



Preliminary Servicing Brief

Date: December 16, 2025 **Project No.:** 300054526.0000

Project Name: Attrell Lot Severances, 20836 Kennedy Road, Caledon

Client Name: Attrell

To: Ms. Sandra DeMaria
Director, Planning & Development
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From: Anne Egan, P.Eng.
Peter Bruce, Senior Project Manager

1.0 Introduction and Background

R.J. Burnside & Associates Limited (Burnside) is retained by John Attrell (the client) to provide engineering services related to a proposed severance of lands located at 20836 Kennedy Road, within the Town of Caledon.

This work is being conducted in support of the client's lot severance application and the future development of three detached homes. The subject property has an area of approximately 41 ha and is located on the west side of Kennedy Road, south of Highway 9 and contains a single detached dwelling. It is proposed to sever the existing lot to create two additional residential lots, for a total of three individual lots. The proposed severance would create a single lot to the north of the existing dwelling (Lot A) with an area of approximately 1.5 ha, and a second lot to the south of the existing dwelling (Lot B), with an area of approximately 1.4 ha. The retained lands would consist of 38.3 ha.

Each lot is to contain a separate dwelling to be serviced with individual private water wells and sewage systems. This preliminary servicing brief presents a review to demonstrate feasibility of water supply, sewage servicing and stormwater management to support the planning approvals for the site.

2.0 Soil and Subsurface Conditions

In August of 2022, Burnside oversaw the excavation of three test pits across the site, with a mini excavator supplied and operated by VanGerven Excavating. The soils were found to be consistent across the three areas of the property, consisting of sand and gravel with some silt.

Two soil samples (from TP1 and TP3) were submitted to Chung & Vander Doelen for a grain size analysis to assist in estimating the percolation rate (T-time) of the native soils. According to the grain size analysis for TP1, the soil consists of sand and gravel, trace silt. We have classified the soil as SW soil, for which T-times range from 2 to 12 min/cm according to Supplementary Standard SB-6 of the Ontario Building Code (OBC). Based on the grain size distribution, consideration of the silt and clay content and our visual observations, a T-time of 8 min/cm has been assigned to the native soil for TP1, which corresponds to the Retained Lot, and Lot B (south).

The grain size analysis for TP3 is representative of the conditions in Lot A (north), consisting of gravelly sand, trace silt. This soil can also be classified as SW. Based on the coarser sand grain size for this part of the site, we have assigned a T-time of 4 min/cm for TP3, to be used for the north Lot A.

3.0 Design Sewage Flows

Daily sewage design flows for the proposed dwellings are calculated in accordance with the Ontario Building Code Table 8.2.1.3.A. using a base flow for the number of bedrooms, and additional flow to account for floor area exceeding 200 m², or fixture units exceeding 20, whichever is greater.

Lot A is proposed to contain a 4-bedroom, 3.5 bath dwelling with a finished floor area of 325 m² (3,500 ft²). An allowance has also been included for a future basement bathroom.

Table 1A – Lot A (North)

	Unit Flow	Total Units	Total Flow (L/day)
4-Bedroom Dwelling	2,000 L/day	1	2,000
Plus, the greater of:			
Floor Area, or	100 L per each 10 m ² between 200 m ² and 400 m ²	13	1,300
Fixtures	50 L for each fixture unit over 20 fixture units	40.5 fixture units total	1,025
Total Sewage Flow			3,300

Lot B is proposed to contain a 5-bedroom, 4.5 bath dwelling with a finished floor area of 465 m² (5,000 ft²). An allowance has also been included for a future basement bathroom.

Table 1B – Lot B (South)

	Unit Flow	Total Units	Total Flow (L/day)
5-Bedroom Dwelling	2,500 L/day	1	2,500
Plus, the greater of:			
Floor Area, or	100 L per each 10 m ² between 200 m ² and 400 m ²	20	2,000
	75 L per each 10 m ² between 400 m ² and 600 m ²	7	525
Subtotal of Floor Area Unit Flow			2,525
Fixtures	50 L for each fixture unit over 20 fixture units	46.5 fixture units total	1,325
Total Sewage Flow			5,025

The retained lot is proposed to contain a 4-bedroom, 3.5 bath dwelling with a finished floor area of 418 m² (4,500 ft²). An allowance has also been included for a future basement bathroom.

Table 1C – Retained Lot

	Unit Flow	Total Units	Total Flow (L/day)
4-Bedroom Dwelling	2,000 L/day	1	2,000
Plus, the greater of:			
Floor Area, or	100 L per each 10 m ² between 200 m ² and 400 m ²	20	2,000
	75 L per each 10 m ² between 400 m ² and 600 m ²	2	150
Subtotal of Floor Area Unit Flow			2,150
Fixtures	50 L for each fixture unit over 20 fixture units	40.5 fixture units total	1,025
Total Sewage Flow			4,150

4.0 Preliminary Sewage System Designs

Each dwelling will be serviced with a new Class 4 septic tank and leaching bed system. The soils on the property are conducive to an in-ground leaching bed system, which is to consist of absorption trenches.

Each septic tank would be sized in accordance with Article 8.2.2.3. of the OBC, which requires a septic tank to provide a minimum capacity of two times the daily sewage flow, or 3,600 L, whichever is greater.

The size of the absorption trench leaching bed is determined based on the relationship

$$L = QT/200$$

Where: L = the minimum length of absorption trench, in m
Q = the daily design flow (L/day)
T = the design percolation time (T-time), in min/cm

Lot B and the Retained Lot will require a pump chamber to dose the leaching bed, since the total length of absorption trenches will exceed 150 m.

The minimum size for each sewage system is summarized in Table 2. As shown on Figures 1 to 3, sufficient area has been allocated for the sewage systems. Detailed sizing and layouts would be provided at the time of the building permit application.

Table 2: Minimum Sewage System Size Requirements

	Lot A (North)	Lot B (South)	Retained Lot
Design Flow	3,300	5,025	4,150
T-time (min/cm)	8	8	8
Minimum Septic Tank Capacity Required (L)	6,600	10,050	8,300
Minimum total length of absorption trenches (m)	66	201	166

5.0 Water Supply Review

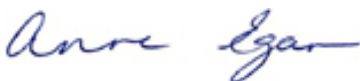
Each lot will be serviced with a private domestic well. Burnside reviewed existing well records in the vicinity of the proposed lot severances and confirmed adequate supply for residential use. Ground water levels indicate approximate water elevation between 12 m and 20 m. Actual well depth will vary depending on the install location.

6.0 Storm Water Management

Impervious areas of the severed lots cover less than 10% of total lot areas. The retained lot will maintain roughly 99.5% pervious land area post-development. Retention of roughly 90-99% of pervious areas will encourage natural infiltration, as the existing soil is conducive to infiltration. Additional runoff from pervious surfaces will be controlled with swales and landscaping to encourage retention on the subject properties.

7.0 Summary

As shown, the proposed lot severance provides sufficient area to accommodate the proposed dwelling and sewage system on each lot. Additionally, the existing soil will provide adequate drainage for the impervious sources, and existing water records indicate sufficient water supply for the proposed use.



Anne Egan, P.Eng.
AE/PB:ao

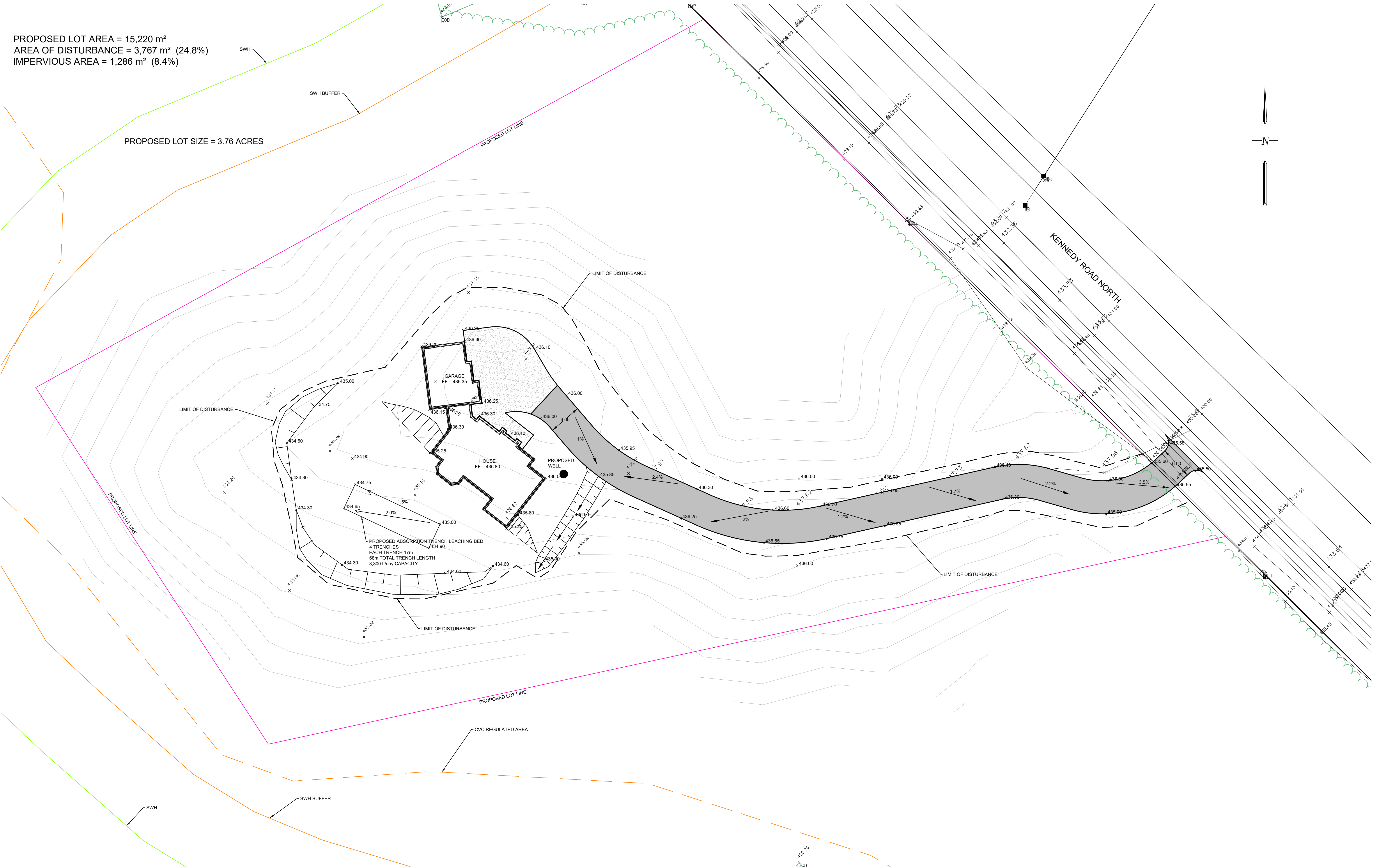
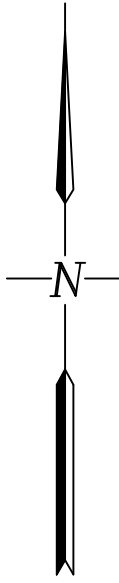


Peter Bruce

Enclosure(s) Attrell Lot Severances

PROPOSED LOT AREA = 15,220 m²
AREA OF DISTURBANCE = 3,767 m² (24.8%)
IMPERVIOUS AREA = 1,286 m² (8.4%)

PROPOSED LOT SIZE = 3.76 ACRES



- Notes
1. This drawing is the exclusive property of R. J. Burnside & Associates Limited. The reproduction of any part without prior written consent of this office is strictly prohibited.
 2. The contractor shall verify all dimensions, levels, and datums on site and report any discrepancies or omissions to this office prior to construction.
 3. This drawing is to be read and understood in conjunction with all other plans and documents applicable to this project.

NOT FOR CONSTRUCTION

No.	Issue / Revision	Date	Auth.



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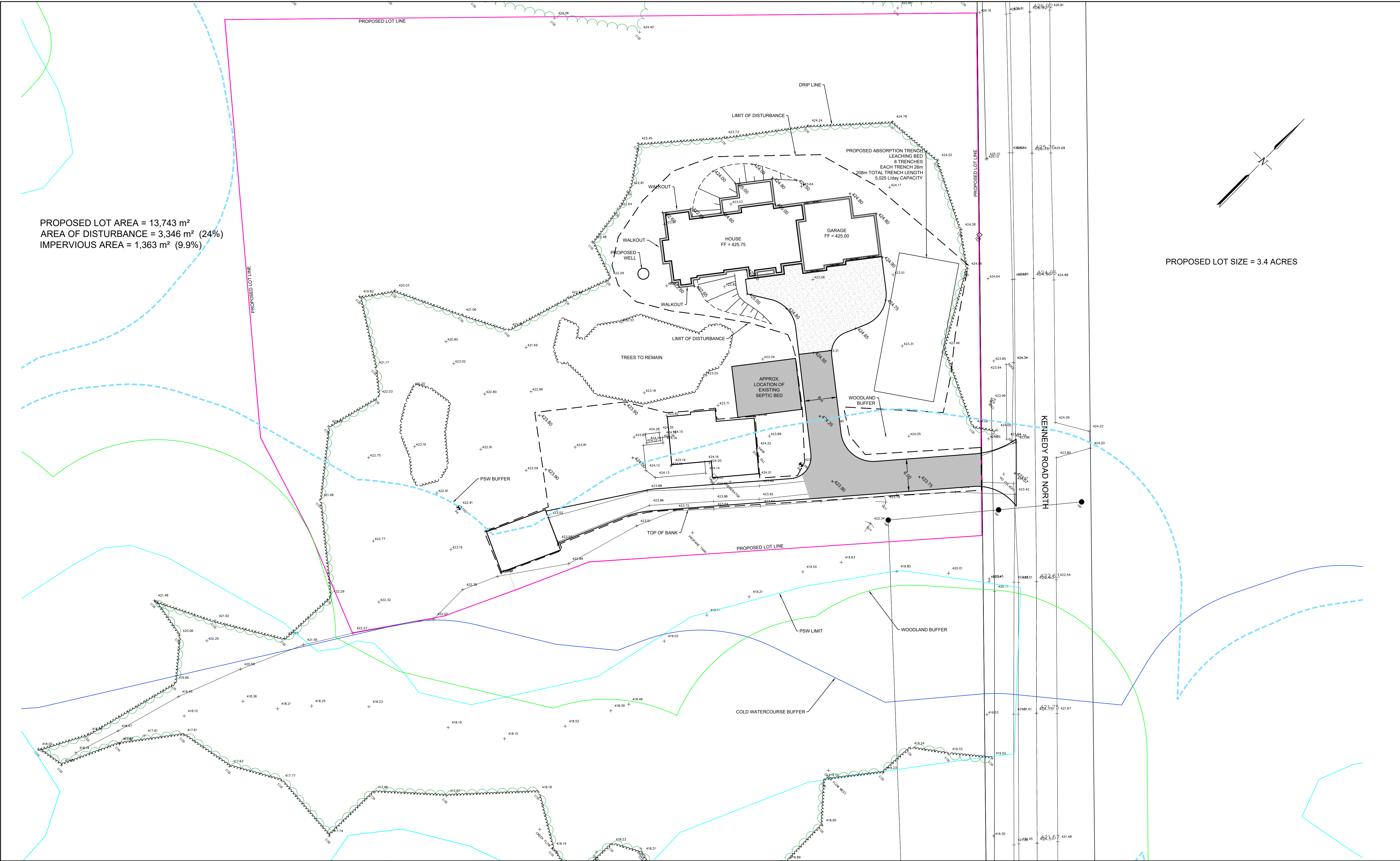
Client
MR. JOHN ATTRELL
110 CANAM CRESCENT
BRAMPTON, ONTARIO
L7A 1A9

Drawing Title
ATTRELL LOT SEVERENCES
20836 KENNEDY ROAD, CALEDON
SEVERENCE A

Drawn	Checked	Designed	Checked	Date
CADD	PB	PB	PB	22/08/05
Project No.	Contract No.		Revision No.	
300054526			0	
Scale	0 6.0 12.0 18.0			
1:300				

PROPOSED LOT AREA = 13,743 m²
AREA OF DISTURBANCE = 3,346 m² (24%)
IMPERVIOUS AREA = 1,363 m² (9.9%)

PROPOSED LOT SIZE = 3.4 ACRES



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BURNSIDE

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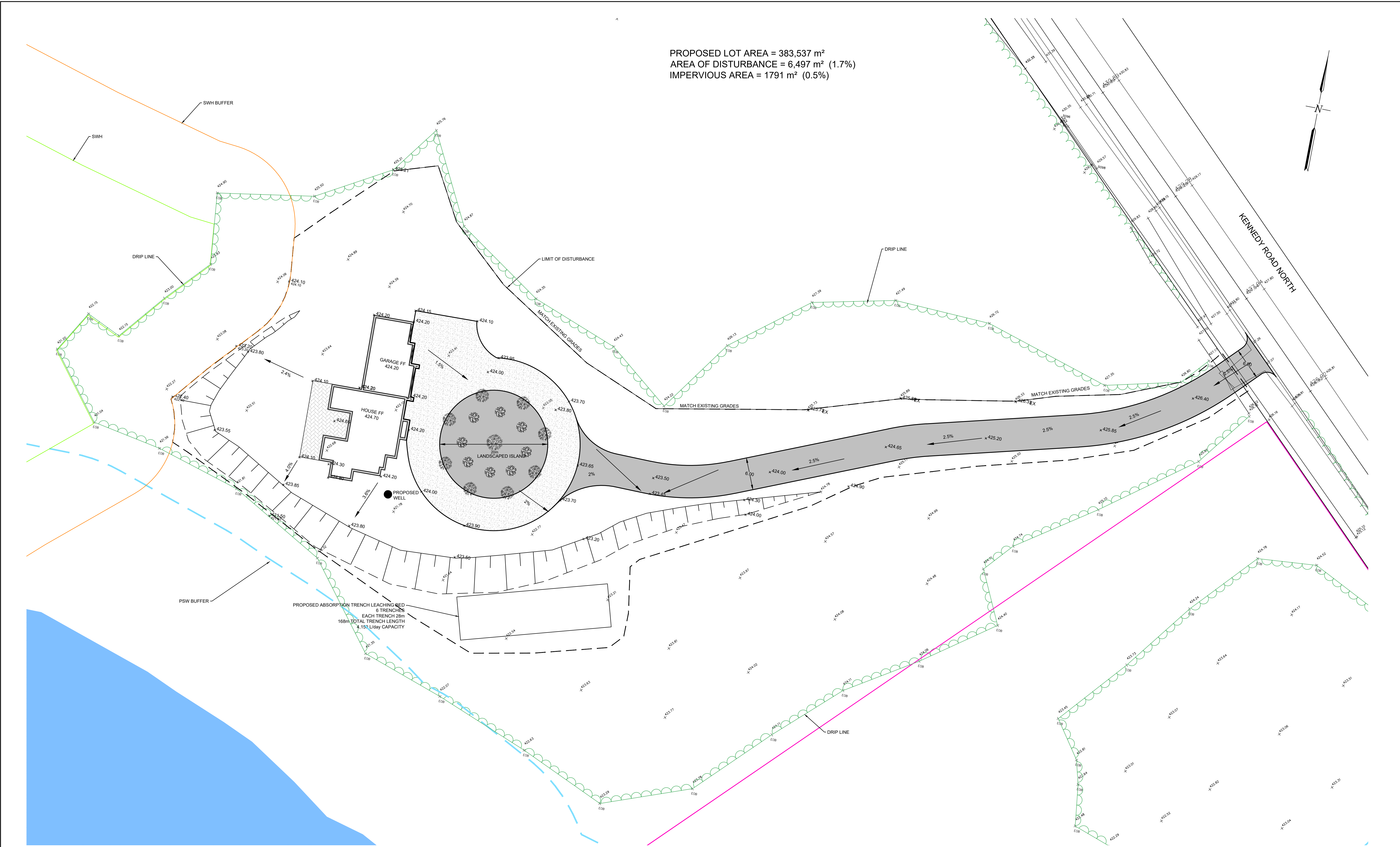
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Drawing Title
ATTRELL LOT SEVERENCES
20836 KENNEDY ROAD, CALEDON
SEVERENCE B

Drawn	Checked	Designed	Checked	Date	Drawing No.
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Project No.	Contract No.		Revision No.		
300054526			0		

Scale
1:300

0 6.0 12.0 18.0m



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Drawing Title
ATTRELL LOT SEVERENCES
20836 KENNEDY ROAD, CALEDON
RETAINED LOT

Drawn	Checked	Designed	Checked	Date	Drawing No.
CADD	PB	PB	PB	22/08/05	
Project No.		Contract No.		Revision No.	
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Scale					
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