ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 3032-BFFKPN
Issue Date: September 11, 2019

CAPREIT Apartments Inc.
11 Church Street, No. 491
Toronto, Ontario
M5E 1W1

Site Location: Red Oaks Mobile Home Park
10085 Culloden Road Eden
Municipality of Bayham, County of Elgin
N0J 1H0

You have applied under section 20.2 of Part II.1 of the Environmental Protection Act, R.S.O. 1990, c. E. 19 (Environmental Protection Act) for approval of:

sewage works for collection, transmission, treatment and subsurface disposal of domestic wastewater, to service a year round mobile home park (fifty-three (53) units) from the above Site Location, with combined daily domestic sewage of 62,300 litres per day, consisting of the following;

Proposed Works

Replacement of any failed Existing Works

Replacement of any existing and approved sewage system with daily sewage flow of 1,100 litres per day as follows:

Septic Tank

- one (1) two-compartment ***septic tank*** having a capacity of approximately 3,600 litres fitted with an approved effluent filter on the outlet pipe, collecting wastewater from the lot and discharging effluent to an effluent pump chamber, filter bed or leaching bed as described below.

Effluent Pump Chamber

- where effluent discharge is not possible by gravity, one (1) ***effluent pump chamber*** shall be provided. The effluent pump chamber shall have a minimum capacity of 360 litres and be equipped with an audible and visual high-level alarm system and an effluent pump controlled by an on / off float switch. The effluent pump shall be sized and configured to dose the filter bed or leaching bed described below at a minimum rate of 75% of the distribution piping volume over a period not exceeding 15 minutes.

One (1) filter bed **or** leaching bed as follows:

Filter Bed

- one (1) 15 square metre fill-based filter bed consisting of the following components:

    1. 75 millimetre diameter perforated pipes installed in a continuous 15 square metre by 300 mm thick stone layer and evenly spaced over the surface of the filter medium with a maximum centre line spacing of 1.2 metres, underlain by a minimum of 750 mm filter media and a contact area consisting of minimum 250 millimetre layer of filter media extending from the base of the filter bed and sized based on the following formula:

        A = (Q * T) / 850

        Where:

        A = Contact area in square metres,

        Q = Daily design flow in litres per day = 1,100 litres per day,and

        T = percolation rate of native soil in minutes per centimetre

        Filter media shall conform to Ontario Building Code sentence 8.7.5.3(3).

    2. Loading area consisting of a minimum 250 millimetre layer of leaching bed fill, conforming to Ontario Building Code Sentence 8.7.4.2(2), placed under the filter bed and contact area and extending a minimum of 15 m beyond the stone layer in any direction in which the effluent entering the soil will move horizontally.

        The minimum size of the loading area shall be as follows:

        - 110 square metres where the T time of the native soil is 15 to 20 minutes per centimetre, or

- 138 square metres where the T time of the native soil is 20 to 35 minutes per centimetre, or

- 184 square metres where the T time of the native soil is 35 to 50 minutes per centimetre, or

- 275 square metres where the T time of the native soil is greater than 50 minutes per centimetre.

Leaching Bed

- one (1) leaching bed consisting of distribution piping laid in absorption trenches.

The total length of distribution piping shall be determined by the following formula:

L = 1,100 litres per day * (T / 200)

Where:

L = length of distribution piping in metres, and

T = design percolation rate in minutes per centimetre.

Construction of the absorption trenches shall conform to Ontario Building Code Section 8.7.3.2.- Absorption Trenches.

Where absorption trenches are constructed in leaching bed fill, the absorption trenches shall be constructed in accordance with Ontario Building Code Section 8.7.4.

Fill Based Absorption Trenches and a loading area shall be provided.

The loading area shall consist of a minimum 250 millimetre layer of leaching bed fill, conforming to Ontario Building Code Sentence 8.7.4.2(2), placed under the leaching bed and extending a minimum of 15 m beyond the outer most distribution pipe in any direction in which the effluent entering the soil will move horizontally.

The minimum size of the loading area shall be as follows:

- 110 metres squared where the T time of the native soil is 15 to 20 minutes per centimetre, or

- 138 metres squared where the T time of the native soil is 20 to 35 minutes per centimetre, or

- 184 metres squared where the T time of the native soil is 35 to 50 minutes per centimetre, or

- 275 metres squared where the T time of the native soil is greater than 50 minutes per centimetre.

Replacement of any existing and approved sewage system with daily sewage flow of 1,600 litres per day as follows:

Septic Tank

- one (1) two-compartment ***septic tank*** having a capacity of approximately 3,600 litres fitted with an approved effluent filter on the outlet pipe, collecting wastewater from the lot and discharging effluent to an effluent pump chamber, filter bed or leaching bed as described below.

Effluent Pump Chamber

- where effluent discharge is not possible by gravity, one (1) ***effluent pump chamber*** shall be provided. The effluent pump chamber shall have a minimum capacity of 360 litres and be equipped with an audible and visual high-level alarm system and an effluent pump controlled by an on / off float switch. The effluent pump shall be sized and configured to dose the filter bed or leaching bed described below at a minimum rate of 75% of the distribution piping volume over a period not exceeding 15 minutes.

One (1) filter bed **or** leaching bed as follows:

Filter Bed

- one (1) 22 square metre fill-based filter bed consisting of the following components:

    1. 75 millimetre diameter perforated pipes installed in a continuous 22 square metre by 300 mm thick stone layer and evenly spaced over the surface of the filter medium with a maximum centre line spacing of 1.2 metres, underlain by a minimum of 750 mm filter media and a contact area consisting of minimum 250 millimetre layer of filter media extending from the base of the filter bed and sized based on the following formula:

        A = (Q * T) / 850

        Where:

        A = Contact area in square metres,

Q = Daily design flow in litres per day = 1,600 litres per day, and

T = percolation rate of native soil in minutes per centimetre

Filter media shall conform to Ontario Building Code sentence 8.7.5.3(3).

2. Loading area consisting of a minimum 250 millimetre layer of leaching bed fill, conforming to Ontario Building Code Sentence 8.7.4.2(2), placed under the filter bed and contact area and extending a minimum of 15 m beyond the stone layer in any direction in which the effluent entering the soil will move horizontally.

The minimum size of the loading area shall be as follows:

- 160 square metres where the T time of the native soil is 15 to 20 minutes per centimetre, or
- 200 square metres where the T time of the native soil is 20 to 35 minutes per centimetre, or
- 267 square metres where the T time of the native soil is 35 to 50 minutes per centimetre, or
- 400 square metres where the T time of the native soil is greater than 50 minutes per centimetre.

Leaching Bed

- one (1) leaching bed consisting of distribution piping laid in absorption trenches.

The total length of distribution piping shall be determined by the following formula:

L = 1,600 litres per day * (T / 200)

Where:

L = length of distribution piping in metres, and

T = design percolation rate in minutes per centimetre.

Construction of the absorption trenches shall conform to Ontario Building Code Section 8.7.3.2.- Absorption Trenches.

Where absorption trenches are constructed in leaching bed fill, the absorption trenches shall be constructed in accordance with Ontario Building Code Section 8.7.4.

Fill Based Absorption Trenches and a loading area shall be provided.

The loading area shall consist of a minimum 250 millimetre layer of leaching bed fill, conforming to Ontario Building Code Sentence 8.7.4.2(2), placed under the leaching bed and extending a minimum of 15 m beyond the outer most distribution pipe in any direction in which the effluent entering the soil will move horizontally.

The minimum size of the loading area shall be as follows:

- 160 metres squared where the T time of the native soil is 15 to 20 minutes per centimetre, or

- 200 metres squared where the T time of the native soil is 20 to 35 minutes per centimetre, or

- 267 metres squared where the T time of the native soil is 35 to 50 minutes per centimetre, or

- 400 metres squared where the T time of the native soil is greater than 50 minutes per centimetre.

Existing Works

1. 201 Oak Street

Existing subsurface disposal system previously approved by Health Unit Permit #D272-A, servicing two (2) bedroom dwelling with daily design sewage flow of 1,100 litres per day, and consisting of;

Septic Tank
- one (1) existing septic tank having a capacity of approximately 2,839 litres, collecting wastewater from 201 Oak Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
- one (1) existing conventional tile bed with 108 meters of perforated distribution piping.

2. 202 Oak Street

Existing subsurface disposal system previously approved by Health Unit Permit #D402-A, servicing two (2) bedroom dwelling with daily design sewage flow of 1,100 litres per day, and consisting of;

Septic Tank
- one (1) existing septic tank having a capacity of approximately 2,839 litres, collecting wastewater from 202 Oak Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
-one (1) existing conventional tile bed with 108 meters of perforated distribution piping.

3. 203 Oak Street

Existing subsurface disposal system previously approved by Health Unit Permit #D516-A, servicing two (2) bedroom dwelling with daily design sewage flow of 1,100 litres per day, and consisting of;

Septic Tank
- one (1) existing septic tank having a capacity of approximately 3,028 litres, collecting wastewater from 203 Oak Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
-one (1) existing conventional tile bed with 108 meters of perforated distribution piping.

4. 204 Oak Street

Existing subsurface disposal system, servicing two (2) bedroom dwelling with daily design sewage flow of 1,100 litres per day, and consisting of;

Septic Tank
- one (1) existing septic tank of unknown capacity, collecting wastewater from 204 Oak Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
-one (1) existing conventional tile bed with 97 meters of perforated distribution piping.

5. 205 Oak Street

Existing subsurface disposal system, servicing two (2) bedroom dwelling with daily design sewage flow of 1,100 litres per day, and consisting of;

Septic Tank
- one (1) existing septic tank of unknown capacity, collecting wastewater from 205 Oak Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
-one (1) existing conventional tile bed with 76 meters of perforated distribution piping.

6. 206 Oak Street

Existing subsurface disposal system, servicing two (2) bedroom dwelling with daily design sewage flow of 1,100 litres per day, and consisting of;

Septic Tank
- one (1) existing septic tank of unknown capacity, collecting wastewater from 206 Oak Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
-one (1) existing conventional tile bed with 97 meters of perforated distribution piping.

7. 207 Oak Street

Existing subsurface disposal system, servicing two (2) bedroom dwelling with daily design sewage flow of 1,100 litres per day, and consisting of;

Septic Tank
- one (1) existing septic tank of unknown capacity, collecting wastewater from 207 Oak Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
-one (1) existing conventional tile bed with 76 meters of perforated distribution piping.

8. 208 Oak Street

Existing subsurface disposal system previously approved by Health Unit Permit #D469-A, servicing two (2) bedroom dwelling with daily design sewage flow of 1,100 litres per day, and consisting of;

Septic Tank
- one (1) existing septic tank having a capacity of approximately 3,636 litres, equipped with OBC approved effluent filter on the outlet pipe, collecting wastewater from 208 Oak Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
- one (1) existing 15 square meter conventional filter bed, with a contact area of 30.25 square meter (5.5 meter X 5.5 meters) and a loading area of 112.75 square meters.

9. 209 Oak Street

Existing subsurface disposal system previously approved by Health Unit Permit #D492-A, servicing three (3) bedroom dwelling with daily design sewage flow of 1,600 litres per day, and consisting of;

Septic Tank
- one (1) existing septic tank having a capacity of approximately 3,028 litres, collecting wastewater from 209 Oak Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
-one (1) existing conventional tile bed with 96 meters of perforated distribution piping.

10. 210 Oak Street
Existing subsurface disposal system previously approved by Health Unit Permit #D334-A, servicing two (2) bedroom dwelling with daily design sewage flow of 1,100 litres per day, and consisting of;

Septic Tank
- one (1) existing septic tank having a capacity of approximately 3,028 litres, collecting wastewater from 210 Oak Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
- one (1) existing conventional tile bed with 108 meters of perforated distribution piping.

11. 211 Oak Street
Existing subsurface disposal system, servicing two (2) bedroom dwelling with daily design sewage flow of 1,100 litres per day, and consisting of;

Septic Tank
- one (1) existing septic tank of unknown capacity, collecting wastewater from 211 Oak Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
-one (1) existing conventional tile bed with 91 meters of perforated distribution piping.

12. 212 Oak Street
Existing subsurface disposal system previously approved by Health Unit Permit #D304-A, servicing three (3) bedroom dwelling with daily design sewage flow of 1,600 litres per day, and consisting of;

Septic Tank
- one (1) existing septic tank having a capacity of approximately 2,839 litres, collecting wastewater from 212 Oak Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
-one (1) existing conventional tile bed with 108 meters of perforated distribution piping.

13. 213 Oak Street
Existing subsurface disposal system previously approved by Health Unit Permit #D526-A, servicing two (2) bedroom dwelling with daily design sewage flow of 1,100 litres per day, and consisting of;

Septic Tank
- one (1) existing septic tank having a capacity of approximately 3,028 litres, collecting wastewater from 213 Oak Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
-one (1) existing conventional tile bed with 90 meters of perforated distribution piping.

14. 214 Oak Street
Existing subsurface disposal system previously approved by Health Unit Permit #D613-A, servicing two (2) bedroom dwelling with daily design sewage flow of 1,100 litres per day, and consisting of;

Septic Tank
- one (1) existing septic tank having a capacity of approximately 3,028 litres, collecting wastewater from 214 Oak Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
- one (1) existing conventional tile bed with 90 meters of perforated distribution piping.

15. 215 Oak Street
Existing subsurface disposal system previously approved by Health Unit Permit #D494-A, servicing three (3) bedroom dwelling with daily design sewage flow of 1,600 litres per day, and consisting of;

Septic Tank
- one (1) existing septic tank having a capacity of approximately 3,028 litres, collecting wastewater from 215 Oak Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
- one (1) existing conventional tile bed with 84 meters of perforated distribution piping.

16. 216 Oak Street
Existing subsurface disposal system previously approved by Health Unit Permit #D614-A, servicing two (2) bedroom dwelling with daily design sewage flow of 1,100 litres per day,

and consisting of;

Septic Tank
- one (1) existing septic tank having a capacity of approximately 3,028 litres, collecting wastewater from 216 Oak Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
- one (1) existing conventional tile bed with 90 meters of perforated distribution piping.

17. 217 Oak Street

Existing subsurface disposal system, servicing two (2) bedroom dwelling with daily design sewage flow of 1,100 litres per day, and consisting of;

Septic Tank
- one (1) existing septic tank of unknown capacity, collecting wastewater from 217 Oak Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
-one (1) existing conventional tile bed with 76 meters of perforated distribution piping.

18. 218 Oak Street

Existing subsurface disposal system previously approved by Health Unit Permit #E-22/87-A, servicing two (2) bedroom dwelling with daily design sewage flow of 1,100 litres per day, and consisting of;

Septic Tank
- one (1) existing septic tank having a capacity of approximately 3,028 litres, collecting wastewater from 218 Oak Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
- one (1) existing conventional tile bed with 90 meters of perforated distribution piping.

19. 220 Oak Street

Existing subsurface disposal system previously approved by Health Unit Permit #E-21/87-A, servicing two (2) bedroom dwelling with daily design sewage flow of 1,100 litres per day, and consisting of;

Septic Tank
- one (1) existing septic tank having a capacity of approximately 3,028 litres, collecting wastewater from 220 Oak Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
- one (1) existing conventional tile bed with 90 meters of perforated distribution piping.

20. 222 Oak Street
Existing subsurface disposal system previously approved by Health Unit Permit #E-23/87-A, servicing two (2) bedroom dwelling with daily design sewage flow of 1,100 litres per day, and consisting of;

Septic Tank
- one (1) existing septic tank having a capacity of approximately 3,028 litres, collecting wastewater from 222 Oak Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
- one (1) existing conventional tile bed with 90 meters of perforated distribution piping.

21. 223 Oak Street
Existing subsurface disposal system, servicing two (2) bedroom dwelling with daily design sewage flow of 1,100 litres per day, and consisting of;

Septic Tank
- one (1) existing septic tank of unknown capacity, collecting wastewater from 223 Oak Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
-one (1) existing conventional tile bed with 73 meters of perforated distribution piping.

22. 224 Oak Street
Existing subsurface disposal system previously approved by Health Unit Permit #E-24/87-A, servicing two (2) bedroom dwelling with daily design sewage flow of 1,100 litres per day, and consisting of;

Septic Tank
- one (1) existing septic tank having a capacity of approximately 3,028 litres, collecting wastewater from 224 Oak Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
-one (1) existing conventional tile bed with 90 meters of perforated distribution piping.

23. 225 Oak Street
Existing subsurface disposal system, servicing two (2) bedroom dwelling with daily design sewage flow of 1,100 litres per day, and consisting of;

Septic Tank
- one (1) existing septic tank of unknown capacity, collecting wastewater from 225 Oak Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
-one (1) existing conventional tile bed with 73 meters of perforated distribution piping.

24. 226 Oak Street
Existing subsurface disposal system, servicing two (2) bedroom dwelling with daily design sewage flow of 1,100 litres per day, and consisting of;

Septic Tank
- one (1) existing septic tank of unknown capacity, collecting wastewater from 226 Oak Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
-one (1) existing conventional tile bed with 90 meters of perforated distribution piping.

25. 228 Oak Street
Existing subsurface disposal system, servicing two (2) bedroom dwelling with daily design sewage flow of 1,100 litres per day, and consisting of;

Septic Tank
- one (1) existing septic tank of unknown capacity, collecting wastewater from 228 Oak Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
-one (1) existing conventional tile bed with 90 meters of perforated distribution piping.

26. 230 Oak Street
Existing subsurface disposal system, servicing two (2) bedroom dwelling with daily design sewage flow of 1,100 litres per day, and consisting of;

Septic Tank
- one (1) existing septic tank of unknown capacity, collecting wastewater from 230 Oak Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
-one (1) existing conventional tile bed with 90 meters of perforated distribution piping.

27. 101 Maple Street

Existing subsurface disposal system previously approved by Health Unit Permit #D273-A, servicing two (2) bedroom dwelling with daily design sewage flow of 1,100 litres per day, and consisting of;

Septic Tank

- one (1) existing septic tank having a capacity of approximately 2,839 litres, collecting wastewater from 101 Maple Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System

- one (1) existing conventional tile bed with 108 meters of perforated distribution piping.

28. 102 Maple Street

Existing subsurface disposal system previously approved by Health Unit Permit #D313-A, servicing three (3) bedroom dwelling with daily design sewage flow of 1,600 litres per day, and consisting of;

Septic Tank

- one (1) existing septic tank having a capacity of approximately 3,028 litres, collecting wastewater from 102 Maple Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System

- one (1) existing conventional tile bed with 108 meters of perforated distribution piping.

29. 103 Maple Street

Existing subsurface disposal system previously approved by Health Unit Permit #D305-A, servicing three (3) bedroom dwelling with daily design sewage flow of 1,600 litres per day, and consisting of;

Septic Tank

- one (1) existing septic tank having a capacity of approximately 2,839 litres, collecting wastewater from 103 Maple Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System

- one (1) existing conventional tile bed with 108 meters of perforated distribution piping.

30. 104 Maple Street

Existing subsurface disposal system previously approved by Health Unit Permit #D202-A, servicing two (2) bedroom dwelling with daily design sewage flow of 1,100 litres per day, and consisting of;

Septic Tank
- one (1) existing septic tank having a capacity of approximately 2,839 litres, collecting wastewater from 104 Maple Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
- one (1) existing conventional tile bed with 108 meters of perforated distribution piping.

31. 105 Maple Street
Existing subsurface disposal system, servicing two (2) bedroom dwelling with daily design sewage flow of 1,100 litres per day, and consisting of;

Septic Tank
- one (1) existing septic tank of unknown capacity, collecting wastewater from 105 Maple Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
-one (1) existing conventional tile bed with 91 meters of perforated distribution piping.

32. 106 Maple Street
Existing subsurface disposal system previously approved by Health Unit Permit #D371-A, servicing two (2) bedroom dwelling with daily design sewage flow of 1,100 litres per day, and consisting of;

Septic Tank
- one (1) existing septic tank having a capacity of approximately 3,028 litres, collecting wastewater from 106 Maple Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
- one (1) existing conventional tile bed with 84 meters of perforated distribution piping.

33. 107 Maple Street
Existing subsurface disposal system, servicing two (2) bedroom dwelling with daily design sewage flow of 1,100 litres per day, and consisting of;

Septic Tank
- one (1) existing septic tank of unknown capacity, collecting wastewater from 107 Maple Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
-one (1) existing conventional tile bed with 91 meters of perforated distribution piping.

34. 108 Maple Street

Existing subsurface disposal system previously approved by Health Unit Permit #D219-A, servicing two (2) bedroom dwelling with daily design sewage flow of 1,100 litres per day, and consisting of;

Septic Tank

- one (1) existing septic tank having a capacity of approximately 2,839 litres, collecting wastewater from 108 Maple Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System

- one (1) existing conventional tile bed with 90 meters of perforated distribution piping.

35. 109 Maple Street

Existing subsurface disposal system, servicing two (2) bedroom dwelling with daily design sewage flow of 1,100 litres per day, and consisting of;

Septic Tank

- one (1) existing septic tank of unknown capacity, collecting wastewater from 109 Maple Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System

-one (1) existing conventional tile bed with 91 meters of perforated distribution piping.

36. 110 Maple Street

Existing subsurface disposal system previously approved by Health Unit Permit #D169-A, servicing two (2) bedroom dwelling with daily design sewage flow of 1,100 litres per day, and consisting of;

Septic Tank

- one (1) existing septic tank having a capacity of approximately 2,839 litres, collecting wastewater from 110 Maple Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System

- one (1) existing conventional tile bed with 91 meters of perforated distribution piping.

37. 111 Maple Street

Existing subsurface disposal system previously approved by Health Unit Permit #D284-A, servicing three (3) bedroom dwelling with daily design sewage flow of 1,600 litres per day, and consisting of;

Septic Tank
- one (1) existing septic tank having a capacity of approximately 2,839 litres, collecting wastewater from 111 Maple Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
- one (1) existing conventional tile bed with 91 meters of perforated distribution piping.

38. 112 Maple Street
Existing subsurface disposal system previously approved by Health Unit Permit #D243-A, servicing two (2) bedroom dwelling with daily design sewage flow of 1,100 litres per day, and consisting of;

Septic Tank
- one (1) existing septic tank having a capacity of approximately 2,839 litres, collecting wastewater from 112 Maple Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
- one (1) existing conventional tile bed with 108 meters of perforated distribution piping.

39. 113 Maple Street
Existing subsurface disposal system previously approved by Health Unit Permit #D264-A, servicing two (2) bedroom dwelling with daily design sewage flow of 1,100 litres per day, and consisting of;

Septic Tank
- one (1) existing septic tank having a capacity of approximately 2,839 litres, collecting wastewater from 113 Maple Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
- one (1) existing conventional tile bed with 108 meters of perforated distribution piping.

40. 114 Maple Street
Existing subsurface disposal system previously approved by Health Unit Permit #D363-A, servicing two (2) bedroom dwelling with daily design sewage flow of 1,100 litres per day, and consisting of;

Septic Tank
- one (1) existing septic tank having a capacity of approximately 3,028 litres, collecting wastewater from 114 Maple Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
- one (1) existing conventional tile bed with 108 meters of perforated distribution piping.

41. 115 Maple Street
Existing subsurface disposal system previously approved by Health Unit Permit #D218-A, servicing two (2) bedroom dwelling with daily design sewage flow of 1,100 litres per day, and consisting of;

Septic Tank
- one (1) existing septic tank having a capacity of approximately 2,839 litres, collecting wastewater from 115 Maple Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
- one (1) existing conventional tile bed with 108 meters of perforated distribution piping.

42. 116 Maple Street
Existing subsurface disposal system previously approved by Health Unit Permit #D177-A, servicing two (2) bedroom dwelling with daily design sewage flow of 1,100 litres per day, and consisting of;

Septic Tank
- one (1) existing septic tank having a capacity of approximately 2,839 litres, collecting wastewater from 116 Maple Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
- one (1) existing conventional tile bed with 108 meters of perforated distribution piping.

43. 117 Maple Street
Existing subsurface disposal system previously approved by Health Unit Permit #D242-A, servicing two (2) bedroom dwelling with daily design sewage flow of 1,100 litres per day, and consisting of;

Septic Tank
- one (1) existing septic tank having a capacity of approximately 2,839 litres, collecting wastewater from 117 Maple Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
- one (1) existing conventional tile bed with 91 meters of perforated distribution piping.

44. 118A Maple Street
Existing subsurface disposal system, servicing two (2) bedroom dwelling with daily design sewage flow of 1,100 litres per day, and consisting of;

Septic Tank
- one (1) existing septic tank of unknown capacity, collecting wastewater from 118A Maple Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
-one (1) existing leaching bed with unknown dimension.

45. 118 Maple Street
Existing subsurface disposal system previously approved by Health Unit Permit #D220-A, servicing two (2) bedroom dwelling with daily design sewage flow of 1,100 litres per day, and consisting of;

Septic Tank
- one (1) existing septic tank having a capacity of approximately 2,839 litres, collecting wastewater from 118 Maple Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
- one (1) existing conventional tile bed with 108 meters of perforated distribution piping.

46. 119 Maple Street
Existing subsurface disposal system previously approved by Health Unit Permit #E-48/86, servicing two (2) bedroom dwelling with daily design sewage flow of 1,100 litres per day, and consisting of;

Septic Tank
- one (1) existing septic tank of unknown capacity, collecting wastewater from 119 Maple Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
- one (1) existing conventional tile bed with 108 meters of perforated distribution piping.

47. 120 Maple Street
Existing subsurface disposal system previously approved by Health Unit Permit #E-29/80-A, servicing three (3) bedroom dwelling with daily design sewage flow of 1,600 litres per day, and consisting of;

Septic Tank
- one (1) existing septic tank having a capacity of approximately 3,028 litres, collecting wastewater from 120 Maple Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
- one (1) existing conventional tile bed with 108 meters of perforated distribution piping.

48. 121 Maple Street
Existing subsurface disposal system previously approved by Health Unit Permit #E-47/86, servicing two (2) bedroom dwelling with daily design sewage flow of 1,100 litres per day, and consisting of;

Septic Tank
- one (1) existing septic tank having a capacity of approximately 3,028 litres, collecting wastewater from 121 Maple Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
- one (1) existing conventional tile bed with 91 meters of perforated distribution piping.

49. 123 Maple Street
Existing subsurface disposal system previously approved by Health Unit Permit #E-46/86, servicing two (2) bedroom dwelling with daily design sewage flow of 1,100 litres per day, and consisting of;

Septic Tank
- one (1) existing septic tank having a capacity of approximately 3,028 litres, collecting wastewater from123 Maple Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
- one (1) existing conventional tile bed with 108 meters of perforated distribution piping.

50. 319 Beech Street
Existing subsurface disposal system previously approved by Health Unit Permit #E-61/87-A, servicing two (2) bedroom dwelling with daily design sewage flow of 1,100 litres per day, and consisting of;

Septic Tank
- one (1) existing septic tank of unknown capacity, collecting wastewater from 319 Beech Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
- one (1) existing conventional tile bed with 88 meters of perforated distribution piping.

51. 321 Beech Street
Existing subsurface disposal system, servicing two (2) bedroom dwelling with daily design sewage flow of 1,100 litres per day, and consisting of;

Septic Tank
- one (1) existing septic tank of unknown capacity, collecting wastewater from 321 BeechStreet and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
-one (1) existing conventional tile bed with 91 meters of perforated distribution piping.

52. 322 Beech Street
Existing subsurface disposal system previously approved by Health Unit Permit #E-24/85-A, servicing three (3) bedroom dwelling with daily design sewage flow of 1,600 litres per day, and consisting of;

Septic Tank
- one (1) existing septic tank having a capacity of approximately 3,028 litres, collecting wastewater from 322 Beech Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
- one (1) existing conventional tile bed with 108 meters of perforated distribution piping.

53. 324 Beech Street
Existing subsurface disposal system, servicing two (2) bedroom dwelling with daily design sewage flow of 1,100 litres per day, and consisting of;

Septic Tank
- one (1) existing septic tank of unknown capacity, collecting wastewater from 324 Beech Street and discharging effluent to the subsurface sewage disposal system described below; and

Subsurface Sewage Disposal System
-one (1) existing conventional tile bed with 84 meters of perforated distribution piping.

including all other controls, electrical equipment, instrumentation, piping, valves and appurtenances essential for the proper operation of the aforementioned sewage works.

all in accordance with supporting documents listed in **Schedule A**.

For the purpose of this environmental compliance approval, the following definitions apply:

1. "Approval" means this entire document and any schedules attached to it, and the application;

2. "Director" means a person appointed by the Minister pursuant to section 5 of the EPA for the purposes of Part II.1 of the EPA;

3. "District Manager" means the District Manager of the London District Office;

4. "EPA" means the *Environmental Protection Act*, R.S.O. 1990, c.E.19, as amended;

5. "Existing Works" means those portions of the Works included in the Approval that have been constructed previously;

6. "Licensed Installer" means a person who is registered under the OBC to construct, install, repair, service, clean or empty on-site sewage systems;

7. "Ministry" means the ministry of the government of Ontario responsible for the EPA and OWRA and includes all officials, employees or other persons acting on its behalf;

8. "OBC" means the Ontario Building Code;

9. "Owner" means Capreit Apartments Inc., and its successors and assignees;

10. "OWRA" means the *Ontario Water Resources Act*, R.S.O. 1990, c. O.40, as amended;

11. "Professional Engineer" means a person entitled to practise as a Professional Engineer in the Province of Ontario under a licence issued under the *Professional Engineers Act*;

12. "Professional Geoscientist" means a person entitled to practise as a Professional Geoscientist in the Province of Ontario under a licence issued under the *Professional Geoscientists Act*;

13. "Proposed Works" means those portions of the Works included in the Approval that are under construction or to be constructed;

14. "Works" means the approved sewage works, and includes Proposed Works, and Existing Works.

You are hereby notified that this environmental compliance approval is issued to you subject to the terms and conditions outlined below:

TERMS AND CONDITIONS

1. GENERAL PROVISIONS

1. The Owner shall ensure that any person authorized to carry out work on or operate any aspect of the Works is notified of this Approval and the conditions herein and shall take all reasonable measures to ensure any such person complies with the same.

2. Except as otherwise provided by these conditions, the Owner shall design, build, install, operate and maintain the Works in accordance with the description given in this Approval, the application for approval of the works and the submitted supporting documents and plans and specifications as listed in this Approval.

3. Where there is a conflict between a provision of any submitted document referred to in this Approval and the conditions of this Approval, the conditions in this Approval shall take precedence, and where there is a conflict between the listed submitted documents, the document bearing the most recent date shall prevail.

4. Where there is a conflict between the listed submitted documents, and the application, the application shall take precedence unless it is clear that the purpose of the document was to amend the application.

5. The requirements of this Approval are severable. If any requirement of this Approval, or the application of any requirement of this Approval to any circumstance, is held invalid or unenforceable, the application of such requirement to other circumstances and the remainder of this Approval shall not be affected thereby.

6. The issuance of, and compliance with the conditions of, this Approval does not:

    a. relieve any person of any obligation to comply with any provision of any applicable statute, regulation or other legal requirement, including but not limited to, the obligation to obtain approval from the local conservation authority necessary to construct or operate the sewage works; or

    b. limit in any way the authority of the Ministry to require certain steps be taken to require the Owner to furnish any further information related to compliance with this Approval.

2. EXPIRY OF APPROVAL

1. This Approval will cease to apply to those parts of the Proposed Works which have not been constructed within five (5) years of the date of this Approval.

3. CHANGE OF OWNER

1. The Owner shall notify the District Manager and the Director, in writing, of any of the following changes within 30 days of the change occurring:

    a. change of Owner;

    b. change of address of the Owner;

    c. change of partners where the Owner is or at any time becomes a partnership, and a copy of the most recent declaration filed under the *Business Names Act* , R.S.O. 1990, c.B17 shall be included in the notification to the District Manager;

    d. change of name of the corporation where the Owner is or at any time becomes a corporation, and a copy of the most current information filed under the *Corporations Information Act* , R.S.O. 1990, c. C39 shall be included in the notification to the District Manager;

2. In the event of any change in ownership of the Works, other than a change to a successor municipality, the Owner shall notify in writing the succeeding owner of the existence of this Approval, and a copy of such notice shall be forwarded to the District Manager and the Director.

3. The Owner shall ensure that all communications made pursuant to this condition refer to the environmental compliance approval number.

4. CONSTRUCTION

1. The Owner shall ensure that the construction of the Proposed Works is supervised by a Licensed Installer, or a Professional Engineer.

2. The Owner shall ensure that the Proposed Works are constructed such that minimum horizontal clearance distances as specified in the OBC are satisfied.

3. Upon construction of the Proposed Works, the Owner shall prepare a statement, certified by a Licensed Installer or a Professional Engineer, that the Works are constructed in accordance with this Approval, and upon request, shall make the written statement available for inspection by Ministry staff.

4. Upon construction of the Proposed Works, the Owner shall prepare a set of as-built drawings showing the Works “as constructed”. "As-built" drawings shall be kept up to date through revisions undertaken from time to time and a copy shall be retained at the site for the operational life of the Works and shall be made available for inspection by Ministry staff.

5. OPERATIONS, MAINTENANCE, AND RECORDING

1. The Owner shall ensure that at all times, the Works and related equipment and appurtenances which are installed or used to achieve compliance with this Approval are properly operated and maintained.

2. The Owner shall ensure that the septic tank is pumped out every 3-5 years or when the tank is 1/3 full of solids and the effluent filter is cleaned out at minimum once a year (or more often if required).

3. The Owner shall ensure that grass-cutting is maintained regularly over the subsurface disposal bed, and that adequate steps are taken to ensure that the area of the underground works is protected from vehicle traffic.

4. The Owner shall ensure that in the event a break-out is observed from the subsurface disposal bed, the sewage discharge to the bed is discontinued and the incident immediately reported verbally to the District Manager, followed by a written report within seven (7) days. The Owner shall ensure that during the time remedial actions are taking place the sewage generated at the site shall not be allowed to discharge to a surface water body or to the environment, and shall be safely collected and disposed of through a licensed waste hauler to an approved waste disposal site.

5. The Owner shall maintain a logbook to record the results of Operation and Maintenance activities specified in the above sub-clauses, and shall keep the logbook at the site and make it available for inspection by the Ministry staff.

6. The Owner shall retain for a minimum of five (5) years from the date of their creation, all records and information related to or resulting from the Operation and Maintenance activities required by this Approval.

6. DECOMMISSIONING OF UN-USED SEWAGE WORKS

1. The Owner shall properly abandon any portion of unused existing sewage Works, as directed below, and upon completion of decommissioning report in writing to the District Manager.

    a. any sewage pipes leading from building structures to unused sewage Works components shall be disconnected and capped;

    b. any unused septic tanks, holding tanks and pump chambers shall be completely emptied of its content by a licensed hauler and either be removed, crushed and backfilled, or be filled with granular material;

c. if the area of the existing leaching bed is going to be used for the purposes of construction of a replacement bed or other structure, all distribution pipes and surrounding material must be removed by a licensed hauler and disposed off site at an approved waste disposal site; otherwise the existing leaching bed may be abandoned in place after disconnecting, if there are no other plans to use the area for other purposes;

7. SPECIAL CONDITION

1. The Owner shall upon failure of any of the Existing Works, notify the District Manager, in writing, of the failed Works and the planned installation schedule.

2. The Owner shall design the replacement sewage works as described above under Proposed Works - Replacement of any failed existing sewage works

3. The Owner shall ensure that the Proposed Works - Replacement of any failed existing sewage works, are constructed in accordance with the requirements of condition 4 of this Approval.

4. The Owner shall, within **five (5) years** from the date of issuance of this Approval, submit an application to amend this Approval to include all replaced septic systems.

5. The Owner shall submit a Terms of Reference, acceptable to the District Manager for the study of the "cumulative impact of all existing on-site sewage systems located at the site on the environment" within **six (6) months** and a detailed report prepared by a Professional Engineer or a Professional Geoscientist within **twelve (12) months** of the acceptance of the Terms of Reference by the District Manager. The report shall include but not limited to the following information:

    a. a survey showing all existing supply wells in and around the property and a hydrogeological report to determine the cumulative impact of the sewage works on these wells and nearby surface water; and

    b. any other information requested by District Manager.

The reasons for the imposition of these terms and conditions are as follows:

1. Condition 1 is imposed to ensure that the Works are built and operated in the manner in which they were described for review and upon which approval was granted. This condition is also included to emphasize the precedence of Conditions in the Approval and the practice that the Approval is based on the most current document, if several conflicting documents are submitted for review. The condition also advises the Owners their responsibility to notify any person they authorized to carry out work pursuant to this Approval the existence of this Approval.

2. Condition 2 is included to ensure that the Works are constructed in a timely manner so that standards applicable at the time of Approval of the Works are still applicable at the time of construction, to ensure the ongoing protection of the environment.

3. Condition 3 is included to ensure that the Ministry records are kept accurate and current with respect to the approved works and to ensure that subsequent owners of the Works are made aware of the Approval and continue to operate the Works in compliance with it.

4. Condition 4 is included to ensure that the works are constructed, and may be operated and maintained such that the environment is protected and deterioration, loss, injury or damage to any person or property is prevented.

5. Condition 5 is included to require that the Works be properly operated, maintained, and equipped such that the environment is protected.

6. Condition 6 is included to ensure that any components of un-used Works are properly decommissioned.

7. Condition 7 is included to ensure that all proposed replacements of the Works are done as required by this Approval, and all the Works be properly operated, maintained, and equipped such that the environment is protected. Condition 7.5., is also included to ensure that the impact of the existing sewage works on nearby wells and surface water is assessed by a qualified person.

Schedule A

Application for Environmental Compliance Approval for Private Sewage Works submitted by Andre N. de Moura, P. Eng. of the C. C. Tatham & Associates Ltd. received on October 31 2018, including design report, final plans and specifications.

In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me, the Environmental Review Tribunal and in accordance with Section 47 of the Environmental Bill of Rights, 1993, the Minister of the Environment, Conservation and Parks, within 15 days after receipt of this Notice, require a hearing by the Tribunal. The Minister of the Environment, Conservation and Parks will place notice of your appeal on the Environmental Registry. Section 142 of the Environmental Protection Act provides that the Notice requiring the hearing shall state:

a. The portions of the environmental compliance approval or each term or condition in the environmental compliance approval in respect of which the hearing is required, and;
b. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

The Notice should also include:

1. The name of the appellant;
2. The address of the appellant;
3. The environmental compliance approval number;
4. The date of the environmental compliance approval;
5. The name of the Director, and;
6. The municipality or municipalities within which the project is to be engaged in.

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

The Secretary*
Environmental Review Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5

AND

The Minister of the Environment,
Conservation and Parks
777 Bay Street, 5th Floor
Toronto, Ontario
M7A 2J3

AND

The Director appointed for the purposes of
Part II.1 of the Environmental Protection Act
Ministry of the Environment,
Conservation and Parks
135 St. Clair Avenue West, 1st Floor
Toronto, Ontario
M4V 1P5

*** Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349, Fax: (416) 326-5370 or www.ert.gov.on.ca**

This instrument is subject to Section 38 of the Environmental Bill of Rights, 1993, that allows residents of Ontario to seek leave to appeal the decision on this instrument. Residents of Ontario may seek leave to appeal within 15 days from the date this decision is placed on the Environmental Registry. By accessing the Environmental Registry at https://ero.ontario.ca/ , you can determine when the leave to appeal period ends.

The above noted activity is approved under s.20.3 of Part II.1 of the Environmental Protection Act.

DATED AT TORONTO this 11th day of September, 2019

Fariha Pannu, P.Eng.
Director
appointed for the purposes of Part II.1 of the
Environmental Protection Act

SP/

c: District Manager, MECP London District Office
André N. de Moura, P. Eng., C.C. Tatham & Associates Ltd.