

Prepared For:

Arc Building Partners
100 South Elmwood Avenue, Suite 100
Buffalo, NY 14202

Submitted by:

LaBella Associates
300 Pearl Street
Suite 130
Buffalo, NY 14202
(716) 551-6281



**ENGINEERING REPORT FOR
716 SPORTS COMPLEX**

November 18, 2025

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Section 1 – Introduction/Location

This project is a redevelopment of a 21.3 parcel (SBL #55.03-1-1.10) of site located at 330 Maple Road in the Town of Amherst, Erie County, NY. Arc Building Partners intends to construct a Sport Fieldhouse complex including two (2) 275'x500'x85' high indoor 1,500 seat dome sports complexes, 50,000 sf 2 story Commercial Retail Building. Additional site improvements include approximately 524 parking spaces parking, utilities and landscaping. Vehicular access to the site will be via Maple Road.

Section 2 – Existing Conditions

The parcel currently consists of open vegetated land with some woods and heavy brush. The site currently sheet flows south to Maple Road and drainage is picked up by the storm sewer system within the Maple Road Right of Way. The site was previously remediated through the NYSDEC Brownfield Cleanup Program. A 100' wide conservation easement will remain along the front of the property at Maple Road.

Water service is planned to be fed from an existing 8" Cast Iron Water Main at Maple Road.

An 8" PVC Sanitary Sewer is located at the northerly portion of the UBMD property to serve the project. Sanitary Sewer system also exists at Maple Road. However, the Maple Road sewer is reported to have no available capacity during wet weather conditions.

Section 3 - Proposed Facilities

Stormwater

A stormwater prevention plan (SWPPP) for coverage under the SPDES General Stormwater Permit (Permit GP-0-25-001) is required as the project disturbance will be greater than 1 Acre. To meet Water Quality and Green Infrastructure requirements, Bio-Retention Facilities are proposed at various areas within the site. Underground Storm water detention facilities are proposed to meet Water Quantity requirements. The project Post 25 year Post developed rate will be regulated to less than the 10-year Pre developed rate to meet Town of Amherst Stormwater Management Policy.

Onsite Private Storm Sewer Calculations as follows:

<u>Description</u>	<u>10 Yr Rate</u>	<u>Invert/10 Yr HW* Elev.</u>	<u>100 Yr Rate</u>	<u>Inv./100 Yr HW* Elev.</u>
Arch Chambers Detention	0.15 CFS	590.00/590.26	1.47 cfs	590.0/591.56
158 LF 12" SICPP @ 0.5%	0.17 CFS	589.85/590.20	1.81 cfs	589.85/591.31
217 LF 12" SICPP @ 0.5%	0.05 cfs	591.28/591.33	4.47 cfs	591.28/595.38
105 LF 12" SICPP @ 0.5%	0.50 cfs	591.98/592.84	3.54 cfs	591.98/594.49

*Note: HW = Headwater Elevation

Refer to SWPPP report for additional information.

Water System

No Water Service(s) exist on the property. The proposed Sports Complex will provide one (1) new service Tap to the 8" Cast Iron Main along Maple Road.

The proposed domestic and fire service will have backflow prevention within a hot box enclosure on the site. Disinfection of the water services following installation will be performed per AWWA C-651.

Hydrant flow Tests reports provided by ECWA:

Date of Test:	7/18/2006
Flow Hydrant Location:	255 Maple Road
Size Main/Branch:	8"/6"
Residual Pressure:	90 psi
Static Pressure:	104 psi
Total Flow:	2,237 gpm

Date of Test:	4/24/2014
Flow Hydrant Location:	415 Maple Road
Size Main/Branch:	8"/6"
Residual Pressure:	78 psi
Static Pressure:	92 psi
Total Flow:	2,326 gpm

- Domestic Summary
 - Proposed Buildings
 - 50,000 sf retail
 - 3,000 seats Sports Domes
 - Domestic Daily Demand
 - 6,500 GPD Retail
 - 15,000 GPD Sports Domes
 - Total = 21,500 GPD
 - Domestic Operating Demand
 - Assume 10 hr day = 36 GPM
 - Peak assume 4.0 Factor= 144 GPM
 - Domestic Water Service
 - 4" Water Service
- Sprinklers and Fire Protection Summary
 - Demand
 - 180 GPM (light hazard, no standpipes)
 - Pressure/Fire Pump
 - No fire pump required – 90 psi at main.
 - Fire Protection Service
 - 4" Fire Protection Service
 - Site Fire Hire Hydrants
 - Required - Refer to Site Utility Plan
 - Fire Loop
 - 8" with hydrants every 400'
 - Backflow
 - Watts 8" 957 RPZ (Rated flow=2400 GPM)

Sanitary Sewer

A Duplex Sanitary Pump station and 2,000 LF +/- 6" DR-11 HDPE sanitary sewer force main is proposed with connection to an existing private sanitary manhole near the 716 Health Building. The 716 Health Sanitary System consists of 8" SDR-35 PVC Gravity Sanitary Sewer.

Hydraulic Loading rates per NYS Design Standards for Intermediate Wastewater Treatment Systems, March 5, 2014.

- Sanitary Sewer Demand
 - Athletic Seating 3,000 Seats x 5 GPD = 15,000 GPD
 - Admin Space (50,000 SQFT) 250 Employees x 15 GPD = 3,750 GPD
 - Total Demand 18,750 GPD

- Grease Interceptor
 - Lunch and Dinner meals, cleaning total 150 seats
 - 150 seats x 2 meals per day x 7.5 Gal/meal = 2250 GPM
 - 2,500 Gallon Traffic Rated Grease Interceptor - Precast Concrete

A downstream sewer capacity analysis (DSCA) is required for the project since daily flows are projected to exceed 2,500 Gallons per day. Two (2) Monitoring Nodes (Nodes 1 and 2) were provided by the Town of Amherst. An additional Node (Node 3) at the existing 716 Health Facility is also being monitored to verify existing flows contributing from that facility.

Node 1 is located at the existing 15 inch diameter RCP sanitary sewer near the Campus Mail Center at Millersport Highway. Node 2 is at the 36" RCP sanitary sewer at Sweet Home Road near Passagrille Drive. The Town's permanent meter location provides the following flow data:

66 inch Peanut Line
 Capacity: 57.4 mgd
 8.3764 mgd Avg. Daily Flow
 11.55 mgd Daily Peak Flow
 36.60 mgd 2yr-6hr Flow

Refer to Report appendices for Node location mapping and relevant correspondence.



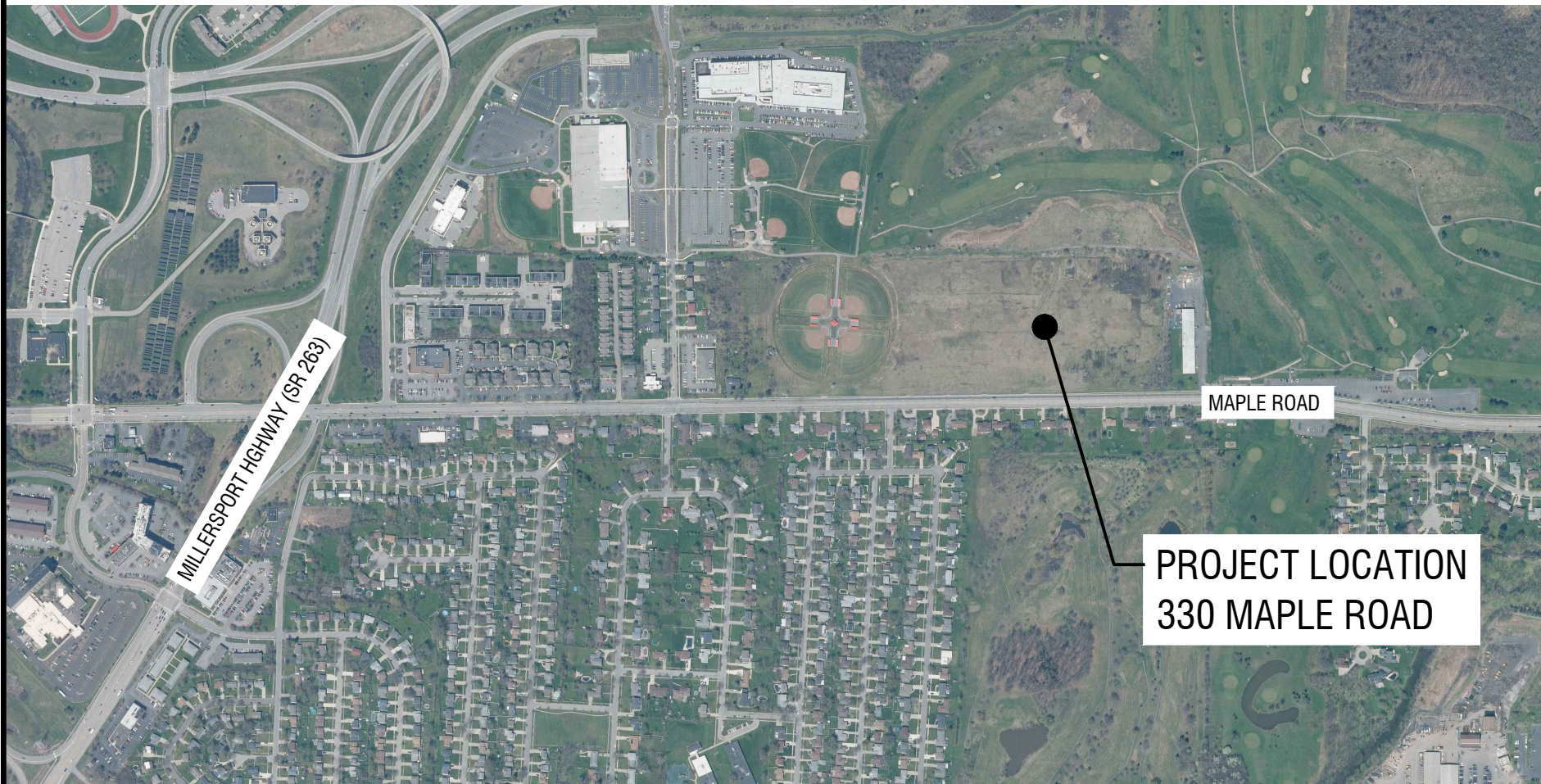
APPENDICES

ATTACHMENTS:

- A: Site Location Map
- B: Hydrant Flow Test
- C: Sanitary Sewer Correspondence



ATTACHMENT A:
SITE LOCATION MAP



300 Pearl Street, Suite 130
Buffalo, NY 14202
716-551-6281

labellapc.com

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It is a violation of New York Education Law Article 145 Sec.7209, for any person, unless acting under the direction of a licensed architect, professional engineer, or land surveyor, to alter an item in any way. If an item bearing the seal of an architect, engineer, or land surveyor is altered; the altering architect, engineer, or land surveyor shall affix to the item their seal and notation "altered by" followed by their signature and date of such alteration, and a specific description of the alteration.

DRAWING NAME:

SITE LOCATION MAP

PROJECT NAME:

716 SPORTS COMPLEX

Amherst, NY

ISSUED FOR:

ENGINEER'S REPORT

DRAWN BY:

DATE:

10/3/2025

PROJECT NO.:

2254561

DRAWING NUMBER:

A-1



ATTACHMENT B:
HYDRANT FLOW TESTS

MAPLE RD., AMTN

1 inch = 300 feet



ARM Hydrant Flow Test Inquiry -- Hydrant: J06B54A Test Date/Time: 7/18/2006 10:00 CHI095-B
Address: 195 MAPLE RD Side: S Location: 1ST HYD E/O MAPLEMERE RD
AMHERST
Size of Main/Branch: 8"/6" Fire District: 22021 SNYDER FD 7 Water District: 315 AMHERST DISTRICT 15C

Performed By: BM, RLS Comments: HYDRANT FLOW TEST REQUESTED BY JEROME BIEDNY
JEROME BIEDNY & ASSOCIATES; PHONE: 894-2410, FAX: 894-2412

Dischrge Coef: .90 Elvtn Usgs(ft): Static(psi): 104 Residual(psi): 90 Required Residual Pressure(psi): 20
Gallons Used...: 7,140 Total Flow(gpm): 2,372 Flow at Reqd Resid Pressure: 6,242

Flow Hydrants:

C	Flow Hyd	Flow Hydrant Address	Main/Brnch	Nzle	Size	Pitot	Flow	Comments
-	J06 B56	255 MAPLE RD	8"/6"	1:	2.50	50.0	1,186	
		2ND HYD E/O MAPLEMERE RD		2:	2.50	50.0	1,186	
				3:				Tot Flow: 2,372

Bottom

I=Flow Hydrant Inquiry
ENTER=Continue F3=Exit F6=Maintain Test F7=Test Hydrant Inquiry F15=Print Test Information

ARM Hydrant Flow Test Inquiry -- Hydrant: J06C50 Test Date/Time: 4/24/2014 11:00 CHI095-B
Address: 335 MAPLE RD Side: S Location: 1ST HYD E/O DONNA LEA
AMHERST
Size of Main/Branch: 8"/6" Fire District: 22021 SNYDER FD 7 Water District: 315 AMHERST DISTRICT 15C

Performed By: BM, RLS Comments: HYDRANT FLOW TEST VALARIE SARCIONE
NUSSBAUMER & CLARKE, 716-827-8000, 716-826-7958
E-MAIL: VSARCIONE@NUSSCLARKE.COM

Dischrge Coef: .90 Elvtn Usgs(ft): Static(psi): 92 Residual(psi): 78 Required Residual Pressure(psi): 20
Gallons Used...: 6,960 Total Flow(gpm): 2,326 Flow at Reqd Resid Pressure: 5,632

Flow Hydrants:

C	Flow Hyd	Flow Hydrant Address	Main/Brnch	Nzle	Size	Pitot	Flow	Comments
-	J06 C53	415 MAPLE RD	8"/6"	1:	2.50	48.0	1,163	
		2ND HYD E/O DONNA LEA		2:	2.50	48.0	1,163	
				3:				Tot Flow: 2,326

Bottom

I=Flow Hydrant Inquiry
ENTER=Continue F3=Exit F6=Maintain Test F7=Test Hydrant Inquiry F15=Print Test Information



ATTACHMENT C:
*SANITARY SEWER
CORRESPONDENCE*

Winkler, Kristopher

From: Reberholt,Vaishali <VReberholt@amherst.ny.us>
Sent: Wednesday, October 1, 2025 1:55 PM
To: Winkler, Kristopher
Cc: Johnson, Dave; Burroughs, Jeffrey
Subject: RE: 330 Maple Road Development - Downstream Sewer Study Monitoring
Attachments: Meter_1_330Maple_Downstream.pdf; Meter_2_330Maple_Downstream.pdf; 330Maple_Downstream.pdf

Mr. Winkler,

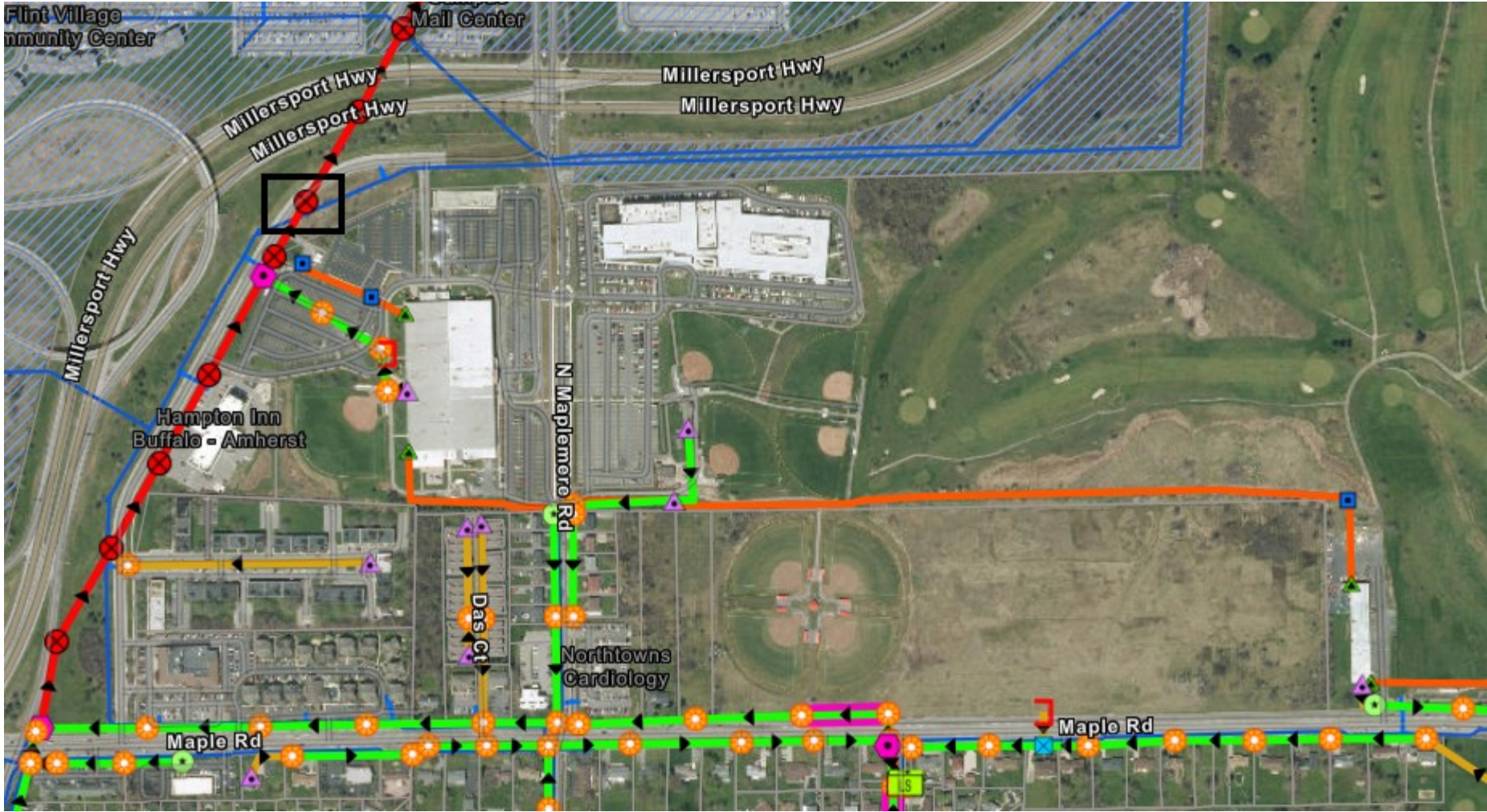
Attached are the two monitoring nodes. Additionally, data from the Town’s permanent meter at the Peanut Line is included as a third node on the downstream map.

As previously noted, the system has limited capacity. Therefore, I recommend that only the fieldhouse flows be included in this approval phase. I understand that the hotel is part of a later phase and as such the hotel flows should be considered in a separate, Phase 2 approval.

The lateral from the fieldhouse should connect to the same manhole currently used by the UBMD building. I suggest a couple of options to achieve this connection:

- 1. Install a private pump station on 330 Maple Road with a forcemain or gravity sewer discharging to a manhole on the UBMD property (assuming it is the same owner)—provided the existing UBMD sanitary lateral can accommodate the additional flow. Our ultimate goal is to discharge to the manhole highlighted in the screenshot below; or
- 2. Install a gravity sewer/forcemain connecting directly to the highlighted manhole.

Please note: The Maple Road sewer has no available capacity during wet weather conditions.



Thank you

From: Winkler, Kristopher <kwinkler@LaBellaPC.com>
Sent: Monday, September 29, 2025 10:37 AM
To: Reberholt,Vaishali <VReberholt@amherst.ny.us>
Cc: Johnson, Dave <djohnson@LaBellaPC.com>
Subject: RE: 330 Maple Road Development - Downstream Sewer Study Monitoring

CAUTION: This email originated from outside of the organization.
Please do not click links or open attachments unless you recognize the sender and know the content is safe.
Morning Vaishali. I wanted to check on the latest for the 330 Maple Road – sanitary Sewer Monitoring Nodes question. (Reference e-mails below). Would you be able to provide an update this week? Thanks for your help. Kris.

Kristopher Winkler, PE
LaBella Associates | Senior Civil Engineer / Team Leader

+1 (716) 768-3411 direct

From: Reberholt,Vaishali <VReberholt@amherst.ny.us>
Sent: Tuesday, September 16, 2025 12:05 PM
To: Winkler, Kristopher <kwinkler@LaBellaPC.com>
Cc: Johnson, Dave <djohnson@LaBellaPC.com>
Subject: RE: 330 Maple Road Development - Downstream Sewer Study Monitoring

Thank you. I will get back to you at the latest by end of next week.

From: Winkler, Kristopher <kwinkler@LaBellaPC.com>
Sent: Monday, September 15, 2025 4:46 PM
To: Reberholt,Vaishali <VReberholt@amherst.ny.us>
Cc: Johnson, Dave <djohnson@LaBellaPC.com>
Subject: RE: 330 Maple Road Development - Downstream Sewer Study Monitoring

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Hi Vaishali ? Our Concept Calculations are below. We're at approximately 44,750 Gallons per day at this point. Thanks for your help.

1. Track/Soccer Seating:	2,000 Seats x 5 GPD =	10,000
2. Hotel - 75,000 sqft - Assume:		
a. 125 Guest Rooms (2 Beds Ea.)	250 Beds x 110 GPD =	27,500
b. 100 seat dining	100 Seats x 35 GPD =	3,500
3. Admin Space - 50,000 sft (assume 200 sf/employee)		
a. 250 Employees	250 x 15 GPD =	<u>3,750</u>
	Total =	44,750 GPD

Kristopher Winkler, PE
LaBella Associates | Senior Civil Engineer/Civil Team Leader



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From: Reberholt,Vaishali <VReberholt@amherst.ny.us>
Sent: Wednesday, September 10, 2025 9:53 AM
To: Winkler, Kristopher <kwinkler@LaBellaPC.com>
Cc: Johnson, Dave <djohnson@LaBellaPC.com>
Subject: RE: 330 Maple Road Development - Downstream Sewer Study Monitoring

Mr. Winkler,

Please note that the sanitary sewer on Maple Road has limited capacity, so connection to the existing manhole may not be feasible. Node monitoring will be required for this project. Could you please provide the estimated sanitary flows expected from the proposed complex development? Once we have that information, we can identify a potential solution and specify the appropriate monitoring locations.

Thank you

Vaishali Reberholt, PE, CPSEC
Assistant Town Engineer
Sewer Maintenance Division
1100 N. Forest Rd
Williamsville, NY 14221

Ph. No 716-631-7154 X 7421

From: Winkler, Kristopher <kwinkler@LaBellaPC.com>
Sent: Wednesday, September 10, 2025 9:43 AM
To: Reberholt,Vaishali <VReberholt@amherst.ny.us>
Cc: Johnson, Dave <djohnson@LaBellaPC.com>
Subject: 330 Maple Road Development - Downstream Sewer Study Monitoring

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Morning Vaishali ? We're in the early stages for a new sport complex development at 330 Maple Road and the project will require a Downstream Sewer capacity analysis (over 2500 Gallons per day projected sanitary flow) based on the current concept. Reference e-mail from Brian Armstrong below. Brian shared the Town's GIS screen shot below.

We're requesting available sanitary sewer monitoring data and verifying if Node monitoring will be required for the project. At this point I'd assume the project would aim to connect to the existing sanitary sewer on Maple Road in front of 330 Maple. If the Town has a preferred location for the proposed sanitary connection for us to investigate, please advise. Also, if you need additional information, please let us know. Thanks. Kris.

Kristopher Winkler, PE
LaBella Associates | Senior Civil Engineer/Civil Team Leader



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From: Armstrong, Brian <BArmstrong@amherst.ny.us>
Sent: Wednesday, September 10, 2025 9:03 AM
To: Winkler, Kristopher <kwinkler@LaBellaPC.com>; Reberholt,Vaishali <VReberholt@amherst.ny.us>
Cc: Johnson, Dave <djohnson@LaBellaPC.com>; Burroughs, Jeffrey <jburroughs@amherst.ny.us>; Boudreau, Jessica <jboudreau@amherst.ny.us>
Subject: [Ext] RE: 330 Maple Road Development - Downstream Sewer Study Monitoring

Thank you Chris but these downstream requests need to be requested of Vaishali Reberholt and as such I have copied her on this email.

I don't know what her preference will be but due to capacity limitations to the west, she may want you to extend a run of new 8-inch public sanitary sewer within the Maple Rd ROW running from the existing manhole to the east in front of the former Parks Building to the west a certain distance where you could then run your new sanitary lateral for the new sports complex facility south and connect into the new sewer at Maple (see GIS screengrab below). If that were the case, she could then give you the appropriate node locations along that routing.
Also, in terms of a water connection you will need to connect to the existing 8-inch line running along the south side of Maple Road (below blue dashed line).



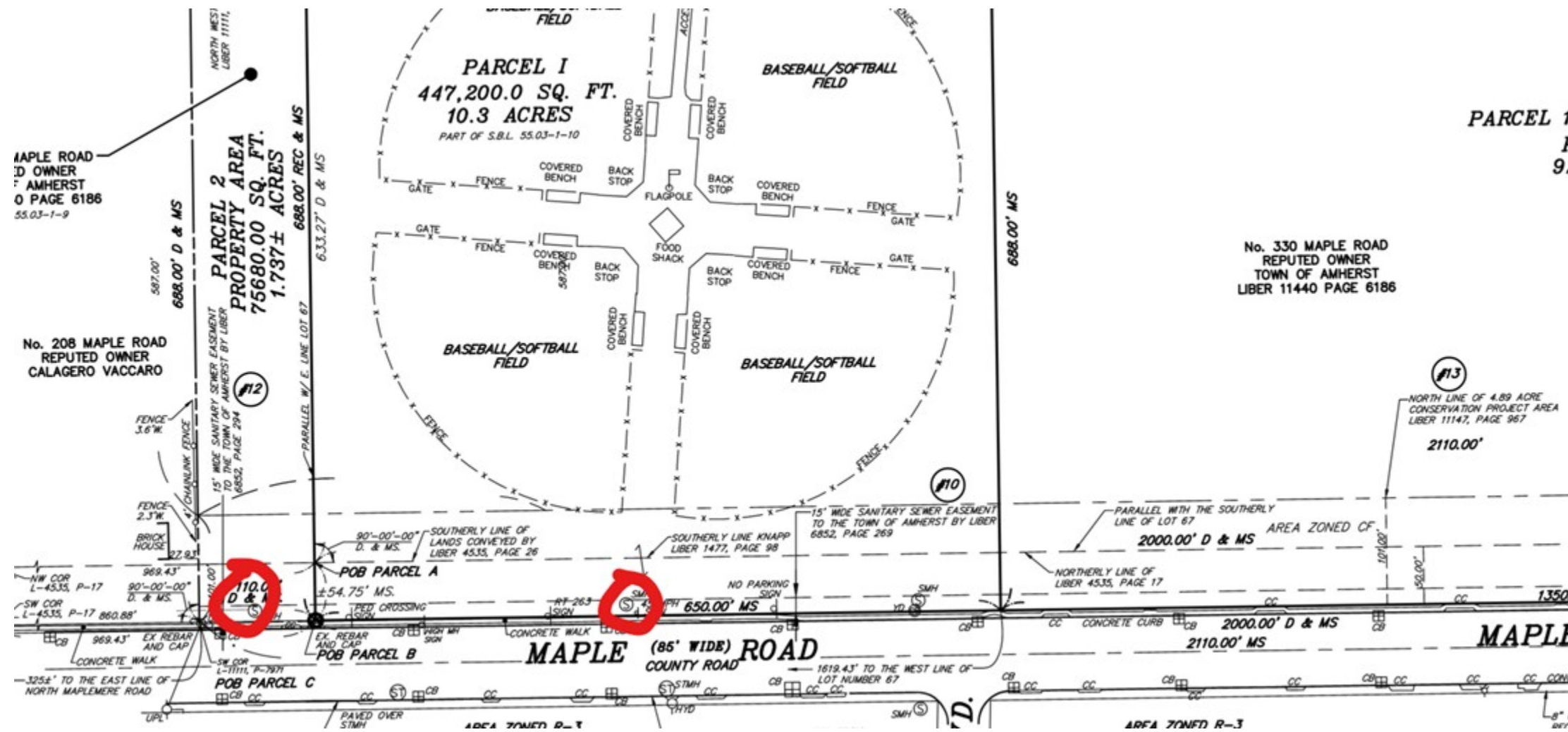
Thank you and good luck,

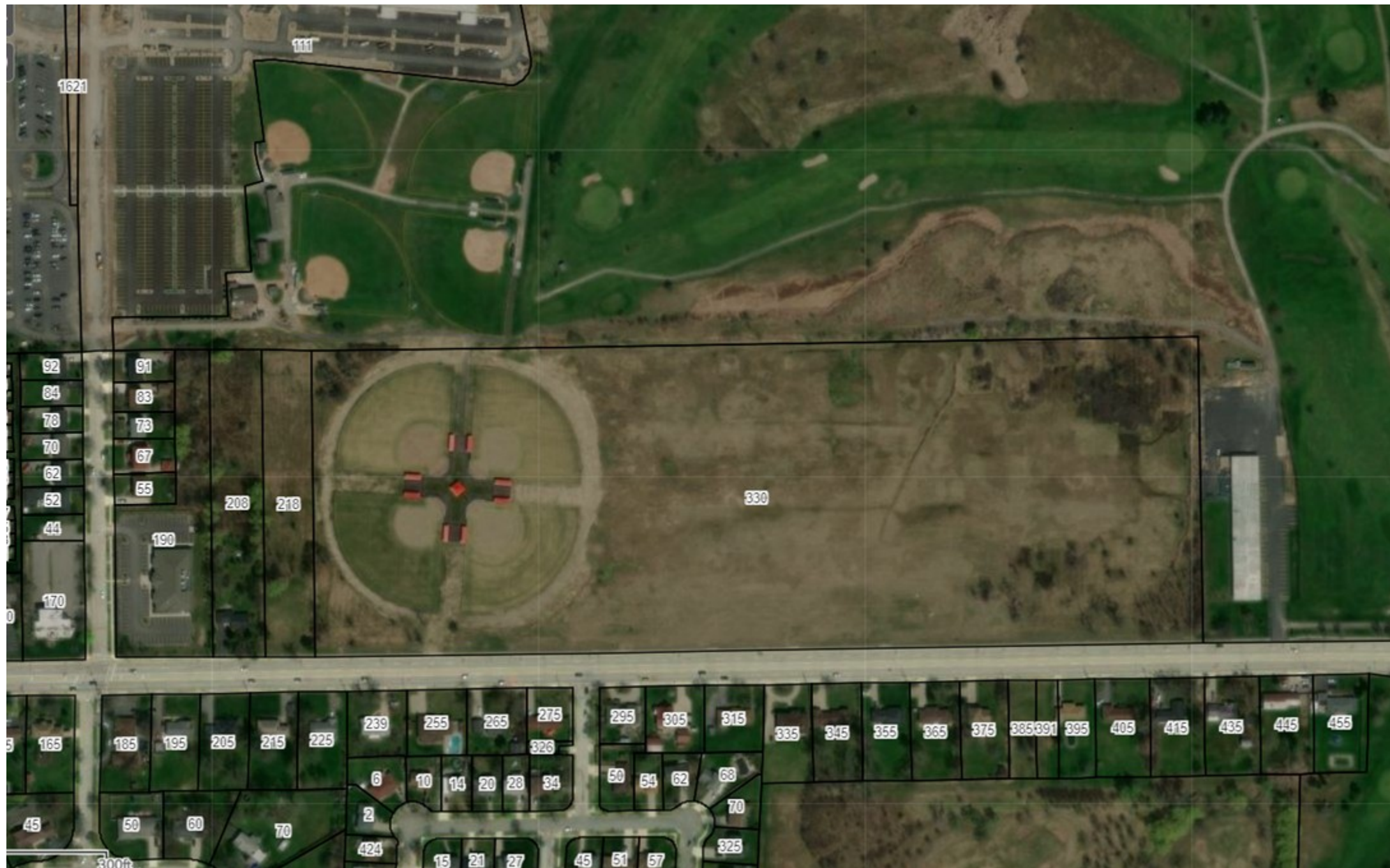
Brian J. Armstrong
Director of Engineering Services
Town of Amherst
Engineering Department
1100 North Forest Road
Williamsville, NY 14221
716.631.7154 ext. 7412 office
716.631.7222 fax
barmstrong@amherst.ny.us

From: Winkler, Kristopher <kwinkler@LaBellaPC.com>
Sent: Wednesday, September 10, 2025 7:59 AM
To: Armstrong, Brian <BArmstrong@amherst.ny.us>
Cc: Johnson, Dave <djohnson@LaBellaPC.com>
Subject: 330 Maple Road Development - Downstream Sewer Study Monitoring

Morning Brian ? We're in the early stages for a new development at 330 Maple Road and the project will require a Downstream Sewer capacity analysis (over 2500 Gallons per day projected sanitary flow) based on the current concept.

We're requesting available sanitary sewer monitoring data and verifying if Node monitoring will be required for the project. At this point I'd assume the project would aim to connect to the existing sanitary sewer on the North side of Maple Road. (Project location images below, sewer manholes circled in red). Please let me know if you need additional information. Thanks. Kris.





Kristopher Winkler, PE

LaBella Associates | Senior Civil Engineer/Civil Team Leader



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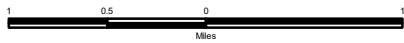
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???

TOWN OF AMHERST

Erie County, New York

Downstream Sewer Routing 330 Maple Road



N

Legend

- ★ Project Location
- Flow Location (Updated 2/4/2020)
- Downstream Routing
- Town Boundary
- Trunk Sewer
- Roads
- Hydrography
- Williamsville
- University at Buffalo

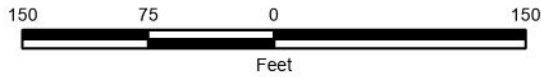
66-inch Peanut Line
Capacity: 57.4 mgd
8.37.64 mgd Avg. Daily Flow
11.55 mgd Daily Peak Flow
36.60 mgd 2yr.-6hr. Flow

TOWN OF AMHERST

Erie County, New York

Sanitary Sewer Downstream Routing

Proposed Meter Location



Proposed Meter Location
36" RCP @ 0.05%
Depth: 23.66'

Passagrie Drive

North Ellicott Creek Road

Sweet Home Road

Maxwell Microsoft

September 2025

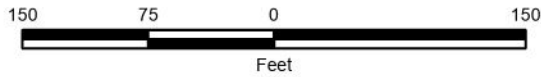
Interstate 990

TOWN OF AMHERST

Erie County, New York

Sanitary Sewer Downstream Routing

Proposed Meter Location



Proposed Meter Location
36" RCP @ 0.05%
Depth: 23.66'

Passagrie Drive

North Ellicott Creek Road

Sweet Home Road

Maxwell Microsoft

September 2025

Interstate 990