

# Functional Servicing Brief

Date: May 31, 2019  
To: Terry Hoekstra, P.Eng., Manager of Engineering  
From: Paul Hurley, P.Eng.  
Subject: Depalma Drive – Functional Servicing to Support ZBA  
Project #: 19006

---

## 1.0 Introduction

### 1.1 Background and Purpose

Engage Engineering has been retained by Depalma Developments Inc. (Depalma) to prepare a Functional Servicing Brief to support a Zoning Bylaw Amendment for the lands at the west limit of Depalma Drive in Cobourg. A portion of these lands was severed in 2019 to create a new 0.751 Ha parcel which is proposed to be developed as a hotel.

The purpose of this report is to identify how the severed parcel can be serviced with water and sanitary sewer and how access will be provided via a future municipal road. This report is intended to be preliminary in nature and is meant to demonstrate that it is technically possible to service and provide access to the site. Details of the proposed servicing including detailed plans, water and sewage demand calculations, downstream capacity analysis and road design will be completed during the detailed design stage to support a future Site Plan application.

### 1.2 Site Description

The existing site is located at the western limit of Depalma Drive. The overall site is 13.8 Hectares and is bounded by commercial lands to the east, Highway 401 to the north and Elgin Street to the south. The site location is shown in **Figure 1**.

Depalma Developments is proposing to develop the lands in a phased approach, according to the Concept Plan included as **Figure 2**. Phase 1, which is the subject of this report and the rezoning application, is approximately 0.75 Ha and includes a hotel and the extension of Depalma Drive along the frontage of the hotel site. A copy of the concept plan for this site and the severance plan for the creation of the parcel are attached as **Figures 3 and 4**, respectively. It is expected that this phase would be developed via Site Plan agreement. Development beyond Phase 1 would be completed and approved via a Draft Plan process to ensure a cohesive and coordinated plan for the entire site.

**Figure 1 – Location Plan**



## **2.0 Water Servicing**

### **2.1 Existing Conditions**

Depalma Drive is currently serviced with a 300mm diameter ductile iron watermain. The watermain extends from Strathy Drive east to the existing limit of Depalma Drive where it terminates. As-constructed drawings were provided by the Town of Cobourg and are included as **Appendix A**. Based on the as-constructed drawings, this watermain was installed in 2003 and is expected to be in good condition.

### **2.2 Proposed Conditions**

In order to service the proposed hotel development, the existing 300 mm ductile iron watermain will be extended approximately 28 m to the east. The proposed watermain is shown on the Preliminary Servicing Plan included in **Appendix B**. The alignment of this watermain is proposed to be in the shoulder of the extension of Depalma Drive, allowing it to be extended further west as may be required for future servicing without disrupting the pavement.

The hotel site is proposed to be serviced via a 150 mm diameter PVC water service as shown on the Servicing Plan. Detailed water demand and fire flow calculations for the hotel to confirm the service size will be completed during the detailed design phase.

## **3.0 Sanitary Servicing**

### **3.1 Existing Conditions**

There is an existing 200 mm diameter PVC sanitary sewer on Depalma Drive. The closest manhole to the site, labeled as S2 on the as-constructed plans and MH944 in the Town GIS system is approximately 44 m west of Strathy Road. From MH944, the sewer flow east towards Strathy Road. The existing sewer is shown on the as-constructed drawings included in **Appendix A**.

### **3.2 Proposed Conditions**

In order to service the proposed site, approximately 230 m of new 200 mm diameter PVC sanitary sewer will be required to be installed, from the site to the existing manhole MH944 on Depalma Drive. The proposed sanitary sewer is shown on the preliminary servicing plan in **Appendix B**. Based on the as-constructed sanitary sewer inverts for MH944 and proposed site grades, there is sufficient fall from the site to provide sanitary sewer at 0.5% slope from the site to MH944.

The hotel site is proposed to be serviced with a 200 mm PVC sanitary service at 1% slope to the sewer main on the Depalma Drive extension, as shown on the Preliminary Servicing Plan. Detailed sanitary sewage flows for the development will be completed during the Site Plan stage to confirm the service size and the new sewer main. Downstream capacity analysis of the existing sewer will also be completed at the Site Plan stage.

## **4.0 Road Access**

### **4.1 Existing Conditions**

Depalma Drive is an east/west collector road that provides access to commercial properties fronting the road. Depalma Drive currently terminates at the east property line of the proposed site. Depalma Drive has a 4-lane urban cross section with a concrete centre median. The cross section includes a 3.0 m wide multi-use pathway on the north boulevard and a 1.5 m wide concrete sidewalk on the south side, all within a 30 m right-of-way (ROW). As-constructed drawings of Depalma Drive are included in **Appendix A**. The four-lane cross section was constructed in 2006/2007 and replaced the semi-urban 2-lane cross section that was originally constructed in 2002/2003.

### **4.2 Proposed Conditions**

In order to provide road access to the hotel site and satisfy conditions of severance related to the proposed hotel site, a new municipal road must be extended across the entire frontage of the proposed site. Based on consultation with the Town, the ultimate cross section for this extension of Depalma Drive should be consistent with the existing road and include a 30 m ROW, 4-lane urban cross section with centre median, multi-use pathway and sidewalk. As an interim condition to support only the hotel site, and until future development plans for the remainder of the site are approved, a 2-lane rural cross section with a temporary cul-de-sac at the west limit of the property is proposed. A drawing showing the proposed road extension and grading is included in

**Appendix B.** The road cross section includes an 8.5 m wide travelled portion with 0.5 m shoulders and will be constructed with a single lift of asphalt. The temporary cul-de-sac includes a 15 m radius in accordance with OPSD 500.020.

The interim road extension will incorporate tapers and gore areas at the east limit, as shown on the plans, to provide a transition from the existing 4-lane cross section east of the site. A two-lane cross section will provide sufficient road capacity and access to the hotel site and the temporary cul-de sac will allow maintenance and emergency vehicles to turn around.

It is expected that prior to any additional development taking place on the site, the road will be upgraded to a 4-lane cross section. The current drawings depict the interim 2-lane rural condition however, the centreline road grades and hotel entrance grades have been developed to allow for the future widening and urbanization while still maintaining Town of Cobourg design standards for boulevard grading and entrance slope. Detailed design plans for the extension of Depalma Drive, including both the interim 2-lane and ultimate 4-lane conditions, will be prepared and submitted for review by the Town under separate submission, as part of the compliance with the severance conditions. The preliminary plan included with this report is meant to demonstrate that a road meeting Town standards can be accommodated within the property.

## **5.0 Conclusion**

There is existing 300 mm diameter watermain available on Depalma Drive. It is possible to extend this watermain along the extension of Depalma Drive and to provide a service to the proposed hotel site. Detailed water demand and fire flow calculations will be prepared at Site Plan, however based on the size of the main, it is expected that sufficient flow and pressure will exist to support the proposed development.

There is existing sanitary sewer on Depalma Drive. To service the proposed hotel site, 230 m of new sanitary sewer will need to be installed along Depalma Drive. Based on the site grades and as-constructed inverts, sufficient fall exists between the site and the existing sewer to provide gravity flow. Detailed sewage calculations and a downstream sanitary capacity study will be completed as part of the Site Plan application.

There is existing road access via Depalma Drive at the eastern limit of the property. Access to the hotel site is proposed to be via a two-lane rural road with temporary cul-de-sac, as an interim condition. The ultimate road cross section will be a 4-lane urban cross section to match the existing Depalma Drive. The interim condition will be sufficient to service the hotel site and until plans for the remainder of the site are developed and approved, at which point the 4-lane cross section will be implemented. A preliminary design for the roadway has been completed and based on the existing road grades and alignment and the proposed site grades, it is possible to construct a 2-lane road meeting Town of Cobourg design standard to provide access to the site. The preliminary design has also contemplated the requirements of the 4-lane cross section, which can be implemented in the future. Detailed design plans for the interim 2-lane and ultimate 4-lane road will be prepared and submitted to the Town in order to satisfy conditions of severance.

A separate report outlining the approach to drainage and stormwater management has been prepared and submitted. Please refer to that report for details.

Figure 2: Site Concept Plan

**DEVELOPMENT STATISTICS:**

Total Site Area: 13.76 ha

**Scenario A**

**PHASE 1**

(Business Park)

Site Area excluding Public ROW: 5.63 ha

**Total Conceptual GFA - Buildings A-E: 22,100 m<sup>2</sup>**

Retail permitted (maximum 30% of GFA): 6,630 m<sup>2</sup>

**PHASE 2**

Site Area excluding Public ROW: 6.99 ha

**Total Conceptual GFA - Buildings F-O: 22,981 m<sup>2</sup>**

Retail permitted (maximum 30% of GFA): 6,894 m<sup>2</sup>

**Scenario B**

**PHASE 1**

(Business Park)

Site Area excluding Public ROW: 5.63 ha

**Total Conceptual GFA - Buildings A-E: 22,100 m<sup>2</sup>**

Retail permitted (maximum 30% of GFA): 6,630 m<sup>2</sup>

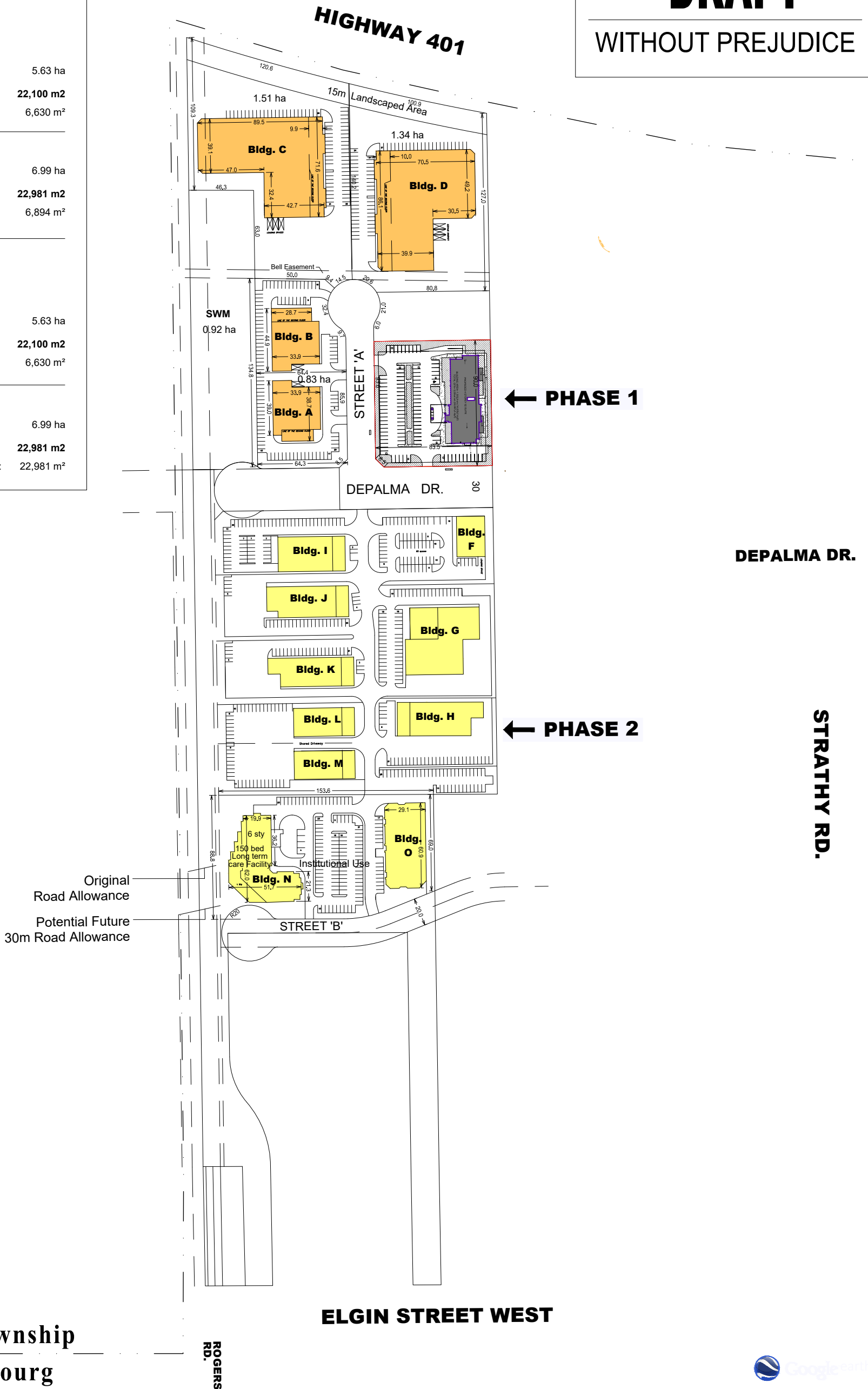
**PHASE 2**

Site Area excluding Public ROW: 6.99 ha

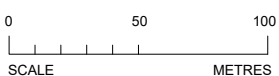
**Total Conceptual GFA - Buildings F-O: 22,981 m<sup>2</sup>**

Retail permitted (maximum 100% of GFA): 22,981 m<sup>2</sup>

**DRAFT**  
WITHOUT PREJUDICE



**Hamilton Township**  
**Town of Cobourg**



DRAWN / REVISED	
14 JUN 2018	Revise buildings A, E, O and N
25 NOV 2016	Revise statistics
14 SEP 2016	First Draft

File Number: 6501  
Drawn By: SB  
Planner: TJ  
Scale: see scale bar  
CAD: 6501/concepts/C4.dgn



Drawing Number:  
**C4**

**Notes:**

- Proposed road network is based on Schedule J – Cobourg West Business Park Secondary Plan Community Design Plan. Ultimate right-of-way widths and alignment or road network requires confirmation from the Town of Cobourg;
- Location and size of stormwater management facility based on input from Official Plan and plans prepared by others in support of a previous application. The size/location may need to be changed to accommodate the final design. The ability to cross the existing bell easement with stormwater management facilities is based on previous plans only and requires confirmation from Bell Canada;
- Setback from Highway 401 is assumed to be accurate and subject to confirmation from the Ontario Ministry of Transportation;
- Gross Floor Area based on preliminary layout and orientation of buildings and may change subject to more detailed site planning;
- Parking layout may change based on determination of building use and verification of parking rate.
- Street 'B' assumes connection through adjacent privately owned land to Strathy Road. A private road may be required to connect south to Elgin Street in the alternative should this connection not be possible.
- This concept assumes a portion of the subject property can be converted to permit non-employment uses through a municipal comprehensive review process.
- Areas and dimensions are approximate, based on available mapping and subject to confirmation by survey.
- The locations, size, type and use of the buildings are conceptual. This concept has been prepared to illustrate a general configuration of what can be achieved on the property to estimate the approximate gross floor area that can be achieved..
- Air photo from Google Earth, May 2015 image.

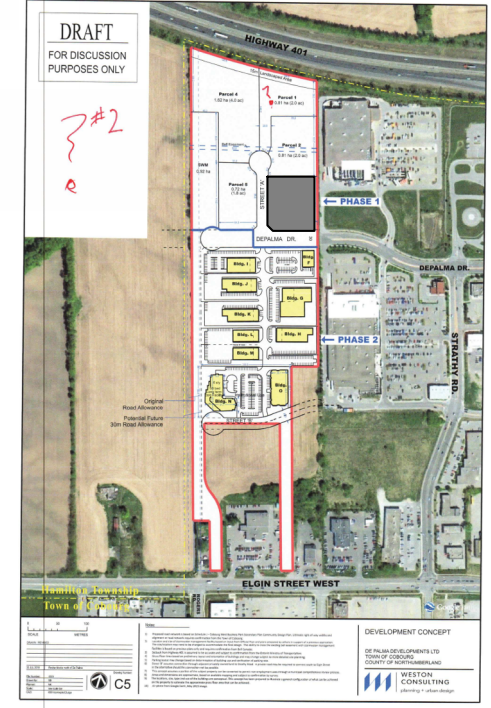
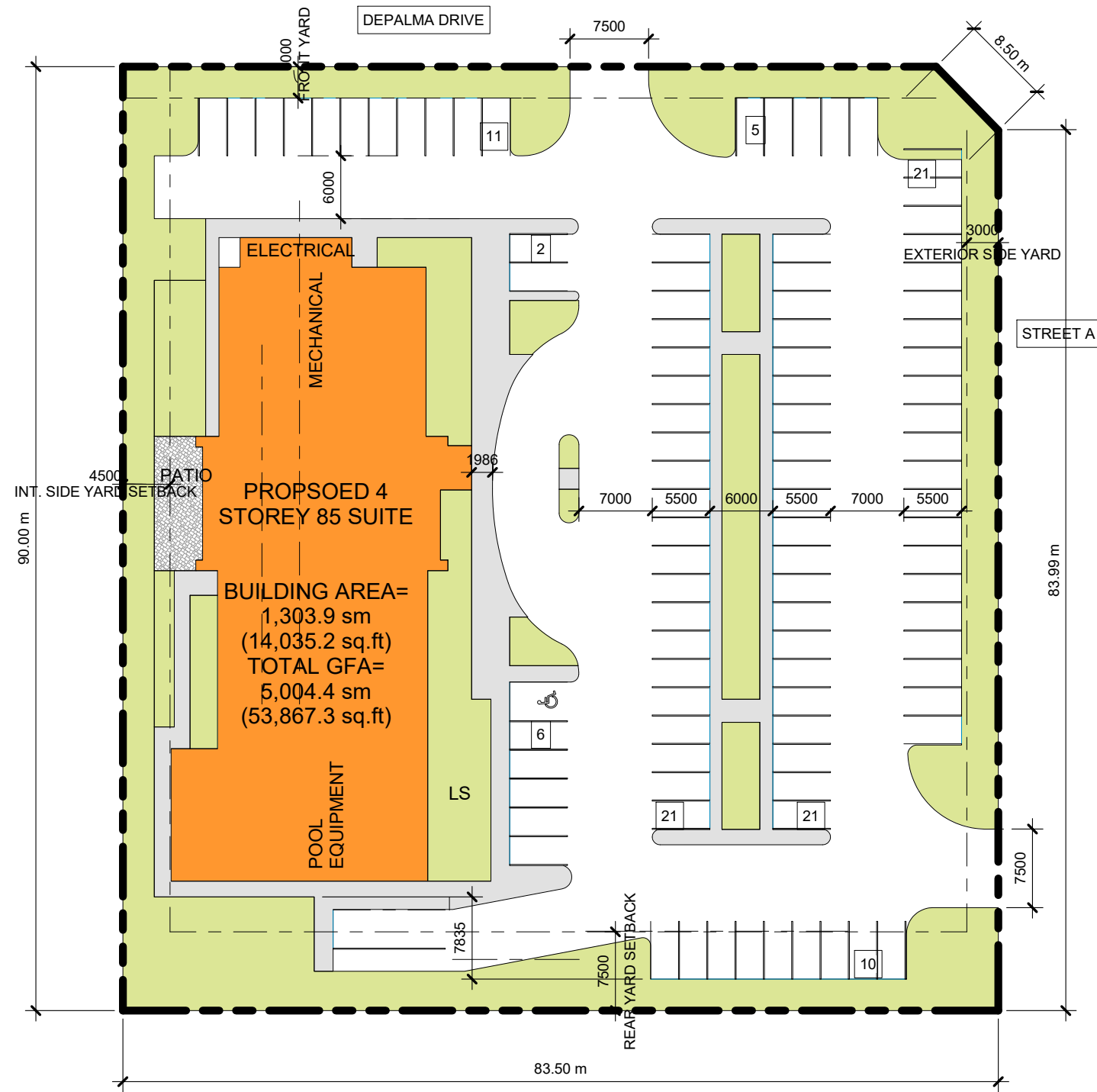
**DEVELOPMENT CONCEPT**

DE PALMA DEVELOPMENTS LTD  
TOWN OF COBOURG  
COUNTY OF NORTHUMBERLAND



**WESTON CONSULTING**  
planning + urban design

Figure 3: Hotel Site Concept



2 KEY PLAN  
A004 1 : 1

1 Site Plan  
A004 1 : 500



Chamberlain Architect Services Limited  
4671 Palladium Way (Unit 1)  
Burlington, Ontario. L7M 0W9  
CANADA  
Phone: 905.631.7777  
www.chamberlainipd.com

# HIE COBOURG

Enter address here

## SITE PLAN

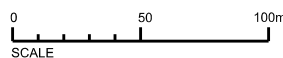
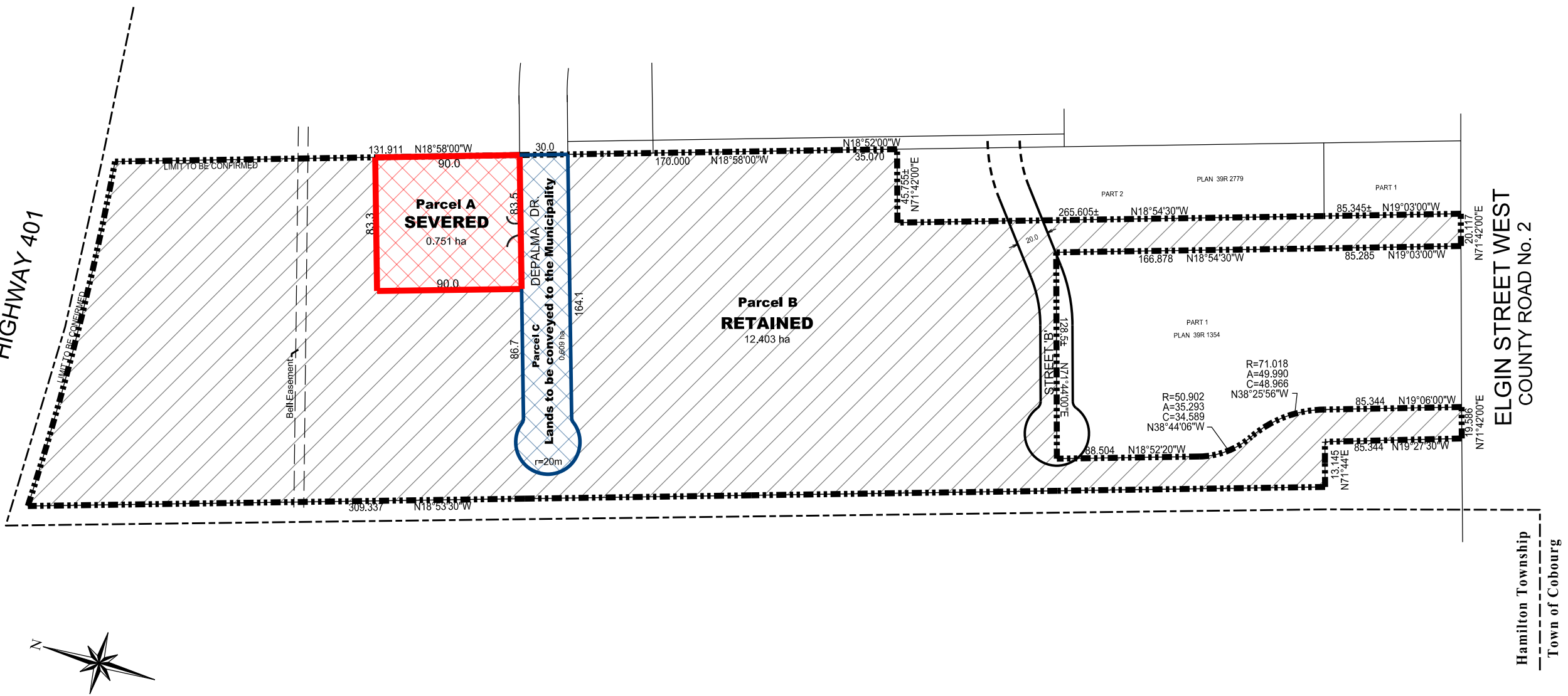
Project number	PROMO 18-22
Date	8/16/2018
Scale	As indicated
Drawn by	RKG

# A004



Figure 4: Hotel Severance Plan

HIGHWAY 401



DATE DRAWN: OCT 31, 2018  
FILE NO. 6501

**WESTON CONSULTING**  
planning + urban design  
1-800.363.3558 westonconsulting.com

Vaughan:  
201 Midway Ave, Suite 19  
Vaughan, Ontario L4K 5K6  
T. 905.738.8080 F. 905.738.6637

Toronto:  
268 Berkeley St.  
Toronto, Ontario M5A 2X5  
T. 416.640.9917 F. 905.738.6637

**LEGEND**

TOTAL HOLDING 13.763 ha

AREA TO BE SEVERED (Parcel A) 0.751 ha

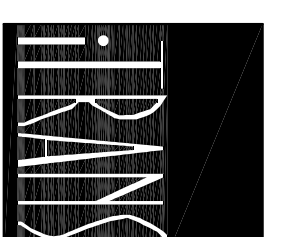
AREA TO BE RETAINED (Parcel B) 12.403 ha

LANDS TO BE CONVEYED TO THE MUNICIPALITY (Parcel C) 0.609 ha

**SEVERANCE SKETCH**

DE PALMA DEVELOPMENTS LTD  
TOWN OF COBOURG  
COUNTY OF NORTHUMBERLAND

## Appendix A: Depalma Drive As-Constructed Plans



**iTRANS Consulting Inc.**  
 100 North Beaver Creek Road  
 Richmond Hill, Ont. L4B 1R8  
 PHONE: (905) 882-4100  
 FAX: (905) 882-1559  
 EMAIL: info@itransconsulting.com  
 www.itransconsulting.com

September 25, 2006

**THE HOME DEPOT**  
 COBOURG, ONTARIO STORE #7251



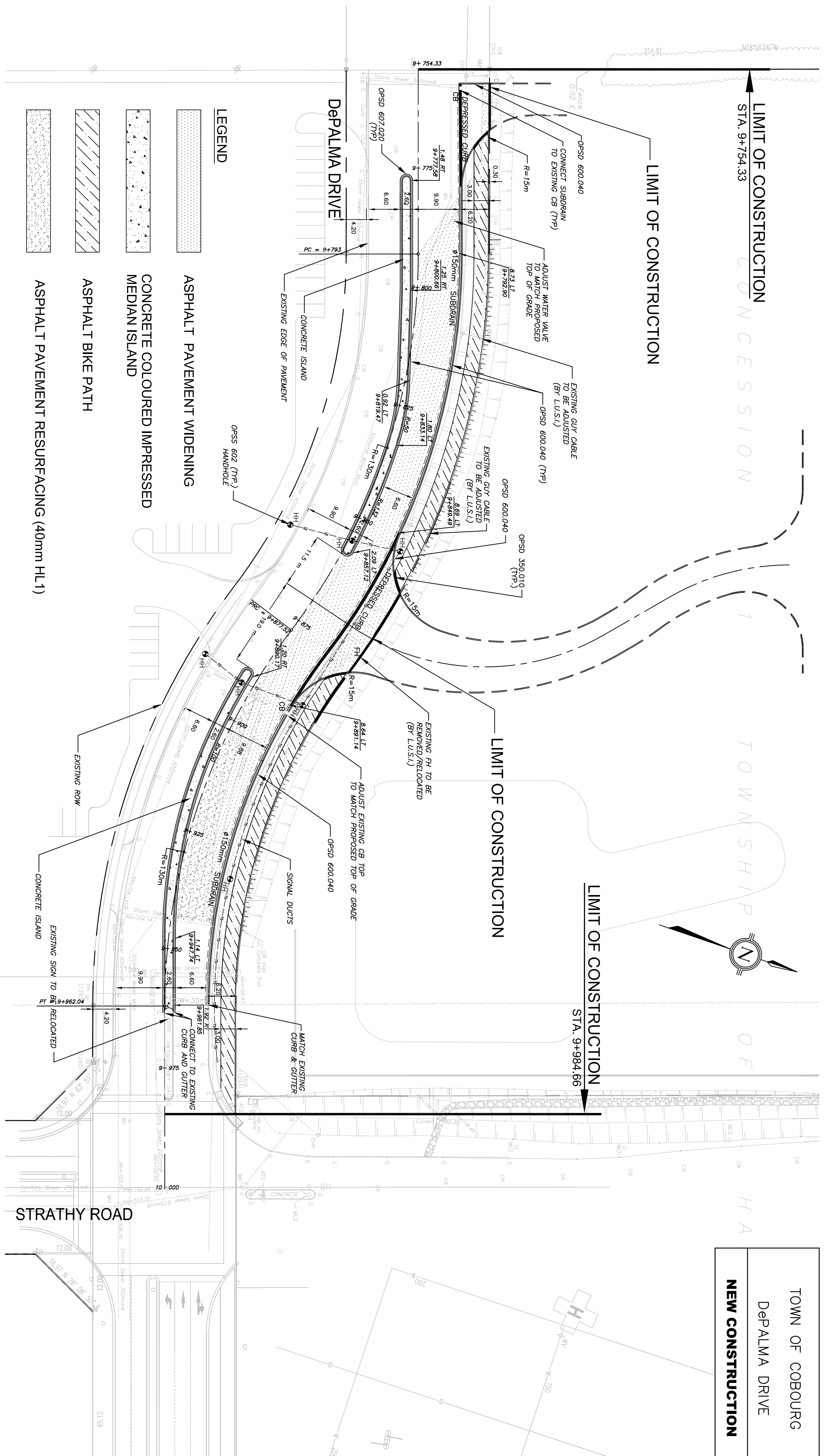
THE HOME DEPOT  
 CANADA INC.

ONTARIO

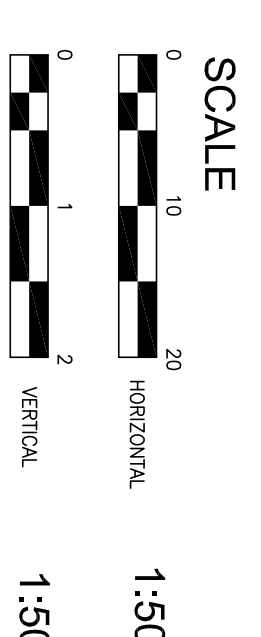
- REVISIONS**
- ISSUED FOR PRE-TENDER PER 26/06
  - ISSUED FOR TENDER PER 27/06
  - TOWN OF COBOURG JUL 27/06
  - ISSUED FOR TENDER PER 12/08
  - ISSUED FOR CONSTRUCTION

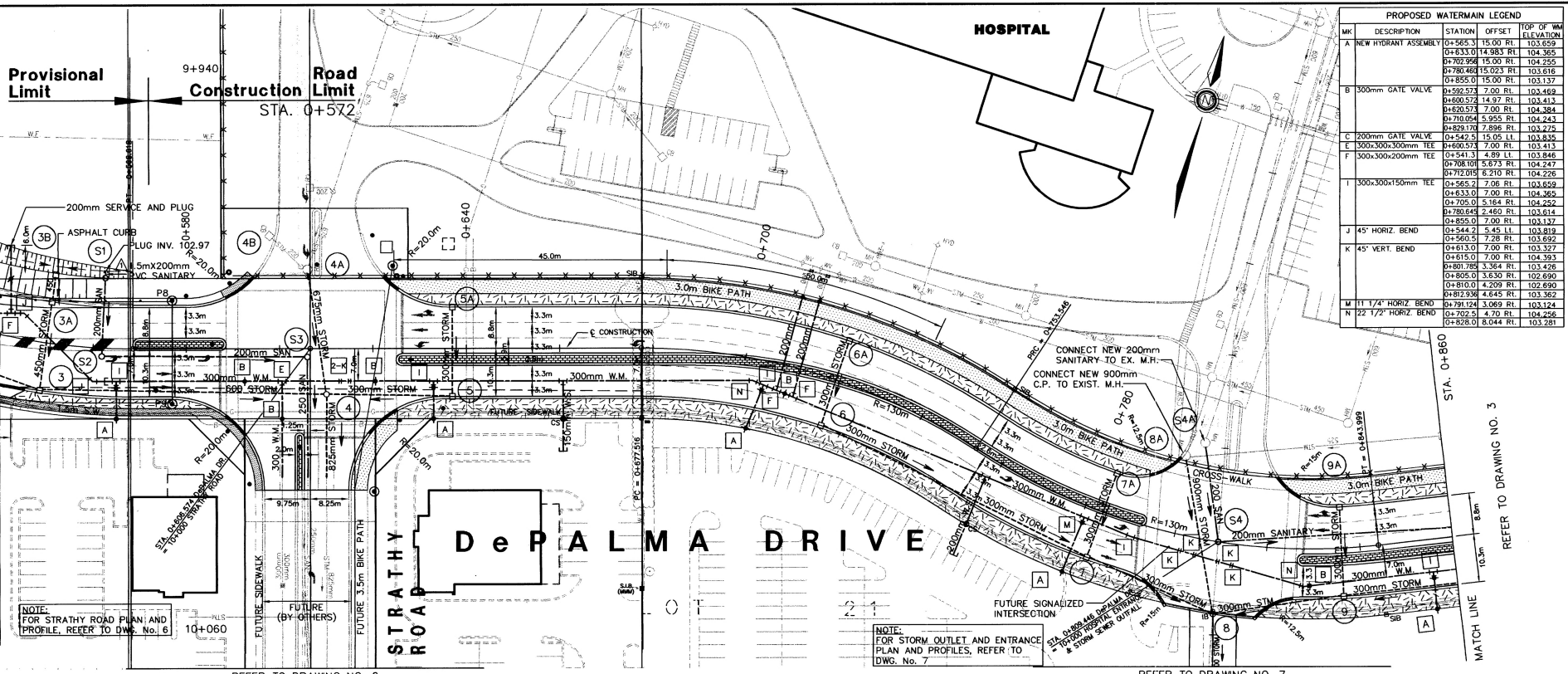
DEPALMA DRIVE  
 COBOURG, ONTARIO  
 STORE NUMBER  
 7152  
 PROJECT NUMBER  
 3007

**TR-1.0**  
 DePALMA DRIVE ROAD WORKS



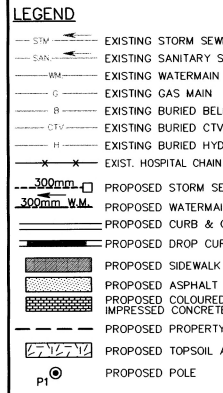
EXISTING CENTER LINE LEFT ERICH CHANNEL	106.30	106.38	106.55	106.72	106.80	106.90	106.92	106.94	106.96	106.98	107.00	107.02	107.04	107.06	107.08	107.10	107.12	107.14	107.16	107.18	107.20	107.22	107.24	107.26	107.28	107.30	107.32	107.34	107.36	107.38	107.40	107.42	107.44	107.46	107.48	107.50	107.52	107.54	107.56	107.58	107.60	107.62	107.64	107.66	107.68	107.70	107.72	107.74	107.76	107.78	107.80	107.82	107.84	107.86	107.88	107.90	107.92	107.94	107.96	107.98	108.00	108.02	108.04	108.06	108.08	108.10	108.12	108.14	108.16	108.18	108.20	108.22	108.24	108.26	108.28	108.30	108.32	108.34	108.36	108.38	108.40	108.42	108.44	108.46	108.48	108.50	108.52	108.54	108.56	108.58	108.60	108.62	108.64	108.66	108.68	108.70	108.72	108.74	108.76	108.78	108.80	108.82	108.84	108.86	108.88	108.90	108.92	108.94	108.96	108.98	109.00
EXISTING CENTER LINE LEFT ERICH CHANNEL	106.30	106.38	106.55	106.72	106.80	106.90	106.92	106.94	106.96	106.98	107.00	107.02	107.04	107.06	107.08	107.10	107.12	107.14	107.16	107.18	107.20	107.22	107.24	107.26	107.28	107.30	107.32	107.34	107.36	107.38	107.40	107.42	107.44	107.46	107.48	107.50	107.52	107.54	107.56	107.58	107.60	107.62	107.64	107.66	107.68	107.70	107.72	107.74	107.76	107.78	107.80	107.82	107.84	107.86	107.88	107.90	107.92	107.94	107.96	107.98	108.00	108.02	108.04	108.06	108.08	108.10	108.12	108.14	108.16	108.18	108.20	108.22	108.24	108.26	108.28	108.30	108.32	108.34	108.36	108.38	108.40	108.42	108.44	108.46	108.48	108.50	108.52	108.54	108.56	108.58	108.60	108.62	108.64	108.66	108.68	108.70	108.72	108.74	108.76	108.78	108.80	108.82	108.84	108.86	108.88	108.90	108.92	108.94	108.96	108.98	109.00





PROPOSED WATERMAIN LEGEND			
MK	DESCRIPTION	STATION	OFFSET / TOP OF WM ELEVATION
A	NEW HYDRANT ASSEMBLY	0+565.0	15.00 RL 103.659
		0+633.0	14.983 RL 104.365
		0+702.98	15.00 RL 104.255
		0+780.463	15.023 RL 103.616
		0+855.0	15.00 RL 103.137
B	300mm GATE VALVE	0+592.573	7.00 RL 103.468
		0+600.572	14.97 RL 103.413
		0+620.572	7.00 RL 104.364
		0+700.054	5.955 RL 104.243
		0+829.170	7.896 RL 103.275
C	200mm GATE VALVE	0+542.2	15.05 RL 103.835
E	300x300x300mm TEE	0+500.573	7.00 RL 103.413
F	300x300x200mm TEE	0+541.3	4.89 RL 103.846
		0+708.100	5.873 RL 104.247
		0+720.015	6.210 RL 104.226
I	300x300x150mm TEE	0+565.2	7.06 RL 103.859
		0+633.0	7.00 RL 104.365
		0+705.0	5.164 RL 104.252
		0+780.463	2.460 RL 103.614
		0+855.0	7.00 RL 103.137
J	45° HORIZ. BEND	0+542.2	5.45 RL 103.819
		0+565.2	7.28 RL 103.892
		0+613.0	7.00 RL 103.327
		0+615.0	7.00 RL 104.393
		0+601.783	3.344 RL 103.428
		0+805.0	3.630 RL 102.690
		0+810.0	4.209 RL 102.690
		0+813.98	4.845 RL 103.362
M	11 1/4° HORIZ. BEND	0+791.124	3.069 RL 103.124
N	22 1/2° HORIZ. BEND	0+702.5	4.70 RL 104.256
		0+828.0	8.044 RL 103.281

NO.	DATE	BY	REVISIONS
1	3/19/02	M.E.M.	MINOR SIZE/LENGTH REVISED
2	4/30/02	J.B.	NEW ALIGNMENT ADDED (0+)
3	5/20/02	J.B.	ALIGNMENT REVISED (0+361)
4	6/2/03	J.B.	AS CONSTRUCTED



REFER TO DRAWING NO. 3

REFER TO DRAWING NO. 7 FOR STORM OUTLET DETAILS.

NOTE: REFER TO DRAWING NO. 7 FOR STORM OUTLET DETAILS.

LICENCED PROFESSIONAL ENGINEER  
W. WILCOX  
PROVINCE OF ONTARIO

513 Division  
Cobourg, ON  
K9A 5G6  
TEL: 905-505-5050  
FAX: 905-505-5051  
E-mail: cobb@wip.ca

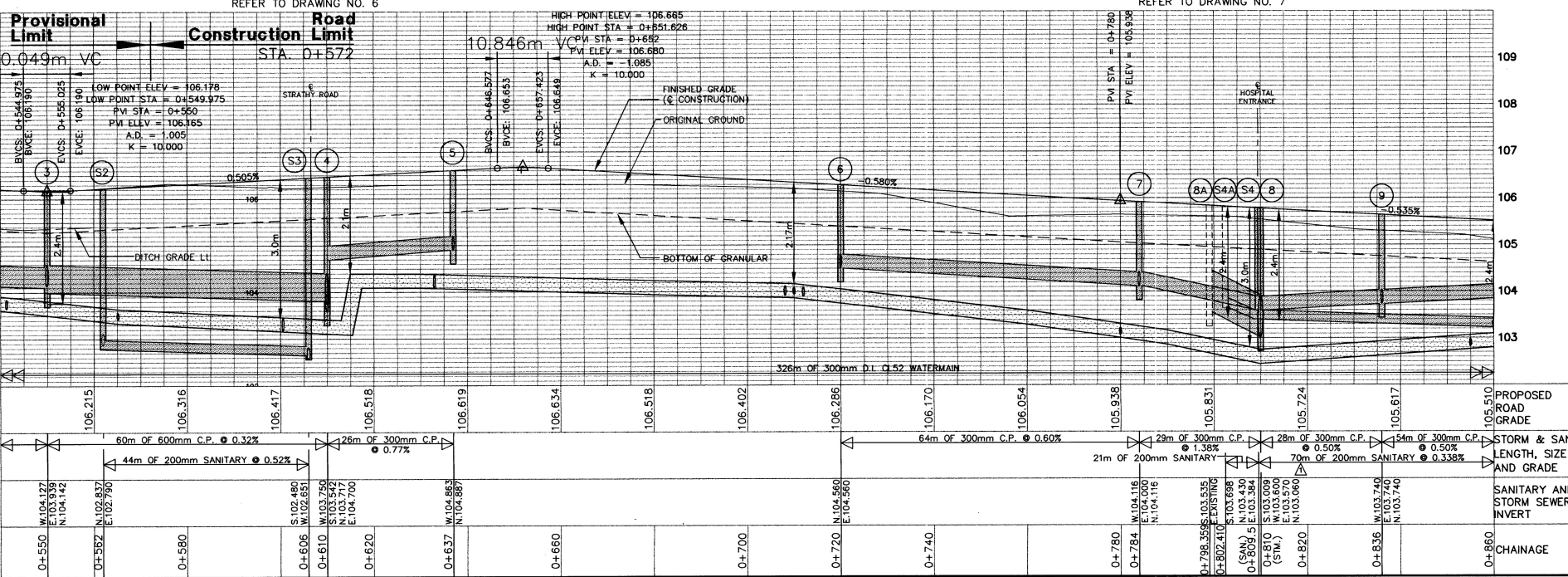
ALL DIMENSIONS AND INFORMATION SHALL BE CHECKED AND APPROVED BY THE CONSULTANT BEFORE ANY CONSTRUCTION BEGINS. THE CONSULTANT SHALL BE RESPONSIBLE FOR THE LOCATION OF AND ASSURE ALL LIABILITY FOR DAMAGE TO ALL SERVICES AND STRUCTURES WHETHER ABOVE GROUND OR BELOW GROUND. SUCH INFORMATION IS NOT NECESSARY FOR THE DRAWINGS AND SHALL BE SHOWN ON THE CONTRACT DOCUMENTS.

ALL DRAWINGS REMAIN THE PROPERTY OF THE CONSULTANT AND SHALL NOT BE REPRODUCED OR REUSED WITHOUT THE CONSULTANT'S WRITTEN PERMISSION. WITH THE SOLE EXCEPTION OF THE REMARKED SPECIFICATIONS, THIS PROJECT, NO ELEVATION INDICATED OR ASSUMED HEREON AS A REFERENCE ELEVATION FOR ANY PURPOSE.

THE CORPORATION OF THE TOWN OF COBURG  
VICTORIA HALL  
55 KING STREET WEST  
COBURG, ONTARIO  
K9A 2M2

DePALMA DRIVE  
CONSTRUCTION  
TOWN OF COBURG

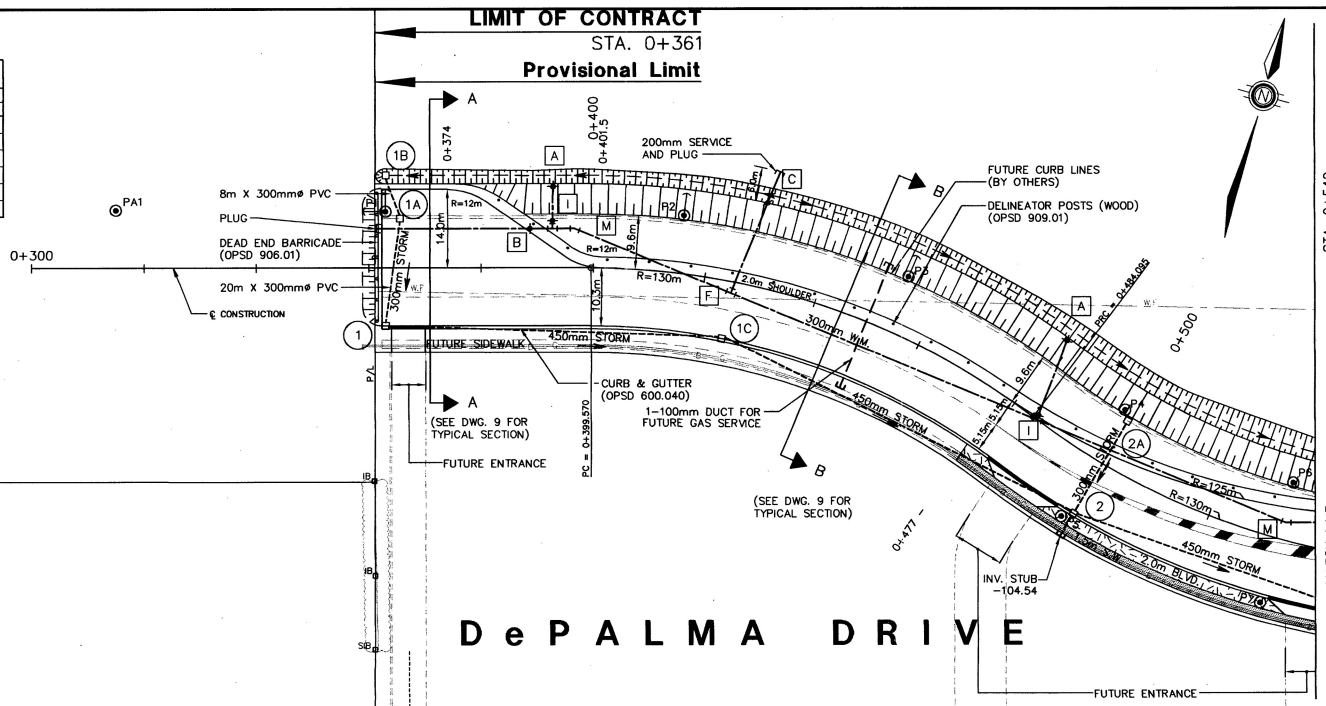
NEW CONSTRUCTION			
STATION	DATE	BY	REVISIONS
STA 0+540 TO 0+860	JUNE 2002	R.P.L.	
DESIGNED BY:	APPROVED BY:	DATE:	
R.P.L.	W.W.	JUNE 2002	
SCALE:	CONTRACT NO.:	DRAWN BY:	
HORIZ. 1:500 VERT. 1:50	2-02-01		



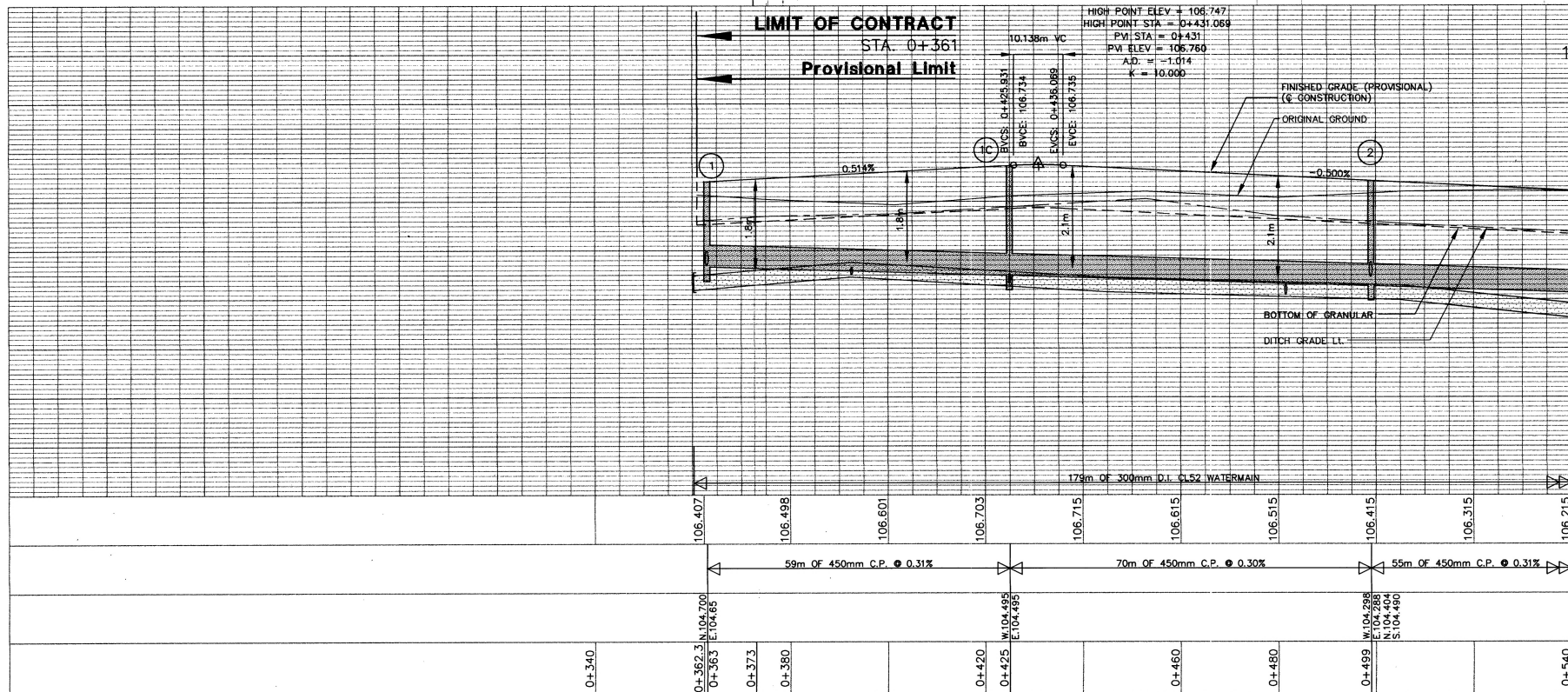
STATION	PROPOSED ROAD GRADE	STORM & SAN LENGTH, SIZE AND GRADE	SANITARY AND STORM SEWER INVERT	CHAINAGE
0+550	106.215	44m of 200mm SANITARY @ 0.52%	W.104.127 N.104.142	
0+562	106.316	28m of 300mm C.P. @ 0.77%	N.102.837 E.102.790	
0+580	106.417		S.102.680 N.102.681	
0+610	106.518		W.103.750 N.103.712 E.104.700	
0+620	106.619			
0+637	106.634		W.104.663 N.104.887	
0+660	106.518			
0+700	106.402			
0+720	106.286		N.104.560 E.104.560	
0+740	106.170			
0+780	106.054			
0+784	105.938		W.104.116 N.104.116	
0+802.110	105.831	29m of 300mm C.P. @ 1.38%	0+798.558:103.535 E.802.110:103.698	
0+809.5	105.724	21m of 200mm SANITARY @ 0.50%	(SAN) N.103.430 E.103.384	
0+810	105.617	7m of 200mm SANITARY @ 0.338%	0+809.5:103.009 (STM) E.103.570 N.103.060	
0+836	105.510	54m of 300mm C.P. @ 0.50%	W.103.740 E.103.740	
0+860	105.510			

PAVEMENT STRUCTURE	CRANULAR 'A'				CRANULAR 'B'	
	40mm HL 1	50mm HL 3	40mm HL 8	50mm HL 8	150mm	200mm
MA DRIVE	●		●	●	●	●
STREET EAST	●		●	●	●	●
AM STREET	●		●	●	●	●
HY ROAD (THROAT)	●		●	●	●	●
SERIAL ENTRANCES	●		●	●	●	●
PATHS	●		●	●	●	●

D MILL (40mm DEPTH) EXISTING ASPHALT ROADWAY, EXCAVATE ON WIDENING AND SURFACE FULL WIDTH.



# DePALMA DRIVE



STA. 0+540  
MATCH LINE  
REFER TO DRAWING NO. 2

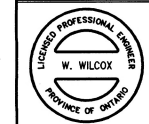
NO.	DATE	BY	REVISIONS
1	4/30/02	J.B.	NEW ALIGNMENT ADDED (0+361 TO 0+540)
2	6/12/02	P.F.M.	MODIFIED WATERMAIN LOCATION
3	8/20/02	J.B.	ALIGNMENT REVISED (0+361 TO 0+540)
4	6/2/03	J.B.	AS CONSTRUCTED

**LEGEND**

- STA --- EXISTING STORM SEWER
- SAN --- EXISTING SANITARY
- WM --- EXISTING WATERMAIN
- G --- EXISTING GAS MAIN
- B --- EXISTING BURIED BELLY
- CTV --- EXISTING BURIED CT
- H --- EXISTING BURIED HYDRANT
- 300mm --- PROPOSED STORM SEWER
- --- PROPOSED CURB & GUTTER
- --- PROPOSED DROP CURB
- --- PROPOSED SIDEWALK
- --- PROPOSED TOPSOIL
- P1 --- PROPOSED POLE

**PROPOSED WATERMAIN LEGEND**

MARK	DESCRIPTION	STATION	OFFSET
A	NEW HYDRANT ASSEMBLY	0+392.08	14.08
		0+481.00	14.80
B	300mm GATE VALVE	0+388.65	7.010
C	200mm GATE VALVE	0+428.08	15.00
F	1500x300x200mm TEE	0+425.04	2.047
	300x300x150mm TEE	0+392.65	7.010
		0+481.50	0.887
		0+398.65	7.010
W	22 1/2" HORIZ. BEND	0+533.68	3.091



ALL DIMENSIONS AND INFORMATION SHALL BE CHECKED AND CORRECTED AND ANY DISCREPANCIES MUST BE REPORTED TO THE COMMANDING OFFICER.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONFIRM LOCATION OF AND ASSUME ALL LIABILITY FOR DAMAGE TO SERVICES AND STRUCTURES BEFORE ANY WORK BEGINS ON THE DRAWINGS, AND THEREAFTER, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION.

ALL DRAWINGS REMAIN THE PROPERTY OF THE CONSULTANT. REPRODUCTION OR REVISION WITHOUT THE CONSULTANT'S WRITTEN PERMISSION IS PROHIBITED.

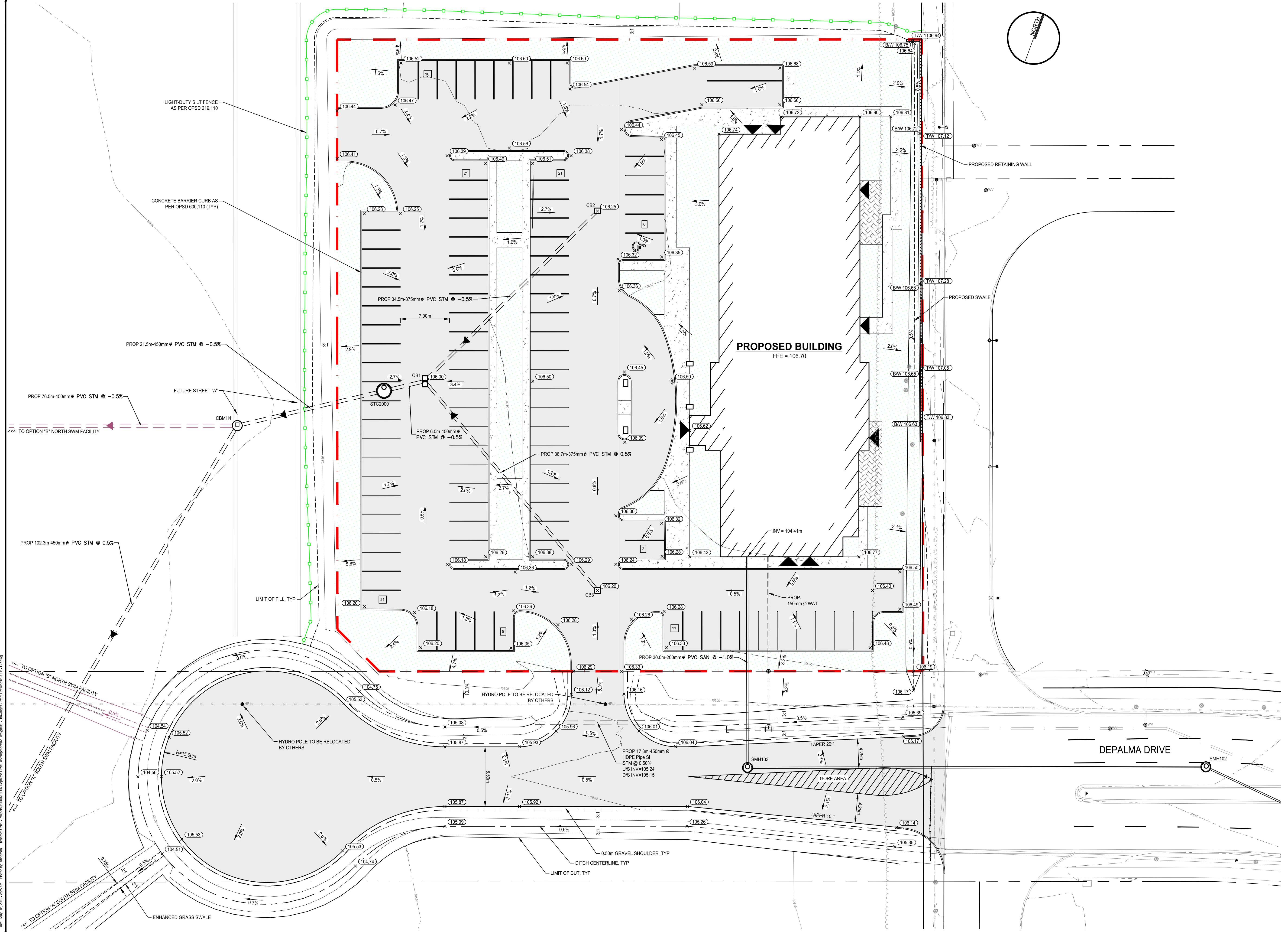
WITH THE EXCEPT OF THE REMARKED SPECIFICATIONS THIS PROJECT, NO ELEVATION INDICATED OR ASSUMED HEREIN AS A REFERENCE ELEVATION FOR ANY PURPOSE.



VICTORIA HALL  
55 KING STREET WEST  
COBURG, ONTARIO  
K9A 2M2

DePALMA DRIVE  
CONSTRUCTION  
TOWN OF COBURG  
NEW CONSTRUCTION  
STA 0+361 TO 0+540  
DESIGNED BY: J.B. CHECKED BY: R.P.L. DATE: JUN 12  
APPROVED BY: W.W. PRO: [Signature]  
SCALE: HORIZ. 1:500 VERT. 1:50 CONTRACT NO.: 2-02-01

## Appendix B: Preliminary Servicing Plan



**NOTES:**

PR.	EX.	FEATURE
[Symbol]	[Symbol]	EDGE OF PAVEMENT
[Symbol]	[Symbol]	BACK OF CURB
[Symbol]	[Symbol]	EDGE OF GRAVEL
[Symbol]	[Symbol]	CENTRELINE OF ROAD
[Symbol]	[Symbol]	DITCH
[Symbol]	[Symbol]	SIDEWALK
[Symbol]	[Symbol]	FENCE LINE
[Symbol]	[Symbol]	RETAINING WALL
[Symbol]	[Symbol]	LIGHT DUTY ASPHALT
[Symbol]	[Symbol]	HEAVY DUTY ASPHALT
[Symbol]	[Symbol]	GRASS/LANDSCAPED
[Symbol]	[Symbol]	CONIC DRIVEWAY RAMP
[Symbol]	[Symbol]	ASPH. DRIVEWAY RAMP
[Symbol]	[Symbol]	INTERLOCK BRICK
[Symbol]	[Symbol]	GAS MAIN
[Symbol]	[Symbol]	OVERHEAD BELL
[Symbol]	[Symbol]	UNDERGROUND BELL
[Symbol]	[Symbol]	OVERHEAD HYDRO
[Symbol]	[Symbol]	UNDERGROUND HYDRO
[Symbol]	[Symbol]	WATERMAIN
[Symbol]	[Symbol]	STORM SEWER
[Symbol]	[Symbol]	SANITARY SEWER
[Symbol]	[Symbol]	WATER SERVICE
[Symbol]	[Symbol]	SANITARY SERVICE
[Symbol]	[Symbol]	PROPERTY LINE
[Symbol]	[Symbol]	RIGHT-OF-WAY
[Symbol]	[Symbol]	WATER VALVE
[Symbol]	[Symbol]	WELL
[Symbol]	[Symbol]	SANITARY MANHOLE
[Symbol]	[Symbol]	CATCH BASIN
[Symbol]	[Symbol]	DOUBLE CATCH BASIN
[Symbol]	[Symbol]	CATCH BASIN MANHOLE
[Symbol]	[Symbol]	DOUBLE CB MANHOLE
[Symbol]	[Symbol]	STORM MANHOLE
[Symbol]	[Symbol]	FIRE HYDRANT
[Symbol]	[Symbol]	IRON BAR
[Symbol]	[Symbol]	LIGHT STANDARD
[Symbol]	[Symbol]	MAILBOX
[Symbol]	[Symbol]	ROAD SIGN
[Symbol]	[Symbol]	CONIFEROUS TREE
[Symbol]	[Symbol]	DECIDUOUS TREE
[Symbol]	[Symbol]	OVERHEAD DOOR
[Symbol]	[Symbol]	MAN DOOR
[Symbol]	[Symbol]	ACCESSIBLE MAN DOOR

1.	ISSUED FOR REVIEW	SD	2019-05-15
No.	REVISION	BY	DATE



**DEPALMA LANDS**

MORCAP CORPORATION

**PRELIMINARY SITE GRADING PLAN**  
**FIGURE 5**

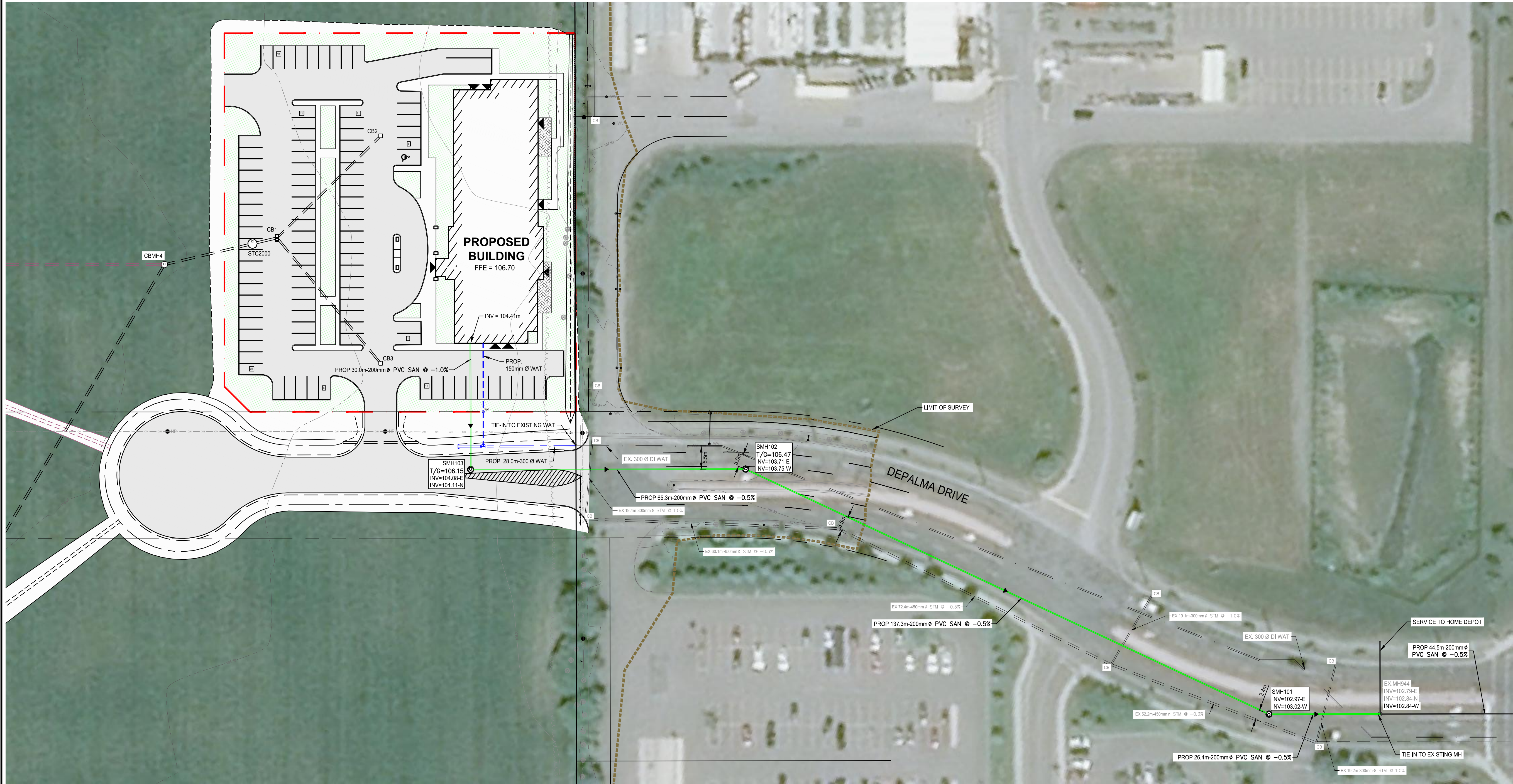
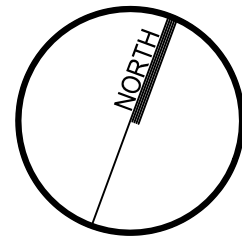
TOWN OF COBOURG

DRAWN BY:	S. DINGMAN	STAMP:
DESIGNED BY:	S. DINGMAN	
APPROVED BY:	P. HURLEY	
DATE:	2019-05-15	

SCALE:	1:250
PROJECT NUMBER:	19006
SHEET NAME:	GP1
SHEET:	- of -

19006 - GP  
 Date: 2019-05-15 2:25:35 PM  
 Plotted by: sdingman  
 Filename: S:\19-05-15\19006\GP1\_PreliminarySiteGradingPlan\19006\_GP.dwg  
 Plot Device: C:\Program Files\Autodesk\LTPlotter\Autodesk LT Plotter.ctb  
 Plot Style: 19006.ctb  
 Scale: 1:250  
 Sheet: 1 of 1





**SURVEY**  
TOPOGRAPHIC SURVEY PROVIDED  
BY DONEVAN FLEISCHMANN PETRICH LTD.

**BENCHMARK**  
GEODEDIC BENCHMARK No. 001910U171  
**ELEV: 80.156m**

**NOTES:**

PR.	EX.	FEATURE
---	---	EDGE OF PAVEMENT
---	---	BACK OF CURB
---	---	EDGE OF GRAVEL
---	---	CENTRELINE OF ROAD
---	---	DITCH
---	---	SEWALK
---	---	FENCE LINE
---	---	RETAINING WALL
---	---	LIGHT DUTY ASPHALT
---	---	HEAVY DUTY ASPHALT
---	---	GRASSLANDSCAPED
---	---	CONC. DRIVEWAY RAMP
---	---	ASPH. DRIVEWAY RAMP
---	---	INTERLOCK BRICK
---	---	GAS MAIN
---	---	OVERHEAD BELL
---	---	UNDERGROUND BELL
---	---	OVERHEAD HYDRO
---	---	UNDERGROUND HYDRO
---	---	WATERMAIN
---	---	STORM SEWER
---	---	SANITARY SEWER
---	---	WATER SERVICE
---	---	SANITARY SERVICE
---	---	PROPERTY LINE
---	---	RIGHT-OF-WAY
---	---	WATER VALVE
---	---	WELL
---	---	SANITARY MANHOLE
---	---	CATCH BASIN
---	---	DOUBLE CATCH BASIN
---	---	CATCH BASIN MANHOLE
---	---	DOUBLE CB MANHOLE
---	---	STORM MANHOLE
---	---	FIRE HYDRANT
---	---	ROCK BAR
---	---	LIGHT STANDARD
---	---	MAIL BOX
---	---	ROAD SIGN
---	---	CONIFEROUS TREE
---	---	DECIDUOUS TREE
---	---	OVERHEAD DOOR
---	---	MAN DOOR
---	---	ACCESSIBLE MAN DOOR

1.	ISSUED FOR REVIEW	SD	2019-05-07
No.	REVISION	BY	DATE



**DEPALMA LANDS**  
MORCAP CORPORATION

**PRELIMINARY  
SITE SERVICING PLAN**

TOWN OF COBOURG	
DRAWN BY: S. DINGMAN	STAMP:
DESIGNED BY: S. DINGMAN	
APPROVED BY: P. HURLEY	
DATE: 2019-05-15	

SCALE: 1:500	PROJECT NUMBER: <b>19006</b>	SHEET NAME: <b>SS1</b>	SHEET: - of -
-----------------	---------------------------------	---------------------------	------------------

19006 - SS  
 Date: 2019-05-15 10:23:20 AM  
 Plotted by: sdingman  
 File name: I:\Projects\19006\19006\_Site Servicing Plan\Drawings\19006\_SS1.dwg  
 Plot date: 2019-05-15 10:23:20 AM  
 Plot scale: 1:500