



**Rivercourt Engineering Inc.**

4 Beechwood Cres., Toronto ON M4K 2K8

tel 647-479-4104; info@rivercourt.ca

[www.rivercourt.ca](http://www.rivercourt.ca)

February 3, 2025

**RE: Septic system design for Commisso Estate Winery located at 564 Kemp Road E., Grimsby, ON**

---

Rivercourt Engineering designed a septic system with a capacity of 4,620 L/d. The system was designed to service the new winery building and the existing garage to the east of the main residence that was also connected to the new septic system. The existing garage currently has a retail space with bathrooms that are accessible for the retail customers. However, once the new winery building is complete, the garage will no longer be used for retail or accessed by winery guests.

A septic permit was obtained from the Niagara Region in September 2020 and later revised in October 2022. The permit number is L126/20 and is included with this document. The septic system was installed in December 2022. It includes a septic tank, pump tanks, a constructed wetland (Aqua Wetland System) for treatment, and a raised Type A dispersal bed for disposal of the treated effluent.

Since the 2022 permit, the occupancy plans for the winery building have changed, but the overall design flow has not increased, and therefore, the septic system is suitably designed and permitted to service the winery building. The main change to the plans is that the garage and its bathrooms will no longer be used as everything will occur in the winery building. Previously, the winery building was presumed to be more production focused but now there will also be retail and hospitality. To account for the change, the following table shows an updated design flow calculation as per Table 8.2.1.3.B of the Ontario Building Code (OBC):

	unit	# units	L/d per	L/d
Employee (production)	8 h shift	2	75	150
Retail floor area (19.8 m <sup>2</sup> )	9.25 m <sup>2</sup>	3	40	120
Water closets (for retail)	WCs	1	950	950
Hospitality (wine tasting)	Seats	30	36	1,080
Total				2,300

The wastewater design flow from the wine production remains unchanged at 2,250 L/d. Based on an annual production goal of 8,000 cases of wine per year.

**The total design flow is 2,300 L/d + 2,250 L/d = 4,450 L/d. Rounded up to 4,620 L/d.**

The total design flow for the property:

Source	Flow (L/d)	Septic System
Main residence (5-bdr)	2,800	<i>Existing</i>
Second residence (3-bdr)	1,600	<i>Existing</i>
Winery	4,620	<i>New</i>
<b>TOTAL</b>	<b>9,020</b>	

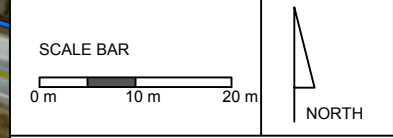
The septic permit attached to this document includes the design drawings from October 2022. There were some minor changes to the layout of the septic system, which will be reflected in as-built drawings. The updated layout drawing is also attached to this document.

**In summary, the septic system has the capacity to service the new winery building.**

Sincerely,

Andrew Hellebust, P.Eng.  
President, Rivercourt Engineering Inc.





PROJECT:  
**VILLA BACCHUS**  
 564 Kemp Rd. East. Grimsby, ON  
 DESIGN OF SEWAGE WORKS

**Rivercourt**  
 Rivercourt Engineering Inc.  
 4 Beechwood Crescent  
 Toronto ON M4K 2K8  
 Tel. 647-479-4104  
 www.rivercourt.ca

**TREATMENT TECHNOLOGIES**  
 THE AQUA WETLAND SYSTEM  
 AQUA Treatment Technologies Inc.  
 4250 Fly Rd. Campden ON L0R 1G0  
 905-327-4571  
 www.aqua-tt.com

NO.	AS-BUILT	DATE: Feb. 3, 2025	DRAWN: ER	CHECKED: AH
NO.	UPDATED DESIGN - ISSUED FOR NIAGARA REGION REVIEW	DATE: Oct. 19, 2022	DRAWN: ER	CHECKED: AH
NO.	ISSUED FOR SEPTIC PERMIT APPLICATION	DATE: Jul. 15, 2020	DRAWN: ER	CHECKED: AH

REVISIONS	
REVISION	DRAWING NUMBER
C	REI-C01

REVISED - Oct. 2022

EXPIRY - Dec. 1, 2022.

FOR OFFICE USE ONLY

PERMIT #: L126/20

PERMIT VALID FOR ONE YEAR

RECEIPT #: R8290 (\$1100)

DATE OF RECEIPT: July 20/20

PERMIT TO CONSTRUCT OR DEMOLISH

FOR CONSTRUCTION OR ALTERATION OF A SEWAGE SYSTEM IN Grimsby MUNICIPALITY

Name of Applicant: FRANK COMMISSO Telephone #: (905) 605-1560

Mailing Address: 564 KEMP RD. EAST BEANSVILLE ON LOR 1B2

Location of Sewage Disposal Unit: 564 KEMP RD. EAST, Grimsby, Municipality

Building Type: RETAIL WINE BLDG. (EMPLOYEE-1) STORAGE BLDG. (EMPLOYEES-3 + WINE PROCESSING) Size: APPROX 20.0 M2 (RETAIL) 4620 Litres Per. Day

TANK SIZE Specifications for a Class 4 or 5 Sewage System

Litres: 15,000 Gallons: -

TYPE OF SYSTEM: RAISED TYPE 'A' w AWS PRETREATMENT (SEE REPORT) Minimum area of stone 69.7 92.4 m2 or - metres in a - metre wide trench

Conditions of Approval and Reason (e.g. fill, grading, drainage improvements, design sewage flows) X

SEE CONDITIONS ATTACHED

Note: information provided that lots have merged

CERTIFICATE OF ISSUANCE

Application approved and this Certificate of Issuance under the Building Code Act, S.O. 1992 and O.Reg. 22/98 is hereby issued for the proposal outlined on the application and its attachments as amended by the requirements and conditions provided that the sewage system shall be completed and an Occupancy Permit issued within 12 months of the issue hereof or such extended period as the Chief Building Official on application allows.

DO NOT OPERATE THE SYSTEM UNTIL A FINAL INSPECTION HAS BEEN CONDUCTED AND APPROVED.

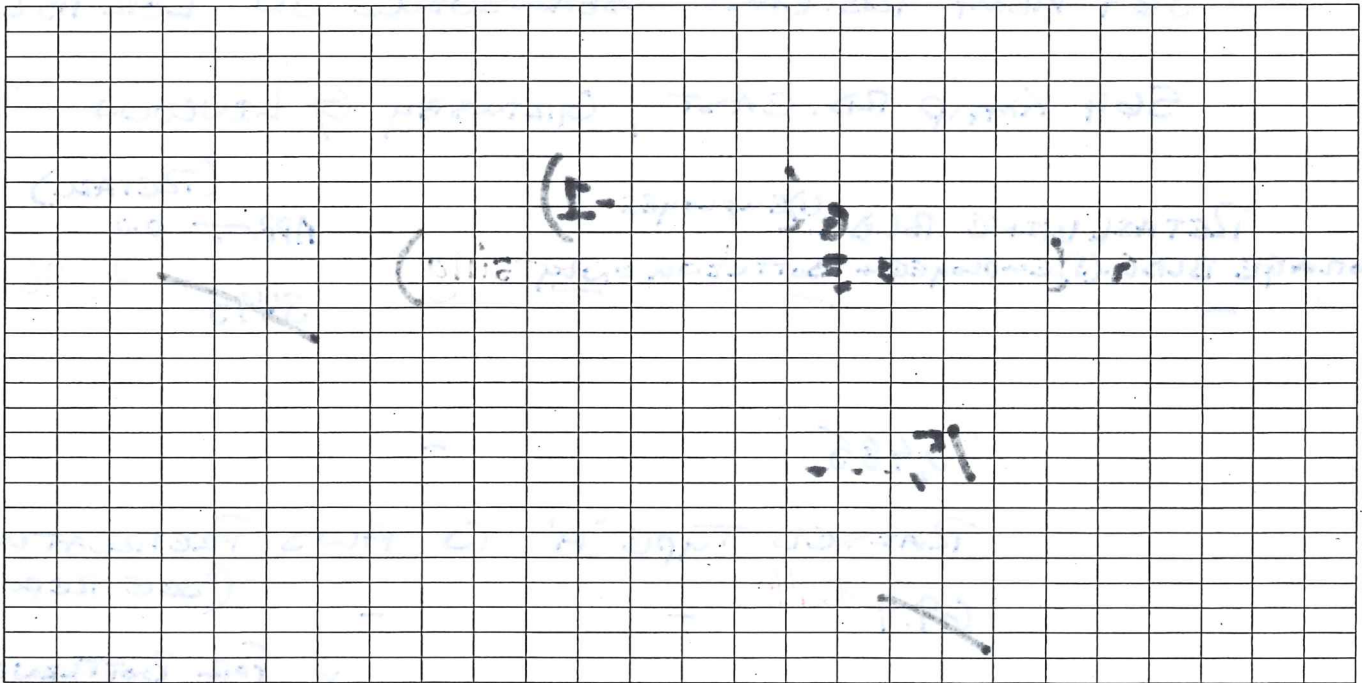
Inspected by: [Signature] Inspector Date: Sept 01/20

Issued by: [Signature] for Phil Lambert Chief Building Official Date: Sept 1 2020

Mailed Copies: SEP 02 2020 OCT 20 2022 (a) Owner (b) Municipality (c) Contractor

**INSPECTOR'S REPORT ON INSTALLATION**

- a) Septic Tank/Holding Tank working capacity of \_\_\_\_\_ litres, constructed of Concrete  or Plastic   
 to serve: \_\_\_\_\_ (# of bedrooms) or \_\_\_\_\_  
 Installer's Name: \_\_\_\_\_ Installer's Address: \_\_\_\_\_  
 Tank Manufacturer: \_\_\_\_\_
- b) Leaching bed of total: \_\_\_\_\_ lineal metres of \_\_\_\_\_ inch diameter distribution pipe of \_\_\_\_\_  
 (type and product description e.g. PVC or CSA Approved Pipe) laid in \_\_\_\_\_ runs and fed by \_\_\_\_\_ (gravity, pump)
- c) Tertiary System: (Manufacturer) \_\_\_\_\_ (Model) \_\_\_\_\_
- d) Mantle \_\_\_\_\_ Filter Sand \_\_\_\_\_ Stone \_\_\_\_\_
- e) Other details: \_\_\_\_\_
- f) **Location:**



**The following work remains to be completed:**

- Finish Grading to Shed Run-off and Divert Water Around Leaching Bed
- Other \_\_\_\_\_

---



---

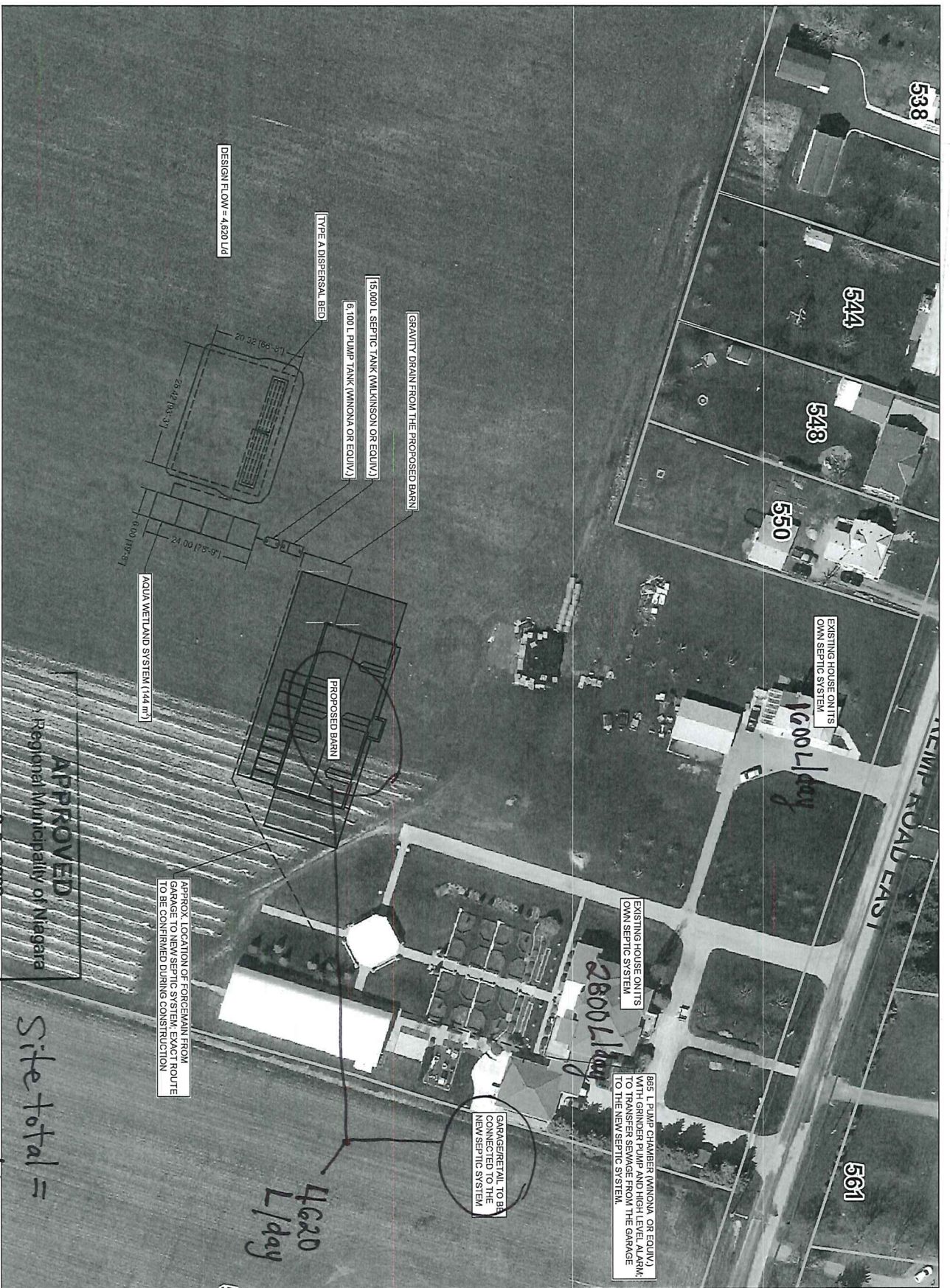


---

Inspector: \_\_\_\_\_ Date: \_\_\_\_\_

**FINAL INSPECTION – USE PERMIT** Mailed Copies: \_\_\_\_\_ (a) Owner (b) Municipality

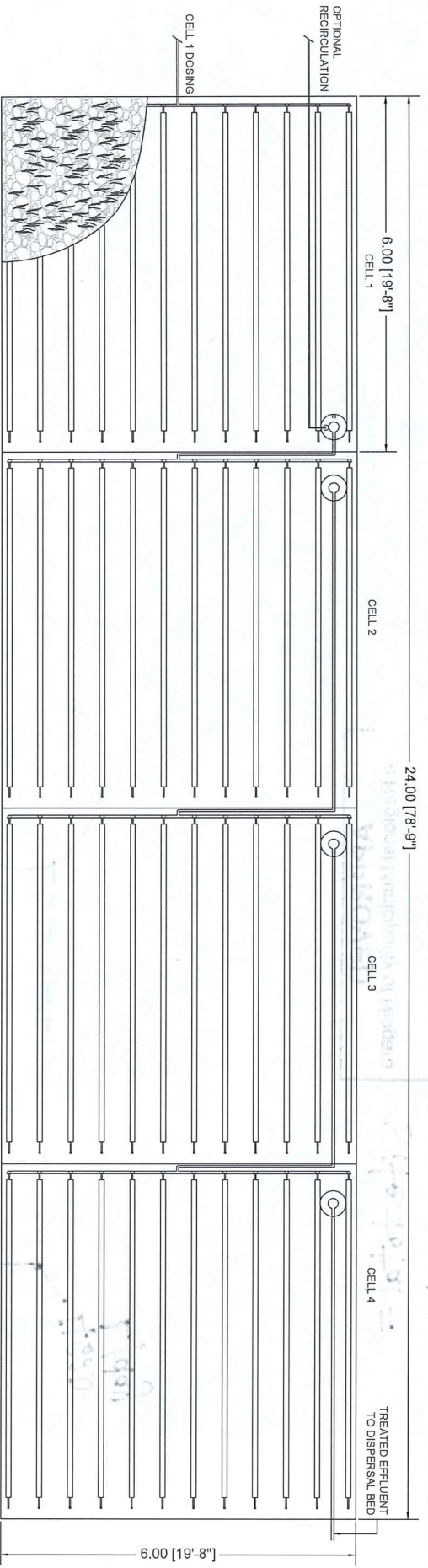
Inspector \_\_\_\_\_ Date \_\_\_\_\_  
 Chief Building Official \_\_\_\_\_ Date \_\_\_\_\_



**APPROVED**  
Regional Municipality of Niagara  
**OCT 20 2022**  
**PLANNING AND DEVELOPMENT SERVICES**

Site total =  
9020 L/day

<p>SCALE BAR 0 m 10 m 20 m NORTH</p>	
<p>PROJECT: <b>VILLA BACCHUS</b> 564 Kemp Rd. East, Grimsby, ON DESIGN OF SEWAGE WORKS</p>	
<p><b>Rivercourt</b> Rivercourt Engineering Inc. 4 Beechwood Crescent Toronto ON M6K 2K8 TEL: 647-497-4104 WWW.RIVERCOURT.CA</p>	
<p><b>TREATMENT TECHNOLOGIES</b> THE AQUA WETLAND SYSTEM AQUA Treatment Technologies Inc. 4250 Fry Rd., Campden ON L0R 1G0 905-327-4571 WWW.AQUA-TEC.COM</p>	
<p><b>LICENSED PROFESSIONAL ENGINEER</b> A. J. HELLEBUST Oct. 19, 2022 PROVINCE OF ONTARIO</p>	
<p>DATE: 10/19/2022 DRAWN BY: ER CHECKED BY: AH DATE: 10/19/2022 DATE: 10/15/2020 DRAWN BY: ER CHECKED BY: AH</p>	
<p>REVISIONS: NOTE: EXISTING DESIGN FOR CONSTRUCTION</p>	
<p>DRAWING TITLE: SITE LAYOUT DRAWN BY: ER CHECKED BY: AH</p>	
<p>REVISION: REI-B01</p>	



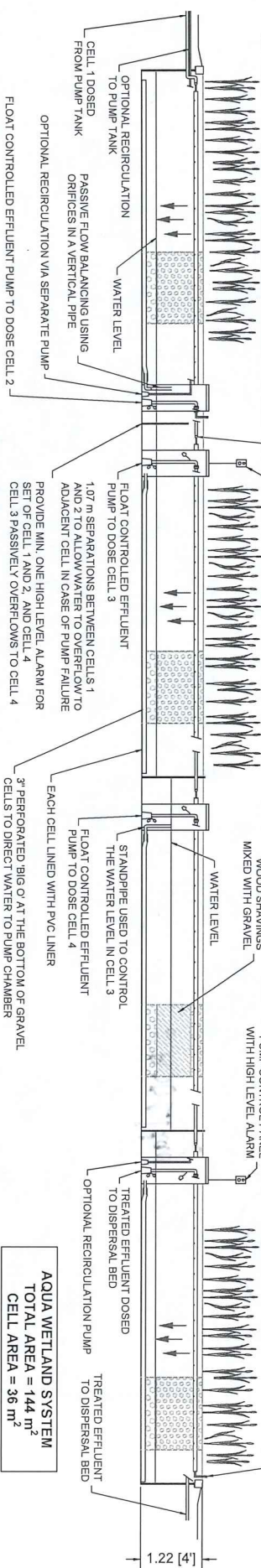
MANIFOLDS COVERED WITH GRAVEL AND PLANTED WITH EMERGENT WETLAND PLANTS

CELL MEDIA:  
 CELL 1 - 0.9 m OF 1/2" CLEAR GRAVEL ON 0.3 m 1/2" CLEAR GRAVEL  
 CELL 2 - 0.9 m OF 1/2" CLEAR GRAVEL ON 0.3 m 1/2" CLEAR GRAVEL  
 CELL 3 - 0.15 m OF 1/2" CLEAR GRAVEL ON 1.05 m OF WOOD SHAVINGS MIXED WITH 1/2" GRAVEL ON TOP OF 0.3 m 1/2" CLEAR GRAVEL  
 CELL 4 - 0.9 m 1/2" CLEAR GRAVEL ON 0.3 m 1/2" CLEAR GRAVEL

2" PIPE FROM PUMP TANK CONNECTS TO 2" MANIFOLD HEADER. LATERALS ARE 3/8" OR 1" PIPE WITH HOLES EVERY 0.6 m

WOODCHIP BIOFILTER CELL (CELL 3) WATER LEVEL IS HIGHER THAN OTHER CELLS TO MAINTAIN A LOW OXYGEN ENVIRONMENT. WOOD SHAVINGS MIXED WITH GRAVEL TO PROVIDE A CARBON SOURCE FOR DENITRIFYING BACTERIA

OPTIONAL RECIRCULATION PUMPS OR BRANCHED PIPES FOR EACH CELL TO ALLOW FOR A PORTION OF THE EFFLUENT TO BE TRANSFERRED TO THE PUMP TANK OR PRECEDING AWW'S CELLS. OTHER RECIRCULATION PATHS ARE OPTIONAL TO OPTIMIZE PERFORMANCE. e.g. RECIRCULATION WITHIN AEROBIC CELLS



AQUA WETLAND SYSTEM  
 TOTAL AREA = 144 m<sup>2</sup>  
 CELL AREA = 36 m<sup>2</sup>

**APPROVED**  
 The Regional Municipality of Niagara  
 OCT 20 2022  
 PLANNING AND DEVELOPMENT SERVICES

Rivercourt Engineering Inc.  
 4 Beadwood Crescent  
 Toronto ON M4K 2K8  
 Tel. 647-479-4104  
 www.rivercourt.ca

**AQUA TREATMENT TECHNOLOGIES INC.**  
 THE AQUA WETLAND SYSTEM  
 4250 HWY 700-327-4571  
 www.aqua-t.com

PROJECT: **VILLA BACCHUS**  
 564 Kemp Rd. East, Chesham, ON  
 DESIGN OF SEWAGE WORKS



Oct. 19, 2022

NO.	DATE	DESCRIPTION
1	2022 OCT 19	ISSUE FOR PERMIT
2	2022 OCT 19	ISSUE FOR PERMIT
3	2022 OCT 19	ISSUE FOR PERMIT
4	2022 OCT 19	ISSUE FOR PERMIT
5	2022 OCT 19	ISSUE FOR PERMIT
6	2022 OCT 19	ISSUE FOR PERMIT
7	2022 OCT 19	ISSUE FOR PERMIT
8	2022 OCT 19	ISSUE FOR PERMIT
9	2022 OCT 19	ISSUE FOR PERMIT
10	2022 OCT 19	ISSUE FOR PERMIT

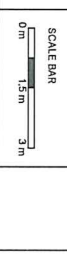
DATE: 2022 OCT 19  
 DRAWING TITLE: Aqua Wetland System  
 PROJECT: B  
 REVISIONS: REI-B02

**APPROVED**  
The Regional Municipality of Niagara  
**OCT 20 2022**  
**PLANNING AND DEVELOPMENT SERVICES**

Rivercourt Engineering Inc.  
4 Beachville  
Toronto ON M9K 2K8  
Tel. 647-479-4104  
www.rivercourt.ca

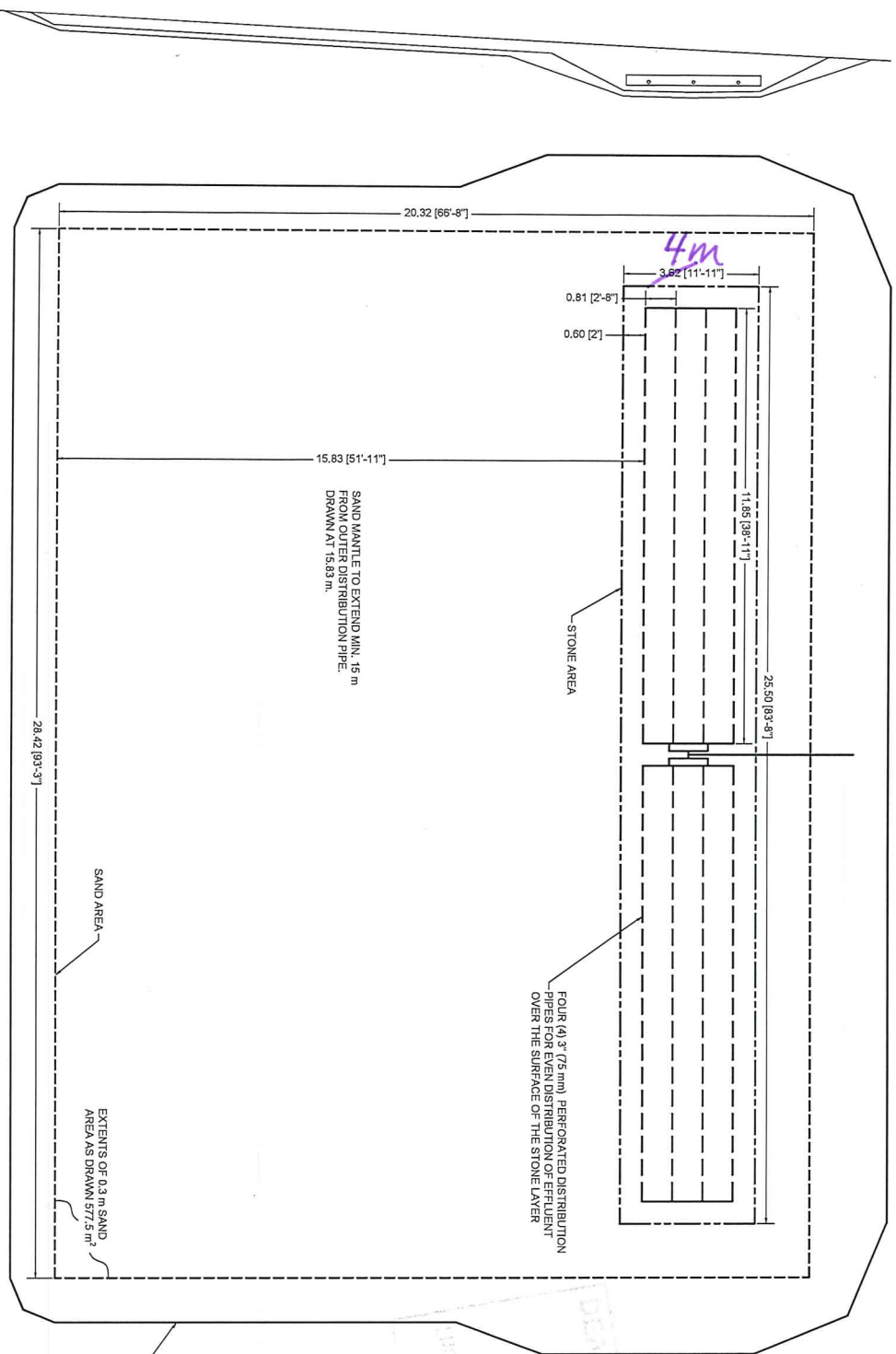
**TREATMENT TECHNOLOGIES**  
THE AQUA VITLAND SYSTEM  
AQUA Treatment Technologies Inc.  
4250 Hwy Rd. Campbell ON L0R 1G0  
905-327-4571  
www.aqua-tt.com

PROJECT:  
**VILLA BACCHUS**  
564 Kemp Rd. East, Grimsby, ON  
DESIGN OF SEWAGE WORKS



Oct. 19, 2022

1	ISSUED FOR PERMIT	10/19/2022	ER	ER	10/19/2022
2	REVISED DESIGN - ISSUED TO NIAGARA REGION REVIEW	10/19/2022	ER	ER	10/19/2022
3	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
4	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
5	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
6	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
7	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
8	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
9	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
10	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
11	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
12	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
13	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
14	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
15	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
16	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
17	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
18	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
19	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
20	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
21	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
22	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
23	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
24	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
25	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
26	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
27	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
28	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
29	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
30	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
31	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
32	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
33	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
34	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
35	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
36	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
37	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
38	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
39	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
40	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
41	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
42	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
43	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
44	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
45	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
46	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
47	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
48	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
49	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
50	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
51	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
52	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
53	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
54	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
55	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
56	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
57	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
58	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
59	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
60	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
61	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
62	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
63	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
64	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
65	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
66	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
67	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
68	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
69	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
70	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
71	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
72	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
73	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
74	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
75	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
76	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
77	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
78	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
79	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
80	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
81	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
82	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
83	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
84	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
85	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
86	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
87	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
88	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
89	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
90	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
91	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
92	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
93	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
94	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
95	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
96	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
97	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
98	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
99	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022
100	ISSUED FOR PERMIT APPLICATION	10/19/2022	ER	ER	10/19/2022



TYPE A DISPERSAL BED  
 DESIGN FLOW = 4,620 L/d  
 SOIL T TIME = 50 min/cm  
 STONE AREA  
 = 92.4 m<sup>2</sup>  
 SAND CONTACT AREA  
 = 4,620 L/d \* 50 min/cm / 400  
 = 577.5 m<sup>2</sup>

THE HEADER LINE AND DISTRIBUTION PIPES WITHIN A LEACHING BED SHALL BE DESIGNED AND CONSTRUCTED SO THAT THEY CAN BE DETECTED BY MEANS OF A 14 GAUGE TW SOLID COPPER LIGHT COLOURED PLASTIC COATED TRACER WIRE OR OTHER MEANS OF SUBSURFACE DETECTION.

APPROX. FOOTPRINT WITH BERMS

EXTENTS OF 0.3 m SAND AREAS DRAWN @ 1:25 m

SAND AREA

STONE AREA

SAND MANTLE TO EXTEND MIN. 15 m FROM OUTER DISTRIBUTION PIPE. DRAWN AT 15.83 m.

REVISION B  
 DRAWING TITLE: Type A Dispersal Bed Overview  
 DRAWING NUMBER: REI-B03



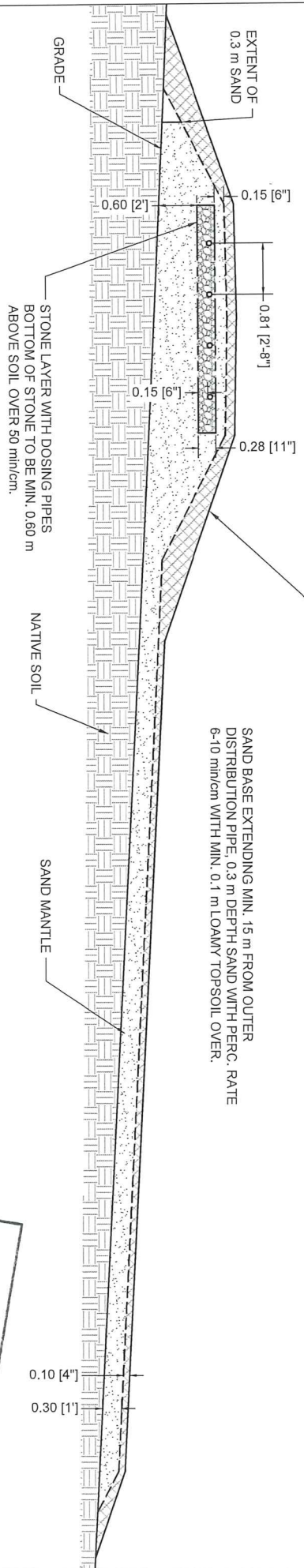
02150000

COVER OVER GRAVEL COMPRISED OF APPROXIMATELY 0.15 m (6-in) LOAMY TOPSOIL (<20 mm) OVER 0.15 m (6-in) SAND FILL 6-10 mm/cm; MOUND TO DIVERT RUNOFF

MIN. 0.6 m SAND UNDER GRAVEL AND IN MANTLE WITH PERC. RATE 6-10 mm/cm UNDER GRAVEL AND WITH NOT MORE THAN 5% FINES PASSING THROUGH A 0.074 mm SIEVE

BERM SLOPES SHOWN AT 1:3. SURFACE TO BE SEEDED WITH GRASS OR EQUIVALENT TO CONTROL EROSION

SAND BASE EXTENDING MIN. 15 m FROM OUTER DISTRIBUTION PIPE. 0.3 m DEPTH SAND WITH PERC. RATE 6-10 mm/cm WITH MIN. 0.1 m LOAMY TOPSOIL OVER.




CLEAN GRAVEL PER OBC PART 8, 50 mm OVER AND 150 mm UNDER DISTRIBUTION PIPE.  
GEOTEXTILE BETWEEN GRAVEL AND COVER

PROTECT BED FROM COMPACTION, LOOSEN / SCARIFY SURFACE IF COMPACTED. BED NOT TO BE COVERED BY ANY MATERIAL WITH A HYDRAULIC CONDUCTIVITY BELOW 0.01 m/day.

SHOWN WITH 5% SLOPE ON BOTTOM OF SAND TO MATCH NATIVE SLOPE ON SITE. TOPSOIL CLEARED AND BED PLACED ON SCARIFIED NATIVE SOIL BASE.

**APPROVED**  
The Regional Municipality of Niagara  
**OCT 20 2022**  
**PLANNING AND DEVELOPMENT SERVICES**

<p>Rivercourt Engineering Inc. 4 Beadwood Crescent Tel: 647-479-4104 www.rivercourt.ca</p>	 <p>THE AQUA WEIRLAND SYSTEM AQUA Treatment Technologies Inc. 4250 Fiy Rd, Campbell ON L9R 1G0 905-327-4571 www.aqua-tl.com</p>	<p>PROJECT: <b>VILLA BACCHUS</b> 544 Kemp Rd. East, Ormsby, ON DESIGN OF SEWAGE WORKS</p>	<p>SCALE BAR 0 m 0.5 m 1.5 m</p>	<p>Oct. 19, 2022</p>	<table border="1"> <tr> <td>NO.</td> <td>DATE</td> <td>DESCRIPTION</td> </tr> <tr> <td>1</td> <td>Oct. 19, 2022</td> <td>ISSUED DESIGN - READY FOR NIAGARA REGION REVIEW</td> </tr> <tr> <td>2</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>3</td> <td>Oct. 19, 2022</td> <td>ISSUED SEWER PERMIT APPLICATION</td> </tr> <tr> <td>4</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>5</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>6</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>7</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>8</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>9</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>10</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>11</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>12</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>13</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>14</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>15</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>16</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>17</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>18</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>19</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>20</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>21</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>22</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>23</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>24</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>25</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>26</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>27</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>28</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>29</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>30</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>31</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>32</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>33</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>34</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>35</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>36</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>37</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>38</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>39</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>40</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>41</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>42</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>43</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>44</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>45</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>46</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>47</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>48</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>49</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>50</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>51</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>52</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>53</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>54</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>55</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>56</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>57</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>58</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>59</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>60</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>61</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>62</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>63</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>64</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>65</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>66</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>67</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>68</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>69</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>70</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>71</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>72</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>73</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>74</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>75</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>76</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>77</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>78</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>79</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>80</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>81</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>82</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>83</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>84</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>85</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>86</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>87</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>88</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>89</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>90</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>91</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>92</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>93</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>94</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>95</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>96</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>97</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>98</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>99</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> <tr> <td>100</td> <td>Oct. 19, 2022</td> <td>ISSUED PERMIT APPLICATION</td> </tr> </table>	NO.	DATE	DESCRIPTION	1	Oct. 19, 2022	ISSUED DESIGN - READY FOR NIAGARA REGION REVIEW	2	Oct. 19, 2022	ISSUED PERMIT APPLICATION	3	Oct. 19, 2022	ISSUED SEWER PERMIT APPLICATION	4	Oct. 19, 2022	ISSUED PERMIT APPLICATION	5	Oct. 19, 2022	ISSUED PERMIT APPLICATION	6	Oct. 19, 2022	ISSUED PERMIT APPLICATION	7	Oct. 19, 2022	ISSUED PERMIT APPLICATION	8	Oct. 19, 2022	ISSUED PERMIT APPLICATION	9	Oct. 19, 2022	ISSUED PERMIT APPLICATION	10	Oct. 19, 2022	ISSUED PERMIT APPLICATION	11	Oct. 19, 2022	ISSUED PERMIT APPLICATION	12	Oct. 19, 2022	ISSUED PERMIT APPLICATION	13	Oct. 19, 2022	ISSUED PERMIT APPLICATION	14	Oct. 19, 2022	ISSUED PERMIT APPLICATION	15	Oct. 19, 2022	ISSUED PERMIT APPLICATION	16	Oct. 19, 2022	ISSUED PERMIT APPLICATION	17	Oct. 19, 2022	ISSUED PERMIT APPLICATION	18	Oct. 19, 2022	ISSUED PERMIT APPLICATION	19	Oct. 19, 2022	ISSUED PERMIT APPLICATION	20	Oct. 19, 2022	ISSUED PERMIT APPLICATION	21	Oct. 19, 2022	ISSUED PERMIT APPLICATION	22	Oct. 19, 2022	ISSUED PERMIT APPLICATION	23	Oct. 19, 2022	ISSUED PERMIT APPLICATION	24	Oct. 19, 2022	ISSUED PERMIT APPLICATION	25	Oct. 19, 2022	ISSUED PERMIT APPLICATION	26	Oct. 19, 2022	ISSUED PERMIT APPLICATION	27	Oct. 19, 2022	ISSUED PERMIT APPLICATION	28	Oct. 19, 2022	ISSUED PERMIT APPLICATION	29	Oct. 19, 2022	ISSUED PERMIT APPLICATION	30	Oct. 19, 2022	ISSUED PERMIT APPLICATION	31	Oct. 19, 2022	ISSUED PERMIT APPLICATION	32	Oct. 19, 2022	ISSUED PERMIT APPLICATION	33	Oct. 19, 2022	ISSUED PERMIT APPLICATION	34	Oct. 19, 2022	ISSUED PERMIT APPLICATION	35	Oct. 19, 2022	ISSUED PERMIT APPLICATION	36	Oct. 19, 2022	ISSUED PERMIT APPLICATION	37	Oct. 19, 2022	ISSUED PERMIT APPLICATION	38	Oct. 19, 2022	ISSUED PERMIT APPLICATION	39	Oct. 19, 2022	ISSUED PERMIT APPLICATION	40	Oct. 19, 2022	ISSUED PERMIT APPLICATION	41	Oct. 19, 2022	ISSUED PERMIT APPLICATION	42	Oct. 19, 2022	ISSUED PERMIT APPLICATION	43	Oct. 19, 2022	ISSUED PERMIT APPLICATION	44	Oct. 19, 2022	ISSUED PERMIT APPLICATION	45	Oct. 19, 2022	ISSUED PERMIT APPLICATION	46	Oct. 19, 2022	ISSUED PERMIT APPLICATION	47	Oct. 19, 2022	ISSUED PERMIT APPLICATION	48	Oct. 19, 2022	ISSUED PERMIT APPLICATION	49	Oct. 19, 2022	ISSUED PERMIT APPLICATION	50	Oct. 19, 2022	ISSUED PERMIT APPLICATION	51	Oct. 19, 2022	ISSUED PERMIT APPLICATION	52	Oct. 19, 2022	ISSUED PERMIT APPLICATION	53	Oct. 19, 2022	ISSUED PERMIT APPLICATION	54	Oct. 19, 2022	ISSUED PERMIT APPLICATION	55	Oct. 19, 2022	ISSUED PERMIT APPLICATION	56	Oct. 19, 2022	ISSUED PERMIT APPLICATION	57	Oct. 19, 2022	ISSUED PERMIT APPLICATION	58	Oct. 19, 2022	ISSUED PERMIT APPLICATION	59	Oct. 19, 2022	ISSUED PERMIT APPLICATION	60	Oct. 19, 2022	ISSUED PERMIT APPLICATION	61	Oct. 19, 2022	ISSUED PERMIT APPLICATION	62	Oct. 19, 2022	ISSUED PERMIT APPLICATION	63	Oct. 19, 2022	ISSUED PERMIT APPLICATION	64	Oct. 19, 2022	ISSUED PERMIT APPLICATION	65	Oct. 19, 2022	ISSUED PERMIT APPLICATION	66	Oct. 19, 2022	ISSUED PERMIT APPLICATION	67	Oct. 19, 2022	ISSUED PERMIT APPLICATION	68	Oct. 19, 2022	ISSUED PERMIT APPLICATION	69	Oct. 19, 2022	ISSUED PERMIT APPLICATION	70	Oct. 19, 2022	ISSUED PERMIT APPLICATION	71	Oct. 19, 2022	ISSUED PERMIT APPLICATION	72	Oct. 19, 2022	ISSUED PERMIT APPLICATION	73	Oct. 19, 2022	ISSUED PERMIT APPLICATION	74	Oct. 19, 2022	ISSUED PERMIT APPLICATION	75	Oct. 19, 2022	ISSUED PERMIT APPLICATION	76	Oct. 19, 2022	ISSUED PERMIT APPLICATION	77	Oct. 19, 2022	ISSUED PERMIT APPLICATION	78	Oct. 19, 2022	ISSUED PERMIT APPLICATION	79	Oct. 19, 2022	ISSUED PERMIT APPLICATION	80	Oct. 19, 2022	ISSUED PERMIT APPLICATION	81	Oct. 19, 2022	ISSUED PERMIT APPLICATION	82	Oct. 19, 2022	ISSUED PERMIT APPLICATION	83	Oct. 19, 2022	ISSUED PERMIT APPLICATION	84	Oct. 19, 2022	ISSUED PERMIT APPLICATION	85	Oct. 19, 2022	ISSUED PERMIT APPLICATION	86	Oct. 19, 2022	ISSUED PERMIT APPLICATION	87	Oct. 19, 2022	ISSUED PERMIT APPLICATION	88	Oct. 19, 2022	ISSUED PERMIT APPLICATION	89	Oct. 19, 2022	ISSUED PERMIT APPLICATION	90	Oct. 19, 2022	ISSUED PERMIT APPLICATION	91	Oct. 19, 2022	ISSUED PERMIT APPLICATION	92	Oct. 19, 2022	ISSUED PERMIT APPLICATION	93	Oct. 19, 2022	ISSUED PERMIT APPLICATION	94	Oct. 19, 2022	ISSUED PERMIT APPLICATION	95	Oct. 19, 2022	ISSUED PERMIT APPLICATION	96	Oct. 19, 2022	ISSUED PERMIT APPLICATION	97	Oct. 19, 2022	ISSUED PERMIT APPLICATION	98	Oct. 19, 2022	ISSUED PERMIT APPLICATION	99	Oct. 19, 2022	ISSUED PERMIT APPLICATION	100	Oct. 19, 2022	ISSUED PERMIT APPLICATION
NO.	DATE	DESCRIPTION																																																																																																																																																																																																																																																																																																																		
1	Oct. 19, 2022	ISSUED DESIGN - READY FOR NIAGARA REGION REVIEW																																																																																																																																																																																																																																																																																																																		
2	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
3	Oct. 19, 2022	ISSUED SEWER PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
4	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
5	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
6	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
7	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
8	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
9	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
10	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
11	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
12	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
13	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
14	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
15	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
16	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
17	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
18	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
19	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
20	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
21	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
22	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
23	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
24	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
25	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
26	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
27	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
28	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
29	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
30	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
31	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
32	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
33	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
34	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
35	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
36	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
37	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
38	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
39	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
40	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
41	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
42	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
43	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
44	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
45	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
46	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
47	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
48	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
49	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
50	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
51	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
52	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
53	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
54	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
55	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
56	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
57	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
58	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
59	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
60	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
61	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
62	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
63	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
64	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
65	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
66	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
67	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
68	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
69	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
70	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
71	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
72	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
73	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
74	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
75	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
76	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
77	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
78	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
79	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
80	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
81	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
82	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
83	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
84	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
85	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
86	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
87	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
88	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
89	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
90	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
91	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
92	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
93	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
94	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
95	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
96	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
97	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
98	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
99	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		
100	Oct. 19, 2022	ISSUED PERMIT APPLICATION																																																																																																																																																																																																																																																																																																																		