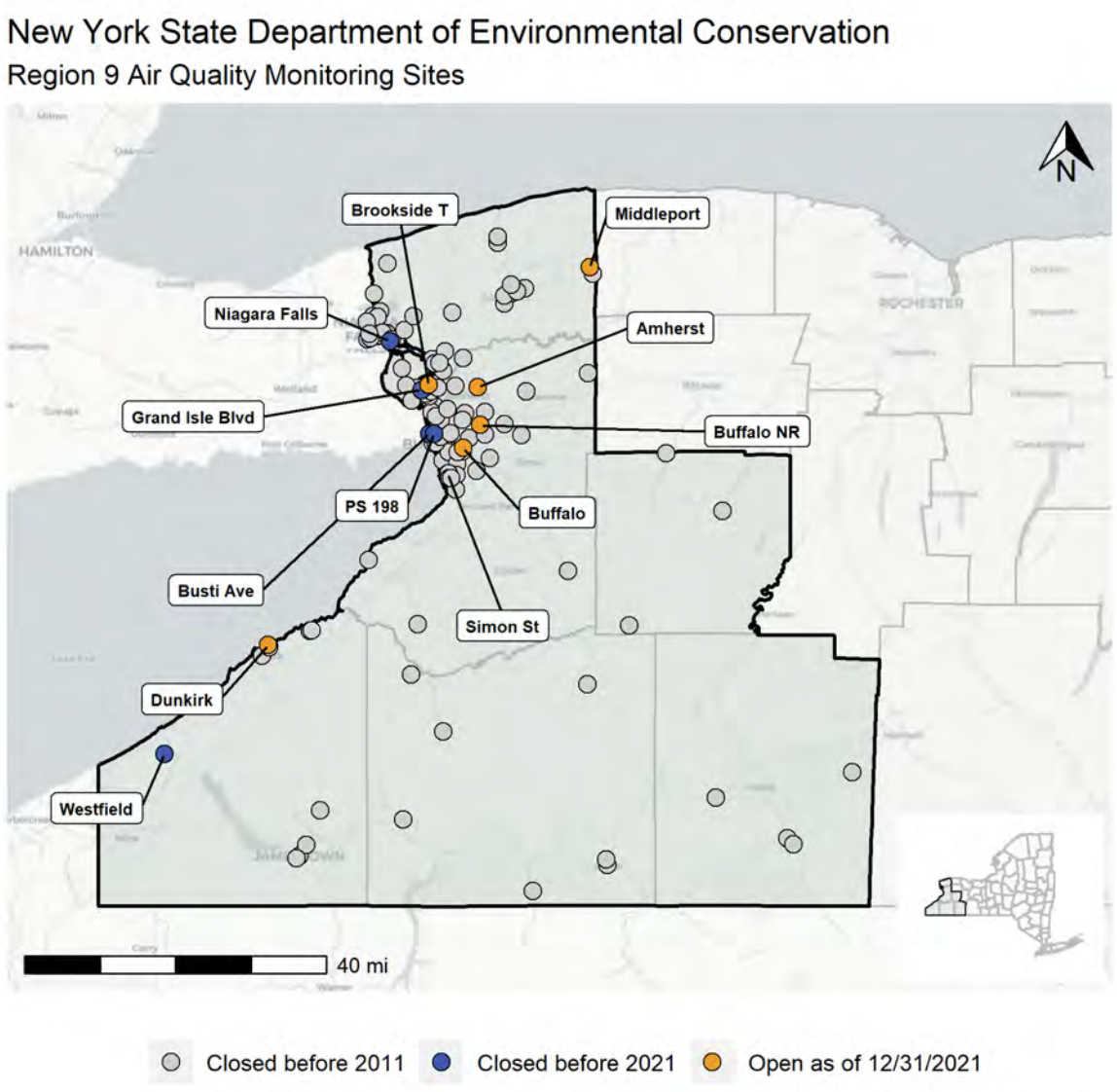
SRF ASSOCIATES
WWW.SRFA.NET
Traffic Engineering & Planning Consultants

Appendix C

Air Quality Report
NYSDEC Region 9

TYLin

Region 9


New York State Department of Environmental Conservation
Region 9 Air Quality Monitoring Sites
N
Brookside T
Middleport
Niagara Falls
Amherst
Grand Isle Blvd
Buffalo NR
PS 198
Buffalo
Busti Ave
Simon St
Dunkirk
Westfield
HAMILTON
ROCHESTER
40 mi
Closed before 2011
Closed before 2021
Open as of 12/31/2021
Basemaps Â© OpenStreetMap contributors
Monitoring site data pulled from EPA AQS on: 2022-09-14

NYSDEC Region **9**

Sulfur Dioxide (SO_2)

Parts per billion (ppb)

EPA Parameter Code: 42401

Annual averages 2011 through 2021

Site	AQS ID	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Brookside T	36-029-1014	3.43	2.11	2.82	1.52	1.02	0.77	0.34	0.38	0.33	0.20	0.22
Buffalo	36-029-0005	2.01	2.72	2.41	1.49	1.04	0.49	0.35	0.40	0.40	0.34	0.32
Dunkirk	36-013-0006	1.72	1.30	1.03	1.50	1.28	0.41	0.16	0.14	0.13	0.11	0.14
Niagara Falls	36-063-2008	2.74	3.47	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Westfield	36-013-0011	1.22	0.98	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

99th Percentile of 1-hour daily maximum concentrations

Not to be exceeded 75 ppb

Site	AQS ID	Obs.	% Avail	2019	2020	2021	3-yr Avg. of 99th %tile
Brookside T	36-029-1014	8,293	95	2.4	2.2	5.3	3.30
Buffalo	36-029-0005	8,618	98	13.4	16.4	12.9	14.23
Dunkirk	36-013-0006	8,609	98	3.2	2.5	3.4	3.03

NYSDEC Region **9**

Ozone (O_3)

Parts per million (ppm)

EPA Parameter Code: 44201

4th Highest Daily Maximum 8-Hour Average

Not to exceed an avg of 0.070 ppm during the last 3 years.

Site	AQS ID	2019	2020	2021	mean 4th max values	Exceeds the NAAQS
Amherst	36-029-0002	0.063	0.066	0.068	0.066	No
Dunkirk	36-013-0006	0.065	0.064	0.066	0.065	No
Middleport	36-063-1006	0.059	0.064	0.066	0.063	No

Summary by site for 2021.

Site	AQS ID	Obs.	% Avail	# Exceed	1st max	1st max date	2nd max	2nd max date	3rd max	3rd max date	4th max	4th max date
Amherst	36-029-0002	4,597	87	1	0.071	05/19	0.070	06/05	0.069	05/20	0.068	05/25
Dunkirk	36-013-0006	6,095	100	1	0.072	05/20	0.070	05/21	0.070	06/05	0.066	04/08
Middleport	36-063-1006	6,103	97	1	0.073	05/20	0.069	05/18	0.067	06/05	0.066	04/24

NYSDEC Region **9**

Carbon Monoxide (CO)

Parts per million (ppm)

EPA Parameter Code: 42101

Annual Averages 2011 through 2021

One-Hour Average - Maximum not to exceed 35 ppm more than once per calendar year *

Site	AQS ID	Obs.	% Avail	1st max	1st max date	2nd max	2nd max date	3rd max	3rd max date	Count of days over 35 ppm
Buffalo	36-029-0005	7,582	87	1.10	12/14	1.10	12/14	1.00	03/22	0
Buffalo NR	36-029-0023	8,134	93	1.42	12/14	1.34	03/22	1.19	05/30	0

2021 Running 8-Hour Average (Non-Overlapping)

Maximum not to exceed 9 ppm more than once per calendar year *

Site	AQS ID	Obs.	% Avail	1st max	1st max date	2nd max	2nd max date	Count of days over 9 ppm
Buffalo	36-029-0005	7,614	87	0.8	12/14	0.8	12/14	0
Buffalo NR	36-029-0023	8,087	92	0.8	12/14	0.8	12/14	0

NYSDEC Region **9**

$PM_{2.5}$ Fine Inhalable Particulates

Micrograms per cubic meter - $\mu g/m^3$

EPA Parameter Code: 88101 & 88502

NAAQS Statistics 2021

Station	Monitor Type	FRM /FEM?	Site No.	2019 98th %tile	2020 98th %tile	2021 98th %tile	3-yr average of 98th %tile	2019 annual mean	2020 annual mean	2021 annual mean	3-yr average of annual means
Amherst	Filter	Y	36-029-0002	14.8	14.2	16.7	15.2	6.4	6.0	6.8	6.4
Brookside T	Continuous	N	36-029-1014	14.0	13.2	16.2	14.5	6.7	6.0	7.2	6.6
Buffalo	Continuous	N	36-029-0005	14.4	15.0	17.1	15.5	6.7	7.1	7.8	7.2
Buffalo	Filter	Y	36-029-0005	16.8	18.7	17.2	17.6	7.0	6.5	7.4	7.0
Buffalo NR	Continuous	N	36-029-0023	14.4	16.4	16.1	15.6	6.9	6.8	7.8	7.2
Buffalo NR	Filter	Y	36-029-0023	14.9	18.2	16.2	16.4	7.1	6.8	7.6	7.2
Dunkirk	Filter	Y	36-013-0006	13.8	12.3	16.2	14.1	5.9	5.3	6.7	6.0

Summary by site for 2021

Station	Monitor Type	FRM/ FEM?	Site No.	Obs.	1st max	1st max date	2nd max	2nd max date	3rd max	3rd max date	Q1 mean	Q2 mean	Q3 mean	Q4 mean
Amherst	Filter	Y	36-029-0002	117	21.5	07/06	17.1	02/21	16.7	08/09	6.9	6.8	8.0	5.4
Brookside T	Continuous	N	36-029-1014	334	33.1	07/20	23.4	08/21	19.2	07/26	7.1	6.1	8.2	7.5
Buffalo	Continuous	N	36-029-0005	360	34.7	07/20	20.6	07/06	19.2	07/19	7.6	7.1	9.1	7.5
Buffalo	Filter	Y	36-029-0005	120	22.8	07/03	18.2	02/21	17.2	01/13	8.0	7.4	8.6	5.8
Buffalo NR	Continuous	N	36-029-0023	357	33.5	07/20	22.2	07/06	19.1	07/19	7.6	6.8	9.0	7.9
Buffalo NR	Filter	Y	36-029-0023	110	23.4	07/06	16.7	01/13	16.2	08/08	7.7	7.8	9.1	6.3
Dunkirk	Filter	Y	36-013-0006	115	21.8	07/06	16.2	01/13	16.2	02/21	6.6	6.9	8.5	4.9

NYSDEC Region **9**

Nitrogen Dioxide (NO_2)

Parts per billion (ppb)
EPA Parameter Code: 42602

Annual Averages 2011 through 2021

One-Hour Averages - 12-month average not to exceed 53 ppb

Site	AQS ID	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Amherst	36-029-0002	8.32	6.44									
Buffalo	36-029-0005	12.52	10.46	10.38	8.73	11.10	9.90	9.60	9.81	9.47	7.56	8.24
Buffalo NR	36-029-0023				9.95	12.48	10.78	9.49	9.54	9.11	7.06	9.47

Annual 98th percentile

Average of 98th percentile for last 3 years not to exceed 75 ppb

Site	AQS ID	Obs.	% Avail	2019	2020	2021	3-yr Avg. of 98th %tile
Buffalo	36-029-0005	8,202	94	37.0	28.7	32.2	32.63
Buffalo NR	36-029-0023	7,570	86	31.7	24.0	29.0	28.23

NYSDEC Region **9**

PM_{10} Inhalable Particulates

Micrograms per cubic meter - $\mu g/m^3$

Parameter Code:81102

NAAQS Statistics 2021

Not to exceed 150 more than once per year on average over 3 years

Station	Site No.	Obs.	1st max	1st max date	2nd max	2nd max date	3rd max	3rd max date	2019 # of exceedances	2020 # of exceedances	2021 # of exceedances	Average exceedances
Buffalo	36-029-0005	52	37	03/17	30	02/21	25	05/22	0	0	0	0