

## SURVEY & ENGINEERING SERVICES, P.C.

SURVEYING • ENGINEERING • LANDSCAPE ARCHITECTURE

102 EAST AVENUE, LOCKPORT, NEW YORK 14094 PHONE: (716) 439-0188 FAX: (716) 439-0189

#### **ENGINEERING REPORT**

**FOR** 

# CARSTAR OF WEST SENECA COLLISSION SHOP ADDITION PROJECT

100 ORCHARD PARK ROAD

TOWN OF WEST SENECA, ERIE COUNTY



JANUARY 2023

**APEX JOB NO. 22-110** 

#### A. Introduction (General):

This project includes the design and construction of a 48' x 65' pre-engineered steel building addition for four additional collision repair stations and a 16' x 16' employee break room for the collision shop employees. The new additions will be located in the rear or east end of the building complex. These additions occur over existing pavement so there is no addition stormwater discharge. The existing building utility services will be adequate to also serve the additions. Therefore, there are no improvements to the electric, natural gas, water and sanitary sewer services. A small simplex grinder unit will pump the waste water sewage from just east of the employee breakroom to an existing sanitary sewer manhole located just south of the detail/washbay building area. An existing 12" storm sewer line will be rerouted around the new addition with a new outlet into Cazenovia Creek. The site improvement area of disturbance is 0.59 acres and is all higher than the BFE 604.0 for this section of Cazenovia Creek.

The USDA Soil Conservation Service lists this 2.44 acre property as Uc (Udorthents, smoothed). Included with this report are a Site Location Map (Exhibit "A") and Soil Survey (Exhibit "B") and Property Deed (Legal Description – Exhibit "C").

#### B. Storm Drainage:

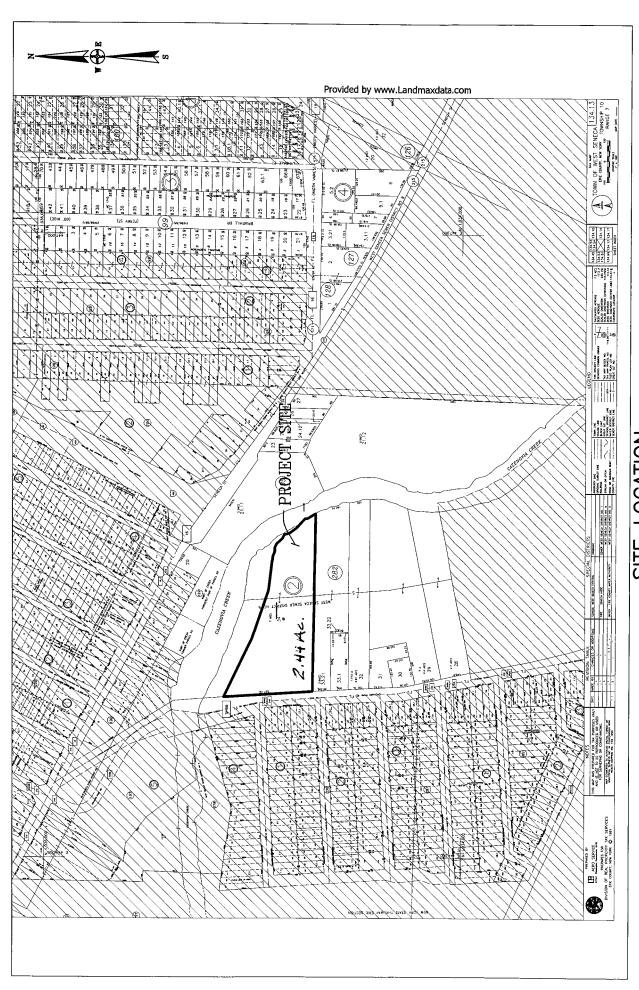
The storm drainage design reflects the rerouting of the existing 12" outlet piping from the south property line, rerouting of the previous roof drainage line(s) 6" and the controlled collection of the existing rear pavement area. The 3376 SF building addition roof drainage will be collected by a separate 6" HDPE outlet pipe that discharges directly to Cazenovia Creek.

- New Roof Drainage 0.078 Ac.
   Tc = 5 MIN I<sub>10</sub> = 5.0 IN/HR C = 0.90
   Using Rational Method 10 Year Storm
   Q<sub>10</sub> = C I<sub>10</sub> A
   Q<sub>10</sub> = 0.9 (5.0 IN/HR) (0.078 Ac.) = 0.35 CFS
   Using 6" HDPE @ 1.0% from Exhibit "D" capacity rating is 0.6 CFS
- Rerouting of Site Drainage STMH #1
   Roof Drainage 96' x 65' + 46 x 31 = 7666 SF or 0.176 Ac. and 12" @ 0.2% (1.75 CFS est.)
   Q<sub>10</sub> = 1.75 CFS + 0.9 (5.0 IN/HR) (0.176 Ac.) = 2.54 CFS
   Use 15" HDPE @ 0.20% capacity rated for 3.0 CFS
- 3. CB #1 STMH #1 + 0.5 Ac. Existing Pavement Q<sub>10</sub> = 2.54 CFS + 0.9 (5.0 IN/HR) (0.5 Ac.) = 4.79 CFS Use 18" HDPE @ 0.2% from Exhibit "D" capacity is ~ 5.0 CFS

#### C. Grinder Pump Design:

The sanitary sewer grinder pump unit will service the breakroom. This new breakroom is used by approximately 15-20 employees per day. This accounts for between 225-300 GPD using 15 GPD/person. The simplex wet well has a capacity of 96 GAL/FT. We, therefore, set dose volume of 2 FT or 192 gallons per dose/pump cycle. Using 40 GPM that equates to a 5 minute pump time. The design flow is only 10 GPM during lunch break 30-60 minutes.

```
Using 40 GPM Pump Design E_T = E_V \ ^0 + E_H \ + E_{Hf} E_H = 607.0 - 604.25 = 2.75' E_{Hf} = (0.71) \ \underline{245 \ LF} + (14 + 5.2 + (2) \ 2.4) \ \times \ 6.60 \ FT/100 \ FT = 12.6 \ FT \ 100 Using C = 120 \ (100/C) \ 1.85 = 0.71 E_T = 2.75 \ FT + 12.6 \ FT = 15.4 \ FT Pump \sim 0.85 \ (85\% \ eff.) Pump = 15.4 \ FT \ / \ 0.85 = 18.1 \ FT \ @ \ 40 \ GPM Use \ Myers \ MWS \ 9 \ 1 \ HP \ Pentair \ Pump \ rated \ or \ 35 \ FT \ Head See \ Exhibit \ "E"
```



SITE LOCATION SCALE: NOT TO SCALE

EXHIBIT B'-1

# MAP LEGEND

# W Soil Map Unit Polygons Area of Interest (AOI) Soil Map Unit Points Soil Map Unit Lines Special Point Features Area of Interest (AOI) Soils

# Very Stony Spot Stony Spot Spoil Area Wet Spot

· 4
-----

itures	Streams and Canals	ation	Rails	Interstate Highways	
Water Features	}	Transportation	Ξ	}	

**Borrow Pit** 

Blowout

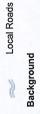
Clay Spot



Closed Depression

**Gravelly Spot** 

**Gravel Pit** 





Marsh or swamp

Lava Flow

Landfill

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

# MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed misunderstanding of the detail of mapping and accuracy of soil Enlargement of maps beyond the scale of mapping can cause scale.

Please rely on the bar scale on each map sheet for map measurements. Source of Map: Natural Resources Conservation Service Coordinate System: Web Mercator (EPSG:3857) Web Soil Survey URL:

Maps from the Web Soil Survey are based on the Web Mercator distance and area. A projection that preserves area, such as the projection, which preserves direction and shape but distorts Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required. This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Erie County, New York Survey Area Data: Version 22, Sep 10, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger. Date(s) aerial images were photographed: Data not available.

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Severely Eroded Spot

Slide or Slip

Sinkhole

Sodic Spot

Sandy Spot

Saline Spot

### **Map Unit Legend**

Map Unit Symbol	Map Unit Name	Acres in AOI	1.0% 17.7%	
AoA	Angola silt loam, 0 to 3 percent slopes	0.1		
Fu	Fluvaquents and Udifluvents, frequently flooded	1.8		
Hm	Hamlin silt loam	0.5	4.4%	
Uc	Udorthents, smoothed	4.7	45.3%	
Us	Urban land-Niagara complex	0.2	2.1%	
W	Water	3.1	29.5%	
Totals for Area of Interest		10.4	100.0%	

#### ERIE COUNTY CLERK'S OFFICE



County Clerk's Recording Page

Return to:

**BOX 126** 

Party 1:

LAKS RAYMOND E

Party 2:

**SME PROPERTIES LLC** 

Book Type: D Book: 11306 Page: 7261

Page Count: 3

Doc Type: DEED

Rec Date:

12/16/2016

Rec Time:

04:09:50 PM

Control #:

2016265585

UserID:

Janet H

Trans #:

16212199

**Document Sequence Number** 

TT2016010967

#### **Recording Fees:**

RECORDING	\$35.00
COE CO \$1 RET	\$1.00
COE STATE \$14.25 GEN	\$14.25
COE STATE \$4.75 RM	\$4.75
RP5217 CNTY \$9	\$9.00
RP5217 ST-NON RES \$241	\$241.00
TP584	\$10.00

Consideration Amount:	900000.00		
BASIC MT	\$0.00		
SONYMA MT	\$0.00		
ADDL MT/NFTA	\$0.00		
SP MT/M-RAIL	\$0.00		
NY STATE TT	\$3,600.00		
ROAD FUND TT	\$4,500,00		

Total: \$8,415.00

STATE OF NEW YORK ERIE COUNTY CLERK'S OFFICE

WARNING - THIS SHEET CONSTITUTES THE CLERK'S ENDORSEMENT REQUIRED BY SECTION 319&316-a (5) OF THE REAL PROPERTY LAW OF THE STATE OF NEW YORK. DO NOT DETACH. THIS IS NOT A BILL.

> Christopher L. Jacobs County Clerk

## This Indenture,

Made the

13 day of

December

Two Thousand Sixteen

**Between** 

RAYMOND E. LAKS, with offices at 3590 Southwestern Boulevard,

Orchard Park, NY 14127 and

100 ORCHARD PARK ROAD, LLC, a Limited Liability Company organized under the Laws of the State of New York, and having its place of business in the Town of Orchard Park, and State of New York,

Grantor, and

SME PROPERTIES, LLC, with offices at 100 Orchard Park Road, West Seneca, NY 14224

Grantee

Witnesseth, that the said Grantor, in consideration of \* \* ONE AND MORE \* \* DOLLARS (\$1.00 & MORE), lawful money of the United States, paid by the Grantee, do hereby grant and release unto the Grantee, his heirs and assigns forever.

### All that Tract or Parcel of Land, situate in the Town of West

Seneca, County of Erie and State of New York, being part of Lot No. 282, Township 10, Range 7 of the Buffalo Creek Reservation and according to a map recorded in the Erie County Clerk's Office in Liber 269 of Deeds at Page 433 is known as part of Subdivision Lot No. 8, bounded and described as follows: BEGINNING at a point on the west line of Lot No. 282 a distance of 146.54 feet north of the south line of said subdivision Lot No. 8; thence easterly at an exterior angle of 89°09'07" a distance of 772.90 feet to the westerly line of Cazenovia Creek; thence northwesterly along the said southwesterly line of Cazenovia Creek a distance of 890 feet more or less to the west line of Lot No. 282; thence southerly along the west line of Lot No. 282 a distance of 390.08 feet to the point or place of beginning.

265585 St Deed-2 WSN **TOGETHER** with the appurtenances and all the estate and rights of the Grantor in and to the said premises.

TO HAVE AND TO HOLD, the above granted premises unto the said Grantee.

**AND** the said Grantor does covenant with said Grantee as follows:

FIRST. - That the Grantee shall quietly enjoy the said premises.

SECOND. - That the Grantor will forever WARRANT the title to said premises.

**THIRD.** - Subject to the trust fund provisions of section thirteen of the lien law.

IN WITNESS WHEREOF, The said Grantor has hereunto set their hands and seals the day and year above written.

IN PRESENCE OF

IN WITNESS WHEREOF, The Grantor has caused its seal to be hereunto affixed, and these presents to be signed by its duly authorized officer this <u>13</u> day of <u>10...</u>, 2016.

By: factor of

\_[L.S.]

YAYMÔND E. LAKS

STATE OF NEW YORK

COUNTY OF ERIE

On this day of limited liability company seal; that it was so affixed by authority of the board of directors of said limited liability company, seal; that it was so affixed by authority of the board of directors of said limited liability company.

and that he signed his name thereto by like authority.

CATHERINE E. NAGEL
Notary Public, State of New York
Qualified in Eric County
My Commission Expires

INSTRUCTIONS: http://www.orps.state.ny.us or PHONE (518) 473-9791 FOR COUNTY USE ONLY REAL PROPERTY TRANSFER REPORT C1. SWIS Code STATE OF NEW YORK STATE BOARD OF REAL PROPERTY SERVICES C2. Date Deed Recorded **RP - 5217- PDF** RP-5217 Rev 1/29/09 PROPERTY INFORMATION 1. Property Location 100 ORCHARD PARK ROAD \*STREET NUMBER \* STREET NAME WEST SENECA 14224 \*CITY OR TOWN VILLAGE 2. Buyer Name SME PROPERTIES, LLC \* LAST NAME/COMPANY LAST NAME/COMPANY 3. Tax Billing if other than buyer address(at bottom of form) 1 AST NAME COMPANY Address Part of a Parcel (Only If Part of a Parcel) Check as they apply: 4. Indicate the number of Assessment # of Parcels Roll parcels transferred on the deed 4A. Planning Board with Subdivision Authority Exists 4B. Subdivision Approval was Required for Transfer Property Size 4C.Parcel Approved for Subdivision with Map Provided 100 ORCHARD PARK ROAD, LLC 6. Seller \* LAST NAME/COMPANY Name RAYMOND E. LAKS Check the boxes below as they apply: ct the description which most accurately describes the 8. Ownership Type is Condominium use of the property at the time of sale: ō 9. New Construction on a Vacant Land F. Commercial 10A. Property Located within an Agricultural District 108. Buyer received a disclosure notice indicating that the property is in an SALE INFORMATION 15. Check one or more of these conditions as applicable to transfer A. Sale Between Relatives or Former Relatives
 B. Sale between Related Companies or Partners in Busin
 C. One of the Buyers is also a Seller 07/15/2016 B. Sale b
C. One o
D. Buyer
E. Deed
F. Sale o
G. Signifi
H. Sale o
I. Other
J. None 11. Sale Contract Date D. Buyer or Seler is Government Agency or Lending Institution E. Deed Type not Warranty or Bargain and Sale (Specify Below) F. Sale of Fractional or Less than Fee Interest (Specify Below) 12/16/16 \* 12. Date of Sale/Transfer G. Significant Change in Property Between Taxable Status and Sale Dates H. Sale of Business is Included in Sale Price 900,000,000 \*13. Full Sale Price (Full Sale Price is the total amount paid for the property including personal property. This payment may be in the form of cash, other property or goods, or the assumption of mortgages or other obligations.) Please round to the nearest whole dollar amount. I. Other Unusual Factors Affecting Sale Price (Specify Below) nent(s) on Condition: Indicate the value of personal property included in the sale ASSESSMENT INFORMATION - Data should reflect the latest Final Assessment Roll and Tax Bill \*17. Total Assessed Value 16. Year of Assessment Roll from which information taken(YY) 16 WEST SENECA CENTRAL \*19. School District Name \*20. Tax Map Identifier(s)/Roll Identifier(s) (If more than four, attach sheet with additional identifier(s)) 134.13-2-34/A CERTIFICATION I Certify that all of the items of information entered on this form are true and correct (to the best of my knowledge and belief) and I understand that the making of any willful false spathment of material fact herein subject me to the provisions of the panal law relative to the making and filing of false instruments. BUYER CONTACT INFORMATION SELLER SIGNATURE (Enter Information for the buyer. Note: if buyer is LLC, society, association, corporation, joint stock company, satats or entity that is not an individual agent or flucidary, then a name and contact information of an individual responsible party who can answer questions regarding the trainfer must be entered. Type or print clearly.) 12/13/16 SME PROPERTIES, LLC **BUYER SIGNATURE** FIRST NAME AREA CODE TELEPHONE NUMBER (Ex: 9999999) 3814 • STREET NUMBER UNION ROAD CHEEKTOWAGA 14225 **BUYER'S ATTORNEY** ROBERT BATTISTA LAST NAME (716) AREA CODE

NOTE: property line and legal description has changed

1000.00 40 fps (12.2m/s) 500.00 400.00 300.00 35 fps (10.7m/s) 200.00 54" (1350mm) 31 fps (9.4m/s) 48" (1200 mm 27 fps (8.2m/s) 100.00 25 fps (7.6m/s) 23 fps (7.0m/s) 50.00 21 fps (6.4m/s) 40.00 30" (750mm 30,00 19 fps (5.8m/s) 20.00 4" (600m 17 fps (5.2m/s) Flow capacity (cfs) 15 fps (4.6m/s) 10.00 8" (450mm 13 fps (4.0m/s) 5" (375mm 5.00 4.00 12" (300m 3.00 10 fps (3.0m/s) 2.00 10' (250mm 9 fps (2.7m/s) 1.00 8 fps (2.4m/s) 0.50 0.40 0.30 0.20 0.10 0.01% 0.02% 0.04% 0.30% 0.40% 0.50% 4.00% 5.00% 10.00% Slope of pipe in feet per 100ft (%slope) 1cfs = 0.02832 m<sup>3</sup>/s 1ft/s = 0.30480 m/s

Figure 3-1
Discharge Rates for ADS Corrugated Pipe with Smooth Interior Liner<sup>1</sup>

1. Applicable products: N-12<sup>®</sup>, MEGA GREEN<sup>®</sup>, N-12 STIB, N-12 WTIB, HP STORM, SaniTite HP, N-12 Low Head

Note: Based on a design Manning's "n" of 0.012.

Solid lines indicate pipe diameters. Dashed lines indicate approximate flow velocity.

Redeveloped from FHWA HDS 3 – Design Charts for Open-Channel Flow<sup>2</sup>

© ADS, Inc., July 2014

# MYERS® MWS9 Series

Cast Iron Submersible Sewage Pumps

MWS9 Series: 2" NPT Discharge MWS39 Series: 3" NPT Discharge

#### **SPECIFICATIONS**

**Applications** Sewage and Wastewater Removal

and Transfer, Sump Drainage

235 GPM Capacities

889 LPM

Shut-off head

54'

16.5 m

Operation:

Automatic Float Switch

Tethered:

or Non-Automatic (manual) model available.

Solids handling

50.8 mm

Intermittent liquid temp

130°F

55°C

Min. Basin Diameter

Simplex: Duplex:

18" 30" 457 mm 762 mm

Motor

1, 1-1/2 and 2 HP, 1725 RPM. 230 Volt, single-phase, or 208-230/460 and 575 volt threephase, 60 Hz. Oil-filled, PSC with thermal overload with built-in thermal overload protection with automatic reset and permanent split capacitor on single-phase

only.

Acceptable pH range

Shaft seal

Primary: Mechanical type 21 or equal, Buna-N elastomers, silicon carbide seal faces, stainless steel metal parts: Secondary: self-lubricating

energized nitrile lip seal

Cast Iron

Motor housing Volute case

Cast Iron

Impeller

Cast Iron Two-Vane Semi-Open

Vortex

Power cord

Single Phase: 20' UL/CSA Listed. 3 wire 16-3 SJTW-A/SJTW water resistant cord with integrally grounded three-prong plug. Three Phase: 20' UL/CSA Listed. 4 wire 16-4 SJTW-A/SJTW water resistant

cord.

Discharge

2" NPT vertical 3" NPT vertical discharge: discharge: The MWS9 The MWS39



#### **FEATURES**

- Impeller Non-clog vortex style, pump out vanes for seal protection.
- Dual Shaft Seals -Primary mechanical seal with a secondary selflubricating lip seal.
- Bearing and Mechanical Seal - Permanently lubricated for long life.
- Serviceability Heavyduty lift-out ring, field serviceable.

- Overload Protection Built-in thermal overload with automatic reset on single phase
- •Cord Design Prevents oil loss from and moisture protection for motor.
- Controls Standard controls available for automatic operation.

#### ORDERING INFORMATION

Catalog Number	НР	Max. Load Amps	Volts	Phase/ Cycles	Cord Length	Mechanical Switch Type	Discharge
MWS9100220M	,	8.5	230	1/60		Manual	O" NDT
MWS9100220T		0.0				Tethered	
MWS9150220M	1-1/2	12.0				7	
MWS9150420M	1-1/2	4.7	460	3/60			2" NPT
MWS9200220M	2	13.0	230	1/60	М	Manual	
MWS9200420M		5.3	460	3/60			
MWS39100220M		1 8.5	230	1/60	00.		
MWS39100220T	1				20'	Tethered	3" NPT
MWS39100520M		3.5	575	3/60		Manual	
MWS39150220M	1-1/2	12.0	230	1/60			
MWS39150520M		3.8	575	3/60			
MWS39200220M	2	13.0	230	1/60			
MWS39200320M		10.0	208-230	240			
MWS39200520M		4.2	2 575 3/60				

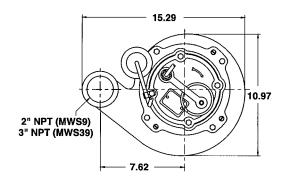
In order to provide the best products possible, specifications are subject to change.

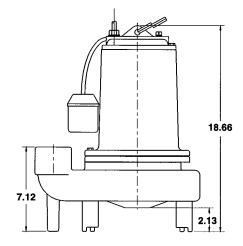
# MYERS® MWS9 Series

Cast Iron Submersible Sewage Pumps

MWS9 Series: 2" NPT Discharge MWS39 Series: 3" NPT Discharge

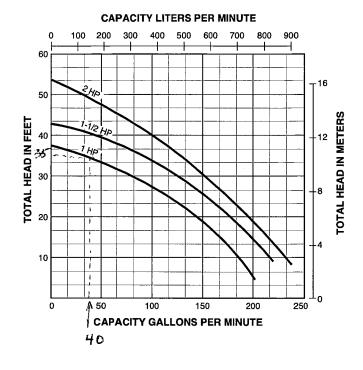
#### **OUTLINE DIMENSIONS**





Dimensions (in inches) are for estimating purposes only.

#### **PUMP PERFORMANCE**





USA

293 WRIGHT STREET, DELAVAN, WI 53115 WWW.FEMYERS.COM PH: 888-987-8677 ORDERS FAX: 800-426-9446

CANADA 490 PINEBUSH ROAD, UNIT 4, CAMBRIDGE, ONTARIO, N1T 0A5 PH: 800-363-7867 FAX: 888-606-5484

Because we are continuously improving our products and services, Pentair reserves the right to change specifications without prior notice.