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**TOWN OF NEWBURGH
PLANNING BOARD
TECHNICAL REVIEW COMMENTS**

PROJECT: THE POLO CLUB SENIOR HOUSING
PROJECT NO.: 2018-12
PROJECT LOCATION: SECTION 39, BLOCK1, LOT 1 & 2.12
REVIEW DATE: 18 DECEMBER 2018
MEETING DATE: 20 DECEMBER 2018
PROJECT REPRESENTATIVE: ENGINEERING & SURVEYING PROPERTIES

1. No response to our 28 June 2018 comments for the 5 July 2018 Planning Board meeting has been received.
2. A jurisdictional determination as to the location of the Federal Wetlands on the site must be provided. Plans reference a previous jurisdictional determination issued in 2006 which has expired. Calculation of the jurisdictional wetland areas is important in order to determine unit count as senior housing in the R-3 Zone removes environmentally constrained areas from the lot calculations.
3. Compliance with Section 185-48 for the units must be identified. The ordinance requires certain unit sizes. The plan must identify where on the site the senior housing units will be located.
4. Conversations with Mark Taylor the Town Attorney identified that the onsite sewer treatment plant must be designed to municipal standards. Section 185-25 of the Zoning Code states the site shall be served by public sewer and water facilities shall be approved by all agencies having jurisdiction. Section 185-3 of the Zoning Code under definitions identifies public sewer "any sewage disposal system approved by the Town Board as meeting the standards required for municipal operation". The Town Board must approve the "public sewer" on the site in order for the site to comply with the zoning requirements. It is noted based on this definition that developer grade sanitary sewer systems are not acceptable to meet the intent of the public sewer code.
5. Further review of the project will be undertaken once detailed plans are submitted and our previous 28 June 2018 comments are addressed.
6. The Board should determine if the plans contain sufficient level of detail to declare its intent for

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Lead Agency for the project. The revised plans contain modifications over the previously reviewed plans including onsite sanitary sewer treatment, increased impervious surfaces, revised unit/bedroom count, wetlands jurisdiction and impact, increased stormwater management requirements, and potential traffic impacts.

7. The plans propose large parking fields. Site landscaping designs should address compliance with Town's landscaping requirements for parking.
8. The EAF identifies the project is located in an area designated as sensitive for archeological sites.
9. Future plans and reports should address the potential for blasting and rock removal on the site such that these issues can be addressed during the SEQRA review process.

Respectfully submitted,

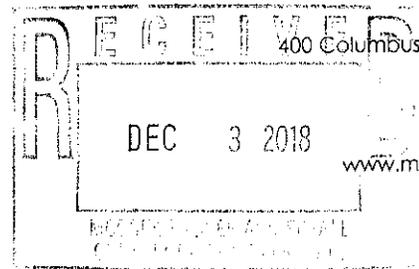
***McGoey, Hauser and Edsall
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MEMORANDUM

To: David Weinberg; Ross Winglovitz, P.E.

From: Philip J. Grealy, Ph.D., P.E.

Date: September 18, 2018

**Re: Polo Club Residential Development
NYS Route 300, Town of Newburgh, New York
MC Project No. 18006130A**

As requested, we have reviewed the revised development plan for the Polo Club, which is now proposed to consist of a total of 250 apartment units. This site was the subject of a previous evaluation prepared by our office in our report dated May 24, 2007, which evaluated both this development of 138 townhouses, as well as the Driscoll Subdivision with 112 single-family homes, which is no longer proceeding. The change in unit type and elimination of the Driscoll Subdivision results in a traffic generation significantly less than previously analyzed with total peak hour generation in the order of 117 AM and 136 PM trips compared to the 150 AM and 190 PM trips under the previously proposed development as was outlined in the July 3, 2018 email prepared by Ken Wersted. Also, more recent existing traffic count data was obtained from the New York State Department of Transportation (NYSDOT) with data collected for this corridor in 2014. A review of the data and comparison with the traffic data from the original report show similar peak hour conditions.

In order to evaluate this current plan and identify any differences compared to the conclusions of our previous studies, the Polo Club site access intersection, as well as the intersection of Route 300 and Gardnertown Road were reevaluated with the new site generated traffic volumes. The analysis is based on the trip generation utilizing the latest addition of the Institute of Transportation Engineers (ITE) *Trip Generation Handbook, 10th Edition, September 2017* (see Table No. 1R), and the latest version of the *Highway Capacity Manual* and corresponding Synchro software were completed for both locations.

The result of the capacity analyses are summarized in Table No. 2R. The analysis indicates that at the access road, certain improvements, including the provision of a separate right turn lane, together with the previously identified sight distance improvements, i.e., clearing of vegetation, etc. are recommended. This will have to be finalized as part of the NYSDOT Highway Work Permit process.



Also, the intersection of Route 300 and Gardnertown Road indicates overall Levels of Service "C" during peak periods. It should be noted that as indicated in the original report, this intersection currently has significant northbound left turn movements during the PM peak hour, but the traffic generated by the Polo Club will be in the form of through traffic through the intersection. Based on the current Polo Club project, since the total traffic volumes generated are lower than previously analyzed, the other intersections in the area are expected to experience conditions somewhat better than previously analyzed.

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TABLE NO. 1-R

HOURLY TRIP GENERATION RATES AND ANTICIPATED SITE GENERATED TRAFFIC VOLUMES

POLO CLUB RESIDENTIAL	ENTRY		EXIT		TOTAL	
	HTGR*	VOLUME	HTGR*	VOLUME	HTGR*	VOLUME
POLO CLUB RESIDENTIAL (256 UNITS)						
WEEKDAY PEAK AM HOUR	0.11	27	0.35	91*	0.46	118
WEEKDAY PEAK PM HOUR	0.35	90*	0.21	53	0.56	143

THE ABOVE HOURLY TRIP GENERATION RATES (HTGR) ARE BASED ON DATA PUBLISHED BY THE INSTITUTE OF TRANSPORTATION ENGINEERS (ITE) AS CONTAINED IN THE TRIP GENERATION HANDBOOK, 10th EDITION, 2017.
 (1) ITE LAND USE 220 - LOW-RISE APARTMENTS

TABLE NO. 2-R

LEVEL OF SERVICE SUMMARY TABLE

		BUILD TRAFFIC VOLUMES		
		AM	PM	
1	NYS ROUTE 300 & GARDNERTOWN ROAD			
	<u>SIGNALIZED</u>			
	GARDNERTOWN ROAD	SEB L-T-R	B[19.0]	C[22.4]
		SEB APPROACH	B[19.0]	C[22.4]
	GARDNERTOWN ROAD	NWB L-T-R	C[20.6]	C[29.4]
		NWB APPROACH	C[20.6]	C[29.4]
	NYS ROUTE 300	NEB L-T-R	B[10.8]	C[31.3]
	NEB APPROACH	B[10.8]	C[31.3]	
NYS ROUTE 300	NEB L-T-R	B[14.7]	B[13.3]	
	SEB APPROACH	B[14.7]	B[13.3]	
	OVERALL INTERSECTION		B[14.0]	C[24.7]
2	NYS ROUTE 300 & PROPOSED SITE DRIVEWAY			
	<u>UNSIGNALIZED</u>			
	NYS ROUTE 300	SB L-T	A[8.3]	B[10.0]
PROPOSED SITE DRIVEWAY	WB L-R	D[25.4]	E[48.6]	

NOTES:

- 1) THE ABOVE REPRESENTS THE LEVELS OF SERVICE AND VEHICLE DELAY IN SECONDS, B [13.2], FOR EACH MOVEMENT, FOR EACH APPROACH AS WELL AS FOR THE OVERALL INTERSECTION FOR THE SIGNALIZED INTERSECTIONS AND THE LEVELS OF SERVICE AND AVERAGE TOTAL DELAY IN SECONDS, B [10.9], FOR THE UNSIGNALIZED INTERSECTIONS.

New York State Department of Transportation

EB Traffic Count Hourly Report

STATION: 830074

ROUTE/ROAD: NY300 **FROM:** RT 32 **TO:** RT 52 **REGION-COUNTY:** 8-ORANGE
FED DIR CODE: 3 **REF. MARKER:** 16 - U Minor Arterial **MUNI:** Newburgh-Town-0569
ST DIR CODE: 7 **END MILEPOST:** 7.01 **FACTOR GROUP:** 30 **BIN:** 3345000
DOT ID: 100268 **LANES BY DIR:** 1 East **CC STN:** **RR CROSSING:**
BEGIN DATE: 4/23/2014 **WEEK OF YEAR:** 17 **ADDD. DATA:** CLS SPD **HPMS SAMPLE:**
NOTES 1: SB TRAVEL LANE **PLACEMENT:** .768MI NORTH OF RT 52 **JURISDICTION:** 01-NYS DOT **I WAY CODE:**
NOTES 2: **PROCESSED BY:** DOT-CEL **BATCH ID:** DOT-R8 Wk 17 **COUNT TYPE:** Vehicle
TAKEN BY: TST-KAJ **DOT-CEL:** **SPEED LIMIT:** 45

DATE	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	DAILY TOTAL	HIGH COUNT	HIGH HOUR	
4/23, Wed																												
4/24, Thu	48	26	21	24	58	65	161	313	345	316	309	374	413	408	503	547	591	670	568	397	328	283	153	112	7033	670	17-18	
4/25, Fri	56	33	14	27	40	67	140	302	339	312	341	359	443	483	543	596	662	646	539	439	377	318	204	146	7426	662	16-17	
4/26, Sat	92	49	26	21	19	35	51	111	210	279	328	416	461	426	462	532	541	409	370	365	312	234	221	149	6119	541	16-17	
4/27, Sun	129	50	20	17	14	22	60	72	166	260	298	376	422	446	425	496	410	382	353	297	252	137	116	74	5294	496	15-16	
4/28, Mon	41	22	17	18	42	73	168	296	365	317	378	381	482	459	524	573	615	662	543	383	281	214	117	101	7072	662	17-18	
4/29, Tue	41	18	15	25	43	81	146	294	321	311	293	330	377	400	403	508	569	620	534						5329			

AVERAGE WEEKDAY HOURS (Axle Factored, Mon 6 AM to Fri Noon)

48	26	17	25	47	71	154	301	343	314	330	361	424	422	477	543	589	663	550	392	293	249	140	103	AWDT	6881
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DAYS	HOURS	WEEKDAYS	WEEKDAY	AVERAGE WEEKDAY			ESTIMATED		
				Counted	High Hour	% of day	Roadway	AAADT	
6	147	3	81	1109	8.4	663	13005	6771	6234
Counted		Counted	Hours	High Hour	% of day	High Hour	% of day	West	West
				8.4	8.4	9.6	8.4	6771	6234

FACTOR

Month	Seasonal	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Axl
4	1.02	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

New York State Department of Transportation Roadway Traffic Count Hourly Report

STATION: 830074

ROUTE/ROAD: NY300
FED DIR CODE: 3, 7
ST DIR CODE: 7
DOT ID: 100268
BEGIN DATE: 4/23/2014
NOTES 1: SB TRAVEL LANE
NOTES 2:
TAKEN BY: TST:KAJ
PROCESSED BY: DOT:CEL
FROM: RT 32
REF. MARKER:
END MILEPOST: 7.01
LANES BY DIR: 1 East 1 West
WEEK OF YEAR: 17
PLACEMENT: 768MI NORTH OF RT 32
TO: RT 52
FUNC. CLASS: 16 - U Minor Arterial
FACTOR GROUP: 30
CC STN:
ADDL DATA: CLS SPD
JURISDICTION: 01-NYS DOT
BATCH ID: DOT-R8 Wk 17
REGION-COUNTY: 8-ORANGE
MUNI: Newburgh-Town-0569
BIN: 3345000
RR CROSSING:
HPMS SAMPLE:
I WAY CODE:
COUNT TYPE: Vehicle
SPEED LIMIT: 45

DATE	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	DAILY TOTAL	HIGH HOUR	HIGH HOUR COUNT	
4/23, Wed	73	41	39	49	140	229	514	805	880	745	649	737	848	825	915	963	1060	1142	926	652	546	411	220	169	4889	1142	17-18	14207
4/24, Thu	83	47	34	63	112	230	454	778	885	750	720	747	885	864	940	1091	1174	1113	942	730	574	446	320	225	14207	1174	16-17	11645
4/25, Fri	130	77	52	42	37	108	181	340	526	666	727	913	906	871	851	916	898	717	739	607	451	366	304	220	11645	916	15-16	10177
4/26, Sat	179	75	38	31	26	70	136	196	352	594	685	769	878	905	841	920	754	699	607	509	394	226	187	106	10177	920	15-16	13433
4/27, Sun	52	34	26	44	129	257	505	794	882	728	732	752	924	815	952	1006	1076	1116	872	641	423	320	202	151	10744	1116	17-18	10744
4/28, Mon	68	33	29	48	118	251	473	790	859	713	654	694	719	757	744	916	983	1036	859	648	458	366	210	155	13216	1036	17-18	13216
4/29, Tue	75	40	34	53	123	237	487	792	877	734	689	733	830	799	870	962	1045	1109	892	648	458	366	210	155	13216	1109	17-18	13216

AVERAGE WEEKDAY HOURS (Axle Factored, Mon 6 AM to Fri Noon)

Counted	6	147	3	81	1109	8.4	663	9.6	534	8.4
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DAYS	Counted	HOURS	WEEKDAYS		WEEKDAY		WEEKDAY		WEEKDAY		ESTIMATED		
			Counted	Hours	Counted	Hours	Counted	Hours	Roadway	AADT	East	West	
Month	4	1.02	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	13005	6771	6234
Seasonal													
Sun	1.00												
Mon	1.00												
Tue	1.00												
Wed	1.00												
Thu	1.00												
Fri	1.00												
Sat	1.00												
Axd	1.00												

FACTOR

Month	4	1.02
Seasonal		
Sun	1.00	
Mon	1.00	
Tue	1.00	
Wed	1.00	
Thu	1.00	
Fri	1.00	
Sat	1.00	
Axd	1.00	

New York State Department of Transportation WB Traffic Count Hourly Report

STATION: 830074

ROUTE/ROAD: NY300 **FROM:** RT 32 **TO:** RT 52
FED DIR CODE: 7 **REF MARKER:**
ST DIR CODE: 7 **END MILEPOST:** 7.01 **FUNC. CLASS:** 16 - U Minor Arterial
DOT ID: 100268 **LANES BY DIR:** 1 West **FACTOR GROUP:** 30
BEGIN DATE: 4/23/2014 **WEEK OF YEAR:** 17 **CC STN:**
NOTES 1: SB TRAVEL LANE **PLACEMENT:** .768MI NORTH OF RT 52 **ADDL DATA:** CLS SPD
NOTES 2: **JURISDICTION:** 01-NYS DOT
TAKEN BY: TST-KAJ **PROCESSED BY:** DOT-CEL **BATCH ID:** DOT-R8 Wk 17
REGION-COUNTY: 8-ORANGE
MUNI: Newburgh-Town-0569
BIN: 3345000
RR CROSSING:
HPMS SAMPLE:
1 WAY CODE:
COUNT TYPE: Vehicle
SPEED LIMIT: 45

DATE	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	DAILY HIGH	HIGH	TOTAL	COUNT	HOUR
4/23, Wed																		479	443	356	255	134	117	58	50	1892			
4/24, Thu	25	15	18	25	82	164	353	492	535	429	340	363	435	417	412	416	469	472	358	255	218	128	67	57	6545	535	08-09		
4/25, Fri	27	14	20	36	72	163	314	476	546	438	379	388	442	381	397	495	512	467	403	291	197	128	116	79	6781	546	08-09		
4/26, Sat	38	28	26	21	18	73	130	229	316	387	399	497	445	445	389	384	357	308	369	242	139	132	83	71	5526	497	11-12		
4/27, Sun	50	25	18	14	12	48	76	124	186	334	387	393	456	459	416	424	344	317	254	212	142	89	71	32	4883	459	13-14		
4/28, Mon	11	12	9	26	87	184	337	498	517	411	354	371	442	356	428	433	461	454	329	258	142	106	85	50	6361	517	08-09		
4/29, Tue	27	15	14	23	75	170	327	496	538	402	361	364	342	357	341	408	414	416	325						5415				

AVERAGE WEEKDAY HOURS (Axle Factored, Mon 6 AM to Fri Noon)

26	15	17	28	76	166	333	491	534	420	359	372	406	377	394	419	456	446	342	256	165	117	70	52	6335
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DAYS	HOURS	WEEKDAYS	WEEKDAY	AVERAGE WEEKDAY			ESTIMATED	
				Counted	Hours	High Hour % of day	Roadway	AADT
Counted	6	Counted	3	1109	81	8.4	13005	6771
Counted	147	Counted	81	High Hour % of day	High Hour % of day	High Hour % of day	West	West
				8.4	8.4	8.4	6771	6234
				663	534	534		
				9.6	9.6	8.4		

FACTOR

Month	Seasonal	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Axl
4	1.02	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Created on: 05/09/2014 13:06
ROUTE/ROAD: NY300
STATION: 830074
FROM: RT 32
PLACEMENT: .768MI NORTH OF RT 52
TO: RT 52
REGION-COUNTY: 8-ORANGE

