File #:	**2655**
Date:	**January 28, 2025**

Sarah Wilhelm
Wellington County
74 Woolwich Street
Guelph, Ontario, N1H 3T9

Brett Salmon
Town of Centre Wellington
1 MacDonald Square,
Elora, Ontario, N0B 1S0

Dear Ms. Wilhelm and Mr. Salmon:

Re:	**Preliminary Servicing and Stormwater Management Brief** **6586 Beatty Line North** **Township of Centre Wellington** **County of Wellington**

SCS Consulting Group Ltd. has been retained by Sorbara/Tribute Brubacher Holdings Inc. to prepare a Preliminary Servicing and Stormwater Management Brief (PSSB) for a proposed development located at 6586 Beatty Line North (referenced as the "Subject Lands"), in the Township of Centre Wellington, County of Wellington.

This PSSB has been prepared in support of an Official Plan Amendment (OPA) for the Subject Lands. The effects of the OPA are to redesignate the Subject Lands and to expand the boundaries of the North West Fergus Secondary Plan (NWFSP) in the Township of Centre Wellington (TOCW) Official Plan (OP). The proposed OPA will augment the County-level May 2024 Settlement Area Boundary Expansion (SABE) Request. The instrument will establish permissions for serviced, urban-type land uses on the Subject Lands in conformity with the minimum density targets of the County of Wellington OP, the TCW OP, and the NWFSP. In doing so, the OPA will assist the County and Township in meeting their residential growth targets by the 2051 planning horizon. The Subject Lands are contemplated for inclusion within the Fergus Settlement Area Boundaries to permit urban-type residential uses. The Subject Lands would form a logical extension of the Storybrook Subdivision, which is located to the south, consisting of low and medium density residential uses, a park, and a stormwater management (SWM) pond.

The Subject Lands are located on the west side of Beatty Line North, south of the Beatty Line North and Sideroad 15 intersection, and directly north of Fergus and Elora-Salem's delineated urban settlement area (**Figure 1**). The Subject Property is approximately 43.2 hectares in size, rectangular in shape and has approximately 300 metres of frontage along Beatty Line North. It

is currently vacant except for one single-detached dwelling and an abandoned railway traverses through the Subject Lands in a northwest/southeast direction. Phases 2A+ and 2B of the existing Storybrook Subdivision are located immediately south of the Subject Lands (refer to **Figure 1** below).

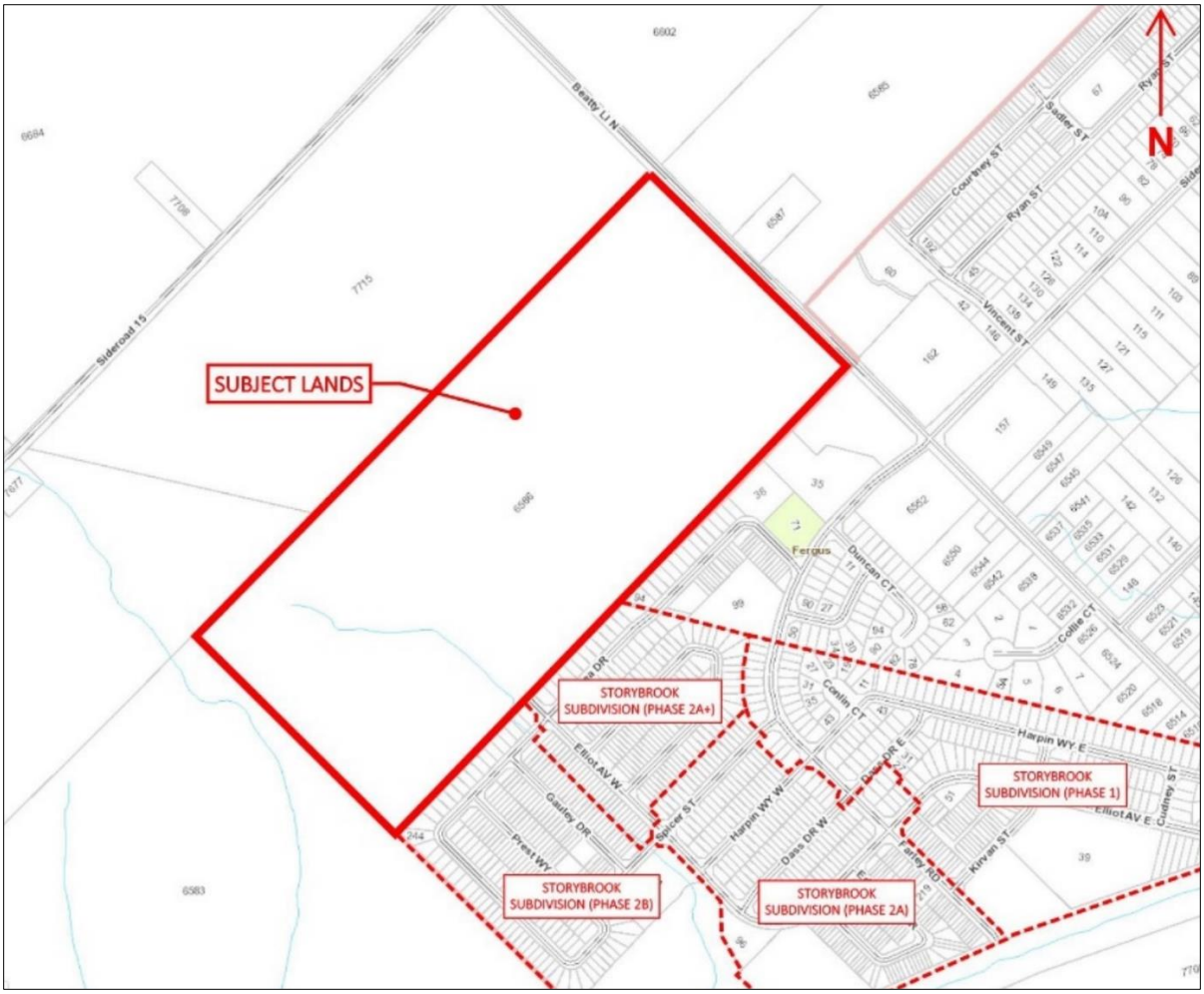


Figure 1 – Site Location *(Welling County Interactive Maps, 2024)*

The Subject Lands consist primarily of agricultural lands with three (3) wetlands and one (1) headwater drainage feature (HDF). The proposed development is located in the Irvine Creek subwatershed of the Grand River watershed. As such, development of the Subject Lands is under the jurisdiction of the Grand River Conservation Authority (GRCA) with the wetlands and HDF regulated by GRCA under Ontario Regulation (O. Reg.) 41/24. Refer to **Figure 2**, below for the regulated areas of the Subject Lands.

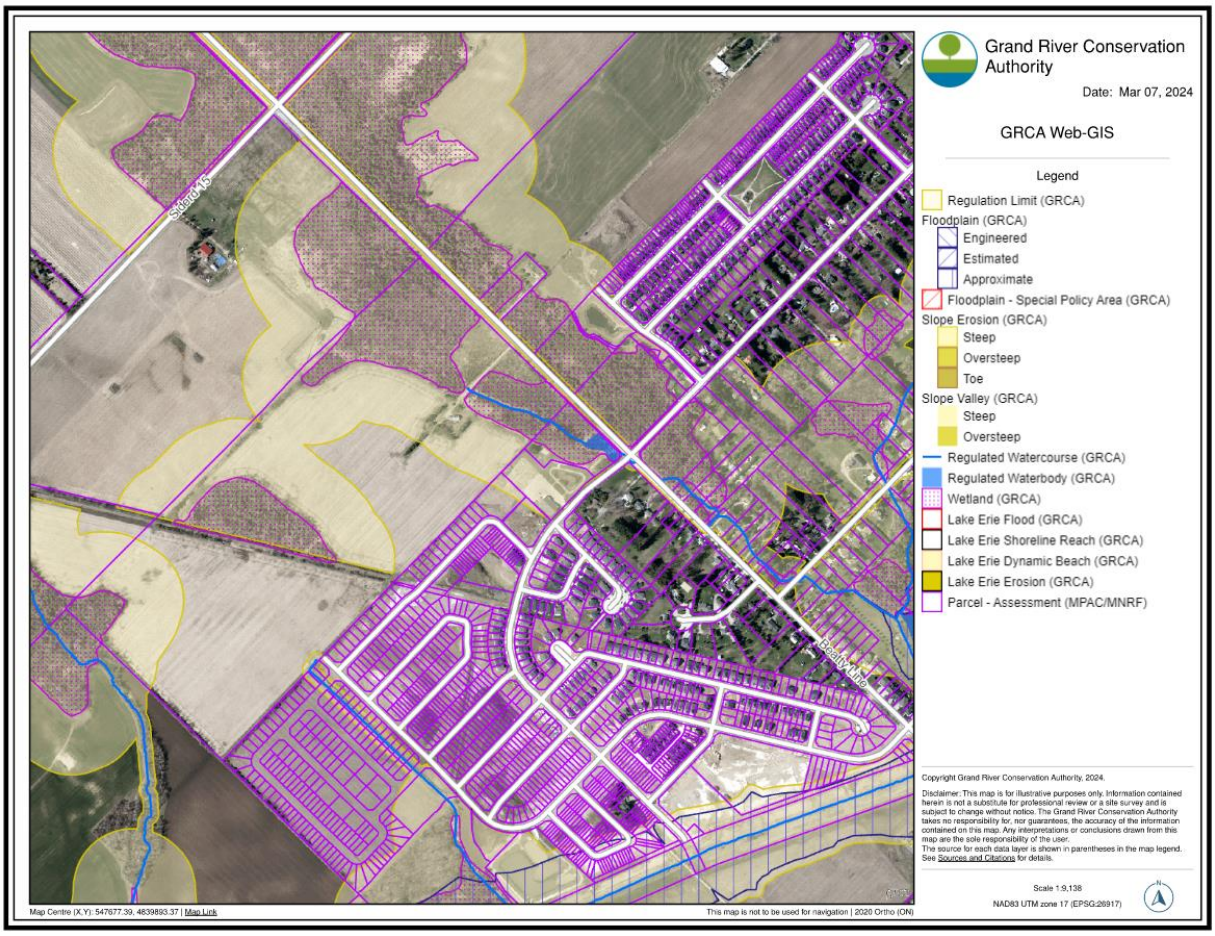


Figure 2 – O. Reg. 41/24 Regulation Limit (GRCA, 2024)

Existing Topography and Drainage

The majority of the Subject Lands generally drain southerly towards the Storybrook Phase 2A+ subdivision (refer to **Figure 1**), via an existing draw to the south of the abandoned railway corridor that bisects the site. Refer to Catchment 101 on **Figure 3**. Elevations throughout the site range from approximately 415 m to 420 m.

Drainage from Catchment 101, approximately 22.89 ha in size, in addition to drainage from external lands to the north (Catchment EXT1 on **Figure 3**), is captured at Elliot Avenue West and conveyed southerly through the Storybrook Phase 2A+ and 2A lands (refer to **Figure 1**) via an existing concrete box bypass sewer. The storm sewer was designed and constructed to convey the 100 year pre-development flow of 2.546 m^3/s from an area of 42.09 ha towards an existing woodlot located approximately 410 m south of the Subject Lands.

The design of the bypass sewer is detailed in the following reports and drawings with relevant excerpts included in **Attachment A**:

- Functional Servicing and Stormwater Management Report, Storybrook Subdivision prepared by R. J. Burnside & Associates Limited, December 2016, Revised February, 2018;
- Stormwater Management Report, North Pond, Storybrook Subdivision, Phase 1, R.J. Burnside & Associates Limited, April 2017;
- SWM Pond Conformance and Water Balance Submission, Storybrook Subdivision Phase 2A – Draft Plan No. 23T-16003, SCS Consulting Group Ltd., December 2019;
- North SWM Pond Conformance Memo, Storybrook Subdivision – Phase 2A+, SCS Consulting Group Ltd., March 2021; and,
- General Plan (Drawing No. 101), Storybrook Subdivision Phase 2A+, SCS Consulting Group Ltd., September 2021.

The southwestern and southern corners of the Subject Lands drain south and southeasterly, respectively, under existing conditions. These two areas, identified as Catchments 102A and 102B on the attached **Figure 3**, approximately 6.30 ha and 1.30 ha in size, respectively, sheet drain through adjacent lands to a tributary to the Grand River located off-site.

The remainder of the Subject Lands, identified as Catchment 103 on the attached **Figure 3**, approximately 12.77 ha in size, drains easterly to the HDF and wetland located in the southeastern corner of the site adjacent to Beatty Line. The HDF conveys the flows southeasterly, crossing Beatty Line approximately 200 m south of the Subject Lands via an existing culvert.

Proposed Grading

Due to the generally flat nature of the site, it is anticipated that the site will generally require fill import to sufficiently convey drainage and provide adequate cover over the proposed servicing. This condition is also driven by the requirement to convey the future storm drainage to the existing 1800 mm x 900 mm concrete box bypass sewer. All efforts will be made to minimize fill import where possible. Refer to the attached Conceptual Grading Plan (**Figure 4**) for more details.

Proposed Storm Drainage

Stormwater conveyance will be provided through a combination of a municipal storm sewers sized to convey the 5 year storm and an overland flow system within the municipal right-of-way (ROW) and easements, if necessary. Most of the Subject Lands will drain to a proposed SWM facility located in the south corner of the site which will outlet to the existing 1800 mm x 900 mm concrete box bypass sewer along Elliot Avenue West constructed as part of Phase 2A+ of the

Storybrook Subdivision (Outlet 1 on **Figure 3**). As noted above, the bypass sewer was sized to convey the pre-development 100 year flows from the Subject Lands, and outlets to the existing woodlot adjacent the Nichol Drain in Storybrook Phase 2B. Major system emergency spill from the Subject Lands (Regional storm event), is proposed to be directed to the Elliot Avenue ROW and conveyed via the ROW through the Storybrook Subdivision to the Nichol Drain.

External drainage from Catchment EXT1 will continue to drain to the central wetland on-site and will be directed southeasterly along the abandoned railway corridor, as shown on **Figure 5**. It is proposed to capture and convey the flows by a new clean water bypass sewer connecting to the existing 1800 mm x 900 mm concrete box bypass sewer (Outlet 1). Drainage from external Catchments EXT2 and EXT3 will continue overland towards the Subject Lands where it will then be conveyed via swale to the southwesterly and northeasterly wetlands, respectively, to maintain existing drainage conditions (refer to **Figure 4**). If the external lands develop in the future, the existing drainage patterns will need to be maintained in order to ensure feature-based water balance is achieved to all three wetlands.

Stormwater Management

Stormwater management (SWM) will be provided for the site per the Ministry of Environment, Conservation, and Parks (MECP), GRCA, and the Township of Centre Wellington design criteria. This will include a treatment train of Low Impact Development (LID) measures and an end-of-pipe wet SWM facility. The LID measures will provide quality and erosion control, as well as water balance benefits and may include increased topsoil depth, roof drains to grassed areas and/or soak-away pits, infiltration trenches, bioretention areas, etc. More detailed investigation into the feasibility and the location of the proposed LID measures will be undertaken as part of the functional SWM design completed in support of a Draft Plan of Subdivision application for the Subject Lands.

The proposed SWM facility, to be located in the southern corner of the Subject Lands adjacent to the future extension of Elliot Avenue, will provide water quality, erosion and quantity control for a drainage area of approximately 27.21 ha (refer to **Figure 5**). The SWM facility will have a permanent pool sized to provide 80% removal of total suspended solids to achieve an "Enhanced" level of quality control. Extended detention of the runoff from the Subject Lands during a 25 mm rainfall event will also be provided in the SWM facility for erosion control. Additionally, the SWM facility will have an outlet control structure designed to control post-development flows to pre-development levels for the 2 through the 100 year storm events for quantity control. The facility will discharge the 100 year post development controlled flows into the existing 1800 mm x 900 mm concrete box bypass sewer (Outlet 1) as outlined above (refer to **Figure 5**).

Proposed Sanitary Servicing

As outlined in the Functional Servicing and Stormwater Management Report (R.J. Burnside, February 2018) for the Storybrook Subdivision, there is an existing sanitary pumping station located within the Storybrook Phase 2A subdivision on Farley Road, approximately 100 m south of Kirvan Street. The sanitary pumping station was sized to accommodate a total peak flow of 73.5 L/s (6,108 persons), including Phases 2 and 3 of the Storybrook Development (refer to **Figure 1**). As per the Sanitary Pumping Station Design Report prepared by R.J. Burnside (dated December 2019), the anticipated drainage area for the Subject Lands was assumed to be 51.26 ha, which equated to 3,230 persons. This external drainage area included the Subject Lands, as well as additional external area from the lands to the north. Refer to **Attachment B** for Figure 1 from the SPS Design Report prepared by RJ Burnside (dated December 2019).

Sanitary sewer sizing along Elliot Avenue West and Farley Road throughout Phase 1 and 2 of Storybrook also accounted for this flow. A sanitary sewer stub was left as deep as possible (approximately 5.0 m) at the north limit of Elliot Avenue West at the interface of the Storybrook Subdivision and the Subject Lands. The pumping station wet well, process piping, forcemain, power supply, and control building were also all sized to accommodate the ultimate peak flow of 73.5 L/s, as per the SPS Design Report prepared by RJ Burnside (dated 2019).

The pumping station was previously upgraded to accommodate flows from the entire Storybrook Development, along with some additional residual flows from the Subject Lands. Further upgrades will be required to accommodate the ultimate condition that includes the entirety of the Subject Lands and additional external area, for which provisions were made during the design of the pumping station. To accommodate the ultimate scenario, with development of the Subject Lands, the current pumps will need to be replaced with two larger pumps (rated for 73.5 L/s) and a third “jockey” pump. The precast concrete top slab of the wet well may need to be reconfigured for the ultimate pump requirements. A larger generator (125 kW) will be required for these pumps, which the building has been sized for noting that the exhaust and gas supply have already been sized for the ultimate generator.

Following detailed design of Phase 2 and 3 of the Storybrook subdivision (refer to **Figure 1**), and due to intensification, the ultimate peak flow tributary to the pumping station will increase from 73.5 L/s to 83.0 L/s, if the same assumption for the Subject Lands and the external lands to the north is utilized (51.26 ha and 3,230 persons). Required pump upgrades will need to be confirmed by the pumping station designer. Based on the latest concept plan for the Subject Lands prepared by Weston Consulting dated January 1, 2025, the development is anticipated to have a net developable area of 29.0 ha with approximately 569 units. Based on a population density per unit of 3.04 (same as the Storybrook Subdivision), a population of 1,520 is expected, which is less than the originally anticipated 3,230 persons of capacity originally allowed for in

the downstream system. A more precise unit count and population can be determined once a more detailed plan is prepared in support of the Draft Plan of Subdivision application.

The site is proposed to be serviced via gravity sanitary sewers that will convey wastewater drainage to the existing sanitary stub at the north limit of Elliot Avenue West within the Storybrook Phase 2A+ lands. Sanitary sewers within the Subject Lands will be designed with a minimum cover of 3.0 m. The sewers will also be designed as per the following criteria, in line with the Township's Design Standards:

- Minimum pipe size: 200 mm diameter
- Minimum slope: 0.5%
- Minimum full-flow velocity: 0.8 m/s
- Maximum full-flow velocity: 3.0 m/s
- Average Daily Flow: 350 L/c/d
- Peaking factor as per the Harmon Formula
- Infiltration: 0.15 L/s/ha

Refer to the attached Conceptual Servicing Layout (**Figure 6**) for more details.

Proposed Water Servicing

The Fergus-Elora Water Supply System consists of a network of wells and interconnected feedermains, consisting of three pressure zones and four (4) elevated storage tanks for fire and peak flow, as discussed in the Water Supply Master Plan (prepared by AECOM, dated July 2019). The Subject Lands are entirely contained within Zone 1. The Aboyne Booster Pump Station transfers water via a 300 mm diameter trunk watermain from the Village of Elora to the Town of Fergus.

The Subject Lands are proposed to connect to the existing 200 mm diameter watermain on Elliot Avenue West, within the Storybrook Phase 2B lands (refer to **Figure 1**). Additionally, there is an existing 300 mm diameter watermain located on Beatty Line North, with a stub located at the intersection of Farley Road. Both connection points are within Zone 1. In order to connect at this location to provide looping for the site, a watermain approximately 350 m in length will be required from the east access point of the site, extending southeasterly along Beatty Line and connecting to the existing stub. Through previous correspondence with the Township, it is understood that the existing watermains should be sufficient to service the Subject Lands. Refer to the attached Conceptual Servicing Layout (**Figure 6**) for the location of the stub.

As per the Functional Servicing and Stormwater Management Report for the Storybrook Subdivision (R.J. Burnside, February 2018), there was an uncommitted residual capacity of approximately 2,451 units within the Fergus/Elora water system, while all three Phases of the Storybrook Development consisted of approximately 1,190 units. This suggests that there

should be available capacity within the system to service the anticipated 569 units within the Subject Lands. Additionally, the Township previously retained AECOM to undertake the Water Supply Master Plan study (dated July 2019), to assess the current and future demands of the Elora/Fergus water system up to the year 2041, and determine water supply alternatives to meet future needs. The study concluded that a new well location was being proposed directly north of the Subject Lands to meet the forecasted demands. While the Water Supply Master Plan initially indicated that this proposed well would be constructed in 2041, recent correspondence with the Township confirms that this well is anticipated to be constructed in 2026. The Township has indicated that they will provide further information on available capacity upon review of the OPA application.

Watermain within the Subject Lands will also be designed as per the following criteria, in line with the Township's Design Standards:

- Minimum cover: 2.0 m
- Minimum pipe size: 150 mm diameter
- Average and Maximum Daily Demand: 350 kPa to 550 kPa
- Minimum Hour and Peak Hour Demand: 275 kPa to 700 kPa

A future hydraulic analysis will be necessary to confirm the appropriate infrastructure sizing and configuration to provide adequate supply and pressure to service the proposed development and to confirm that the existing water storage and supply infrastructure is adequate to service the Subject Lands.

Summary

In summary, this PSSB has been prepared in support of the Official Plan Amendment application for the proposed residential development in the community of Fergus, in the Township of Centre Wellington. This brief outlines the means by which the proposed development can be graded and serviced in accordance with MECP, GRCA, and the Township of Centre Wellington design criteria and policies.

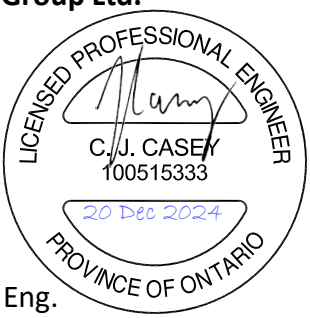
Minor and major system storm drainage from the Subject Lands will be directed by a storm sewer system and overland flow routes, respectively, towards a proposed SWM facility discharging to the existing 1800 mm x 900 mm concrete box bypass sewer located on Elliot Avenue, in the existing Storybrook Subdivision. External drainage contributing to the central wetland on-site will be captured and conveyed via a Clean Water Collector to the same outlet. The proposed SWM strategy will include a treatment train of LID measures and an end-of-pipe SWM facility providing quantity, quality and erosion control, in addition to water balance benefits.

This PSSB has shown that the site can be serviced from the existing municipal wastewater and water systems located east and south of the site, subject to the Township of Centre Wellington's confirmation of capacity and allocation.

We trust that this brief has provided sufficient level of detail on the proposed SWM and servicing infrastructure required for the proposed residential development to satisfactorily support the OPA application. Please contact the undersigned if you have any questions or require additional information.

Sincerely,

SCS Consulting Group Ltd.

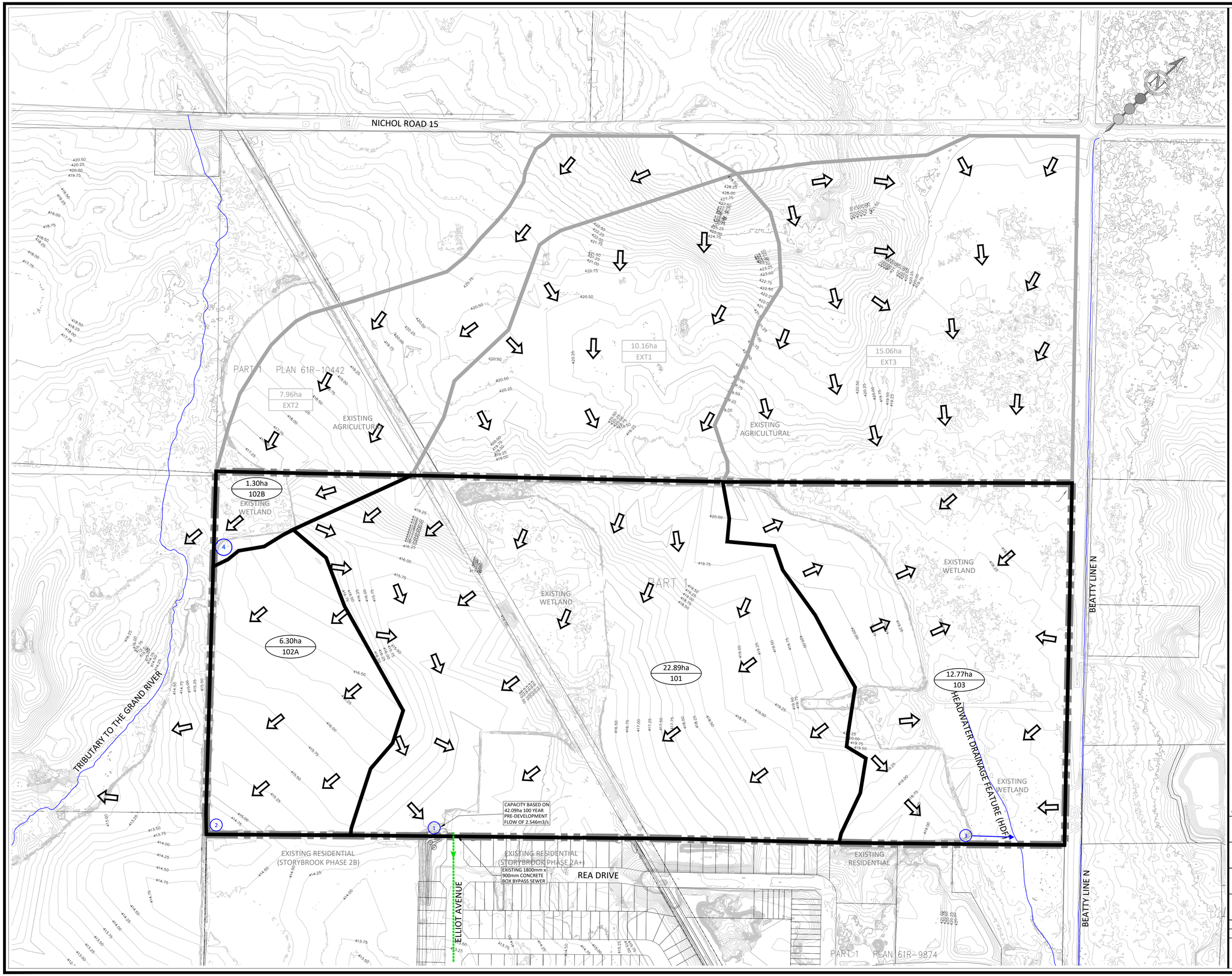


Jamie Casey, P. Eng.
jcasey@scsconsultinggroup.com

Andrea Keeping, P. Eng.
akeeping@scsconsultinggroup.com

Encl.
Attachment A: Storm Servicing Background Information
Attachment B: Sanitary Servicing Background Information

P:\2655 Sorbara - Brubacher\Design\Reports\OPA Servicing and SWM Brief\2655-OPA Preliminary Servicing and SWM Brief-20 December 2024.docx



LEGEND:

- LIMIT OF PROPERTY
- 420.00 EXISTING CONTOUR AND ELEVATION
- EXISTING STORM DRAINAGE BOUNDARY
- EXTERNAL STORM DRAINAGE BOUNDARY
- EXISTING STORM SEWER
- OVERLAND FLOW ROUTE
- 1 STORM DRAINAGE OUTLET
- 1.34ha / 204 — DRAINAGE AREA (HECTARES) / CATCHMENT ID
- 9.71ha / 502 — EXTERNAL STORM DRAINAGE AREA (HECTARES) / CATCHMENT ID

*NOTE: LAYOUT IS SCHEMATIC ONLY, DETAILS TO BE PROVIDED AT DETAILED DESIGN STAGE.

SCS consulting group ltd
30 CENTURIAN DRIVE, SUITE 100
MARKHAM, ONTARIO L3R 8B8
TEL: (905) 475-1900
FAX: (905) 475-8335

PRELIMINARY SERVICING AND STORMWATER MANAGEMENT BRIEF

SORBARA - 6586 BEATTY LINE NORTH

EXISTING STORM DRAINAGE PLAN

DESIGNED BY:	J.N.	CHECKED BY:	A.R.K
SCALE:	1:2000	DATE:	DECEMBER 2024
PROJECT No:	2655	FIGURE No:	3

File: P:\2655 Sorbara – Brubacher\Drawings\FSP\Fig\Report Figures\2655P-STRM-EXST-X.X.dwg – Revised by <TMCNEIL> : Thu, Nov 21 2024 – 11:32am

LEGEND:

- LIMIT OF DEVELOPMENT
- × 223.91 PROPOSED ELEVATION
- × 224.35EX EXISTING ELEVATION
- 0.5% ROAD SLOPE
- 270.25 EXISTING CONTOUR AND ELEVATION
- 1.0% PROPOSED SWALE
- PROPOSED CULVERT

*NOTE: LAYOUT IS SCHEMATIC ONLY, DETAILS TO BE PROVIDED AT DETAILED DESIGN STAGE.

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PRELIMINARY SERVICING AND STORMWATER MANAGEMENT BRIEF

SORBARA - 6586 BEATTY LINE NORTH

CONCEPTUAL GRADING PLAN

DESIGNED BY:	J.N.	CHECKED BY:	A.R.K
SCALE:	1:1500	DATE:	DECEMBER 2024
PROJECT No:	2655	FIGURE No:	4

File: P:\2655 Sorbara - Brubacher\Drawings\FSP\Fig\Report Figures\2655P-GRAD-5.0.dwg - Revised by <TMCNEIL> : Mon, Apr 08 2024 - 2:02pm

NICHOL ROAD 15

BEATTY LINE N

ELIOT AVENUE

REA DRIVE

TRIBUTARY TO THE GRAND RIVER

PART 1 PLAN 61R-10442

PART 1 PLAN 61R-9874

EXISTING AGRICULTURAL

EXISTING WETLAND

EXISTING RESIDENTIAL (STORYBROOK PHASE 2B)

EXISTING RESIDENTIAL (STORYBROOK PHASE 2A+)

EXISTING RESIDENTIAL

7.96ha
EXT2

10.17ha
EXT1

15.06ha
EXT3

1.00ha
102

5.43ha
103

25.23ha
101

1.98ha
105

9.59ha
104

1.34ha
204

9.71ha
502

1.0%

100 YEAR STORM CAPTURE

PROPOSED SWM POND

PROPOSED CULVERT

HEADWATER DRAINAGE FEATURE (HDF)

EXISTING 1800mm x 900mm CONCRETE BOX BYPASS SEWER

CAPACITY BASED ON 42.09ha 100 YEAR PRE-DEVELOPMENT FLOW OF 2.546m3/s

EXIST

LEGEND:

- LIMIT OF PROPERTY
- 420.00 EXISTING CONTOUR AND ELEVATION
- PROPOSED STORM DRAINAGE BOUNDARY
- EXTERNAL STORM DRAINAGE BOUNDARY
- MAJOR SYSTEM - OVERLAND FLOW
- 1.34ha / 204 DRAINAGE AREA (HECTARES) / CATCHMENT ID
- 9.71ha / 502 EXTERNAL STORM DRAINAGE AREA (HECTARES) / CATCHMENT ID
- 1.0% PROPOSED SWALE
- × 417.20 PROPOSED ELEVATION
- × 418.50EX EXISTING ELEVATION
- 100 YEAR STORM CAPTURE
- PROPOSED STORM SEWER AND MAINTENANCE HOLE
- CLEAN WATER BYPASS SEWER
- EXISTING STORM SEWER AND MAINTENANCE HOLE
- PROPOSED CULVERT

*NOTE: LAYOUT IS SCHEMATIC ONLY, DETAILS TO BE PROVIDED AT DETAILED DESIGN STAGE.

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PRELIMINARY SERVICING AND STORMWATER MANAGEMENT BRIEF

SORBARA - 6586 BEATTY LINE NORTH

PROPOSED STORM DRAINAGE PLAN

DESIGNED BY:	J.N.	CHECKED BY:	A.R.K
SCALE:	1:2000	DATE:	NOVEMBER 2024
PROJECT No:	2655	FIGURE No:	5

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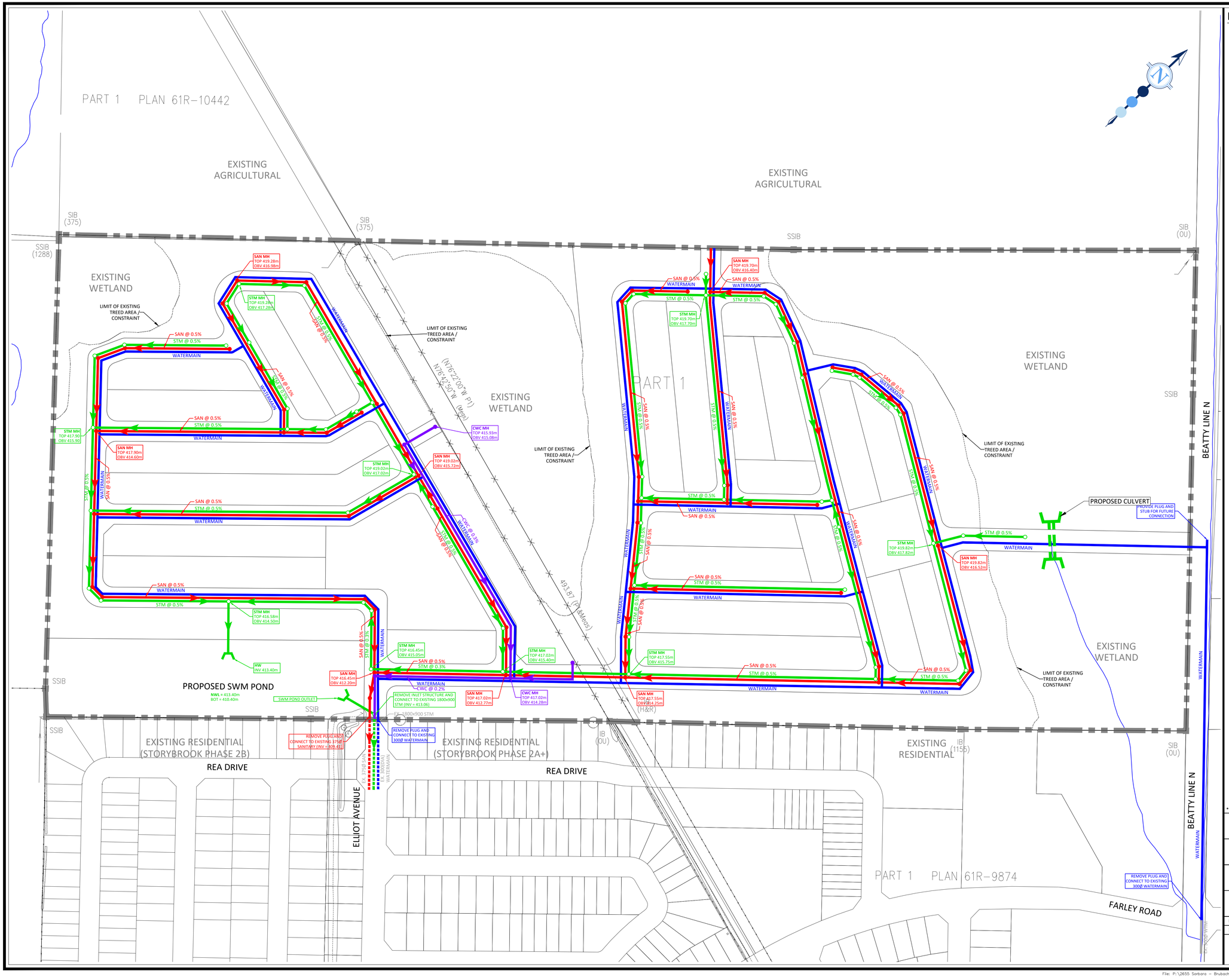

LEGEND:

- LIMIT OF DEVELOPMENT
- PROPOSED STORM SEWER AND MAINTENANCE HOLE
- PROPOSED SANITARY SEWER AND MAINTENANCE HOLE
- PROPOSED WATERMAIN
- PROPOSED CLEAN WATER COLLECTOR (CWC) SEWER AND MAINTENANCE HOLE
- PROPOSED CULVERT

*NOTE: LAYOUT IS SCHEMATIC ONLY, DETAILS TO BE PROVIDED AT DETAILED DESIGN STAGE.

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PRELIMINARY SERVICING AND STORMWATER MANAGEMENT BRIEF

SORBARA - 6586 BEATTY LINE NORTH

CONCEPTUAL SERVICING PLAN

DESIGNED BY:	J.N.	CHECKED BY:	A.R.K
SCALE:	1:1500	DATE:	DECEMBER 2024
PROJECT No:	2655	FIGURE No:	6

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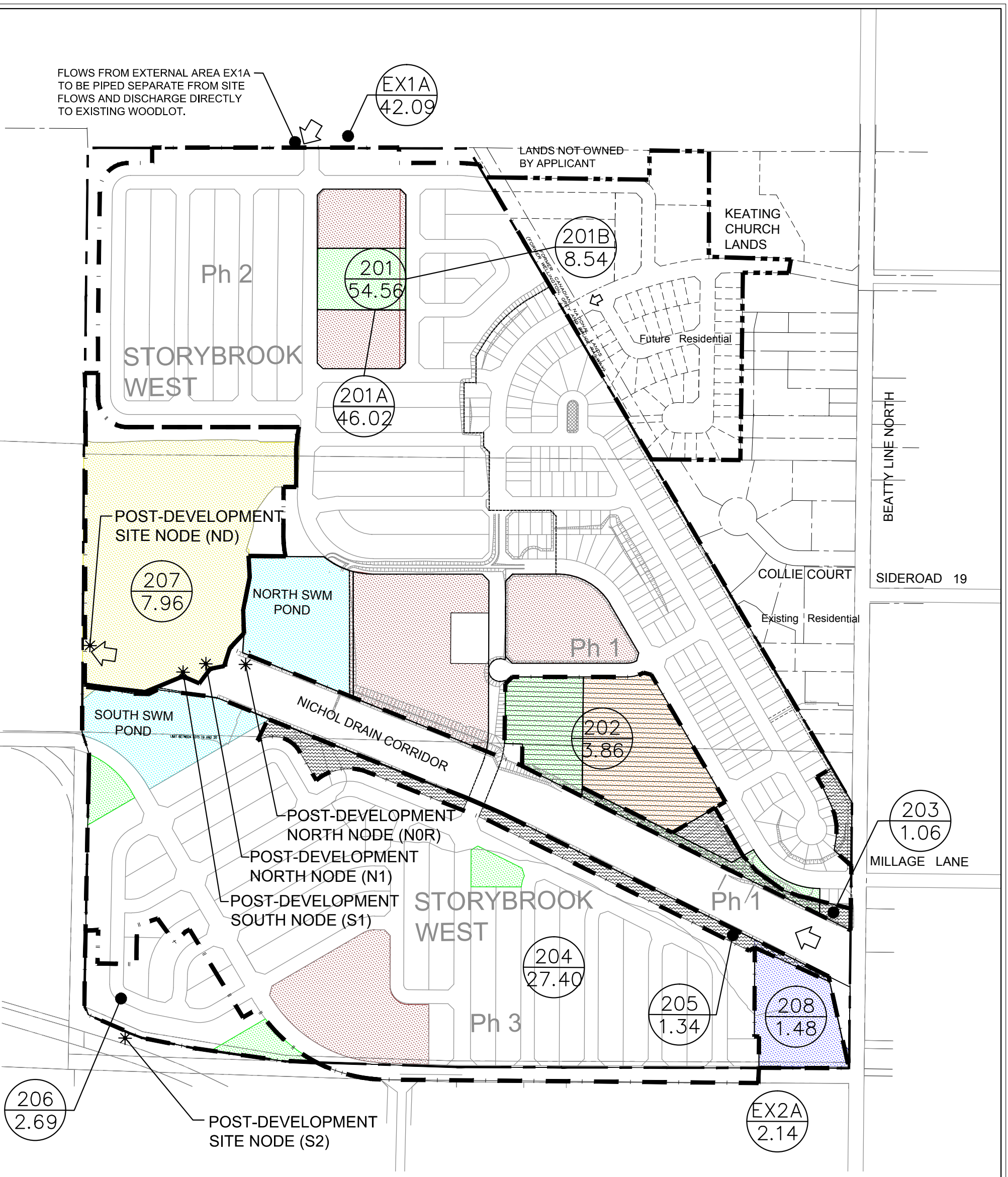
ATTACHMENT A
STORM SERVICING BACKGROUND INFORMATION

SCS consulting group ltd



LEGEND:

- STORYBROOK SUBDIVISION BOUNDARY
- PROPOSED PHASING LIMITS
- DRAINAGE BOUNDARY
- EXTERNAL AREA BYPASS STORM SEWER
- OVERLAND FLOW ROUTE DIRECTION
- MINOR FLOW CONTROLLED, MAJOR FLOW UNCONTROLLED
- MINOR FLOW UNCONTROLLED, MAJOR FLOW UNCONTROLLED

202 / 24.01 — CATCHMENT NUMBER / CATCHMENT AREA (ha)

- PROPOSED SCHOOL BLOCK
- PROPOSED SWM FACILITY
- PROPOSED PARK BLOCK
- PROPOSED MEDIUM DENSITY BLOCK
- EXISTING WOODLOT
- PROPOSED COMMERCIAL BLOCK

0 200 400 600 800
Metres

BURNSIDE

Client: NIGUS FERGUS JOINT VENTURE INC.

Figure Title: **STORYBROOK SUBDIVISION PHASE 1**
PROPOSED DRAINAGE BOUNDARIES

Drawn	Checked	Date	Figure No.
PAG	LN	2016-11-30	FIG 11
Scale: H 1:5000		Project No.: 300031145	

EX1A
42.09

DRAINAGE TO CATCHMENT 101
FROM CATCHMENT EX3A DRAINS
VIA THE EXISTING N-S DITCH

EXISTING
DITCH

RAILWAY EMBANKMENT

LANDS NOT
OWNED BY
APPLICANT

EX3A
11.51

KEATING
CHURCH
LANDS

104
2.92

Ph 2

101
51.10

Future Residential

NORTH

LEGEND:

NORTH WEST FERGUS SECONDARY PLANNING AREA BOUNDARY

DRAINAGE BOUNDARY

OVERLAND FLOW ROUTE DIRECTION

105
5.11

CATCHMENT NUMBER
CATCHMENT AREA (ha)

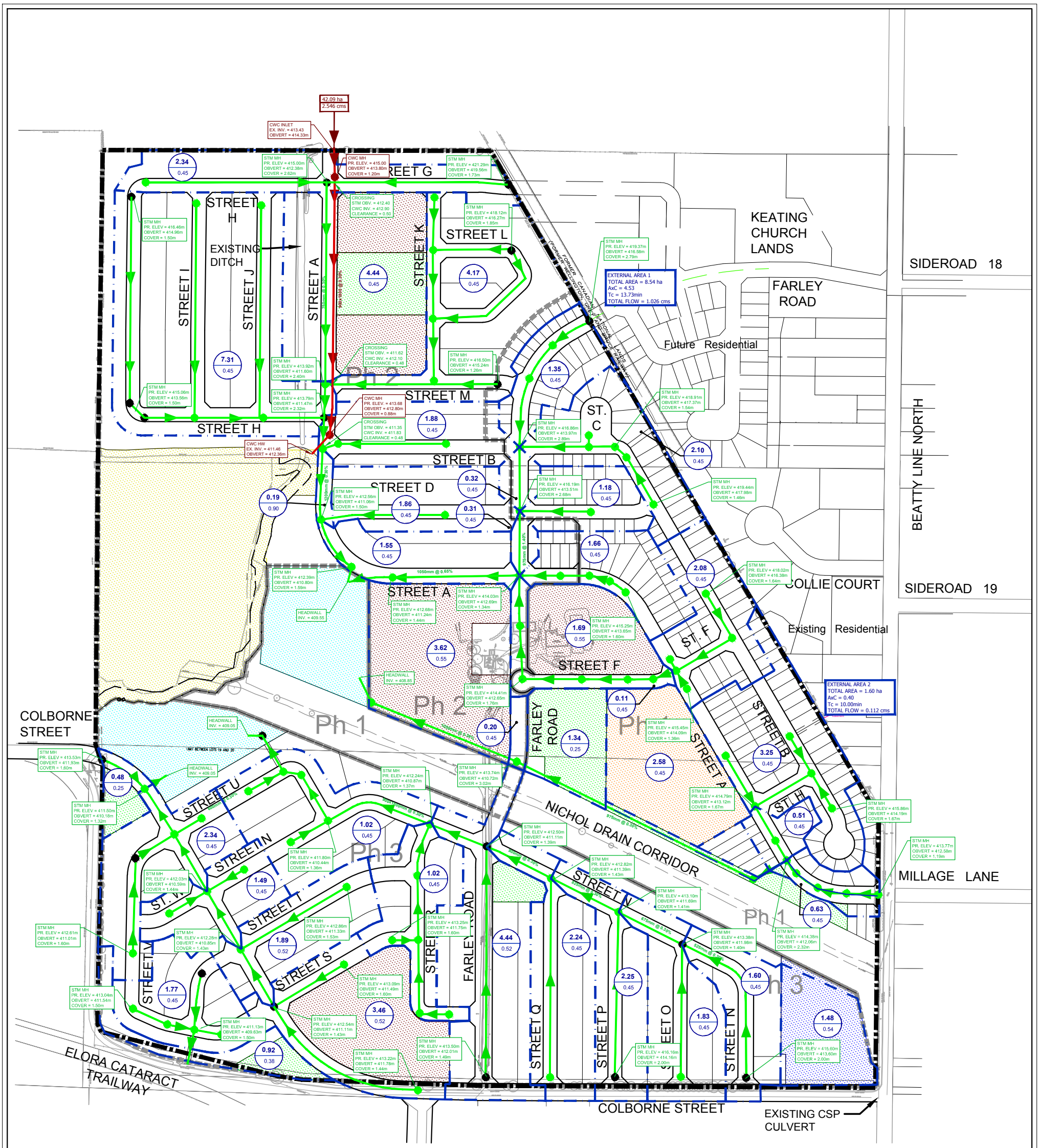
0 200 400 600 800
Metres

BURNSIDE

Client
NIGUS FERGUS JOINT VENTURE INC.

Figure Title
NW FERGUS SECONDARY PLANNING AREA DRAFT PLAN APPLICATION
EXISTING EXTERNAL DRAINAGE BOUNDARIES

Drawn	Checked	Date	Figure No.
RS	LN	2016-11-30	**FIG 10**
Scale		Project No.	
1:5000		300031145	



LEGEND:

- NORTH WEST FERGUS SECONDARY PLANNING AREA BOUNDARY
- PROPOSED PHASING LIMITS
- PROPOSED STORM SEWER
- PROPOSED DEDICATED CLEAN WATER SEWER FOR EXTERNAL FLOWS TO WOODLOT
- NEIGHBOURING SUBDIVISION STORM SEWER LAYOUT
- PROPOSED PARK BLOCK
- PROPOSED MEDIUM DENSITY BLOCK
- EXISTING WOODLOT
- STORM DRAINAGE AREA
- PROPOSED SCHOOL BLOCK
- PROPOSED COMMERCIAL BLOCK
- PROPOSED SWM FACILITY
- STORM DRAINAGE AREA (HA) / RUN-OFF COEFFICIENT / 100-YEAR CAPTURE

0 50 100 200 300 400
Metres

BURNSIDE

Client
NIGUS FERGUS JOINT VENTURE INC.

Figure Title
NW FERGUS SECONDARY PLANNING AREA DRAFT PLAN APPLICATION
PROPOSED STORM SERVICING

Drawn	Checked	Date	Figure No.
PAG	LN	2016-11-30	**STM1**
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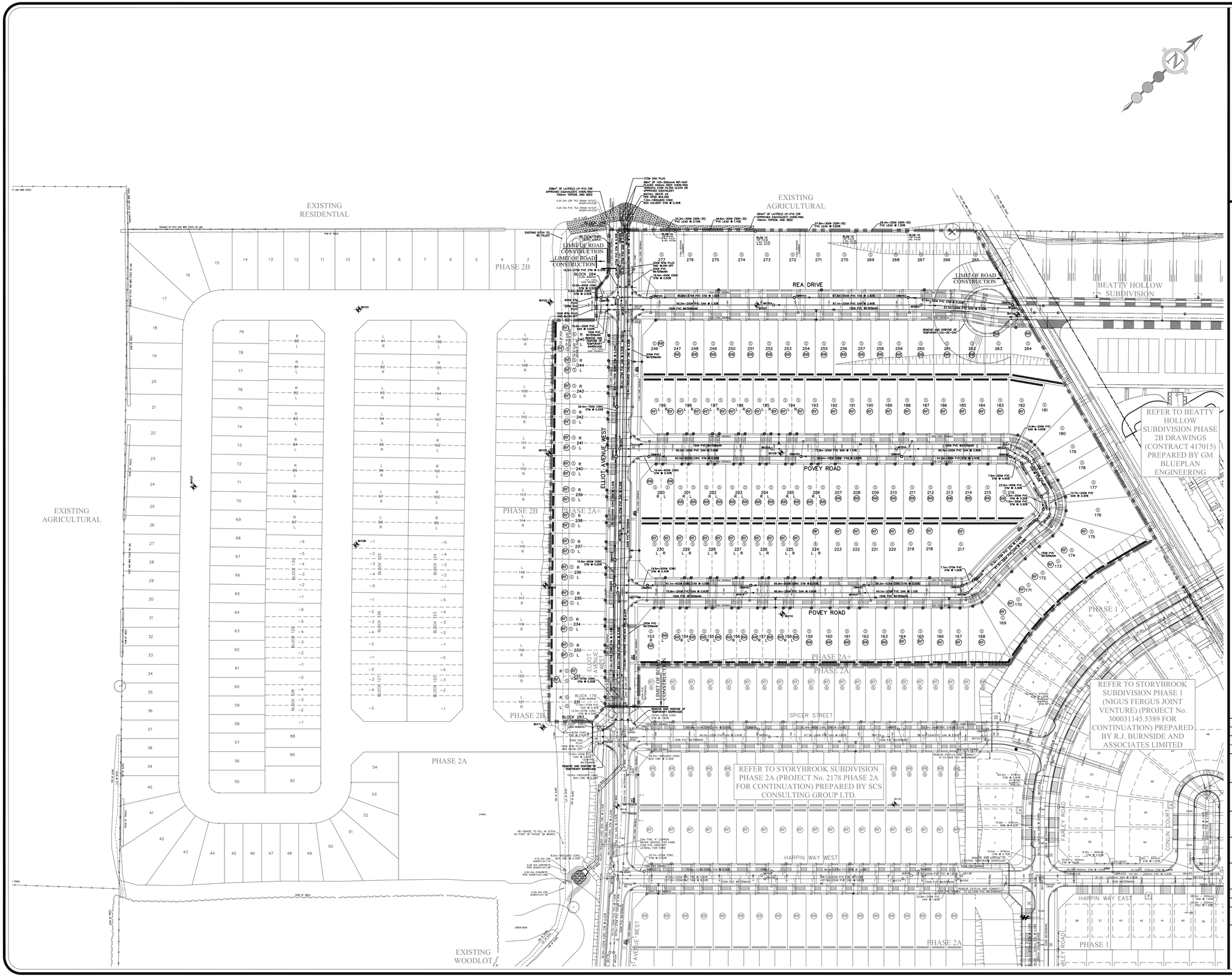

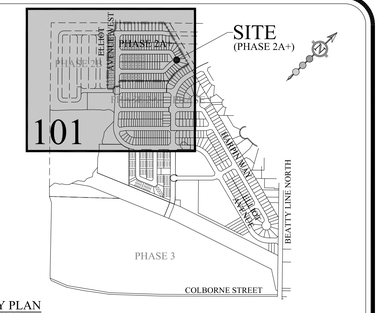

KEY PLAN
N.T.S.

BENCHMARK: 0011916U120F(MTO) ELEV. 415.228m

LOCAL BENCHMARK No. 1
NAIL AND WASHER IN THE NORTH FACE OF THE THIRD HYDRO POLE WEST OF BEATTY LINE ON THE SOUTH SIDE OF COLBORNE STREET. ELEVATION = 415.228m
LOCAL BENCHMARK No. 2
NAIL AND WASHER IN BOTTOM OF HYDRO POLE ON THE SOUTH SIDE OF COLBORNE STREET ACROSS FROM THE SOUTHWEST CORNER OF THE INTERSECTION OF THE GRAVEL DRIVEWAY AND COLBORNE STREET. ELEVATION = 413.22 METERS
LOCAL BENCHMARK No. 3
RAILROAD SPIKE IN SOUTHWEST SIDE OF HYDRO POLE ON THE WEST SIDE OF THE STREET. ELEVATION = 413.13 METERS

LEGEND:

- LIMIT OF PHASE
- SANITARY SEWER / MANHOLE
- STORM SEWER / MANHOLE
- STORM SEWER / CATCHBASIN MANHOLE
- FOUNDATION DRAIN COLLECTOR SEWER / MANHOLE
- EXISTING SANITARY MANHOLE
- EXISTING STORM/ CATCHBASIN MANHOLE
- EXISTING FOUNDATION DRAIN COLLECTOR MANHOLE
- SINGLE/ DOUBLE CATCHBASIN
- EXISTING SINGLE/ DOUBLE CATCHBASIN
- VALVE AND BOX
- WATERMAIN PLUG
- HYDRANT AND VALVE/ EXISTING HYDRANT AND VALVE
- EXISTING VALVE AND BOX
- 53 — LOT NUMBER
- SHALLOW REAR LOT INFILTRATION TRENCH FOR SPLIT DRAINING LOT (SEE DETAILS ON DWG. 904). REAR ROOF LEADER TO DISCHARGE TO SPLASHPAD AT SURFACE.
- DEEP REAR LOT INFILTRATION TRENCH FOR FRONT DRAINING LOT (SEE DETAILS ON DWG. 904). REAR ROOF LEADER TO CONNECT TO INFILTRATION TRENCH.
- WATER SERVICE BOX LOCATION
- FROST COLLAR INSTALLED ON WATER SERVICE BOX
- EXISTING WATER SERVICE BOX LOCATION
- SINGLE SANITARY CONNECTION
- SINGLE STORM/FDC CONNECTION
- PROPOSED EMBANKMENT (MAX. 3:1 UNLESS OTHERWISE NOTED)
- DRIVEWAY LOCATION
- TEMPORARY TURNING CIRCLE PAVED AREA
- EXISTING ACOUSTIC FENCE
- 1.8m HIGH WOOD PRIVACY FENCE (SEE LANDSCAPE DWGS FOR DETAILS)
- EX. WOOD PRIVACY FENCE
- 1.5m HIGH BLACK VINYL CHAINLINK FENCE (SEE LANDSCAPE DWGS FOR DETAILS)
- EX. BLACK VINYL CHAINLINK FENCE
- BH16 — BOREHOLE LOCATION
- TEMPORARY CONCRETE DEAD-END BARRICADE AS PER OPSD 911.150 WITH SIGN (Wa-8)
- CMB — COMMUNITY MAILBOX PAD, SEE DETAILS ON 900 SERIES DRAWINGS
- NUMBER OF MODULES
- UNIT TO BE SERVCED VIA SUMP PUMP CONNECTED TO STORM SEWER (SEE DETAIL ON DWG. 902)
- EXISTING HYDRO SWITCH GEAR/ TRANSFORMER
- EXISTING STREET LIGHT PEDESTAL/ LIGHT STANDARD
- EXISTING COMMUNITY MAILBOX
- EXISTING HYDRO LINE AND HYDRO POLE
- INFILTRATION TRENCH (SEE DETAILS ON DWG. 904)
- " RADIUS TYPE " TACTILE PLATES (AS PER OPSD 310.039)
- EXISTING TREES / EXISTING TREES TO BE REMOVED

TOPOGRAPHIC SURVEY PROVIDED BY J.D. BARNES LIMITED, JUNE 5, 2007.

REVISIONS

No.	DESCRIPTION	DATE	BY	APPROVED
-	ISSUED FOR CONSTRUCTION	SEP 2021	D.W.	-

SCS consulting group ltd
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TEL: (905) 475-1900
FAX: (905) 475-8335

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NIGUS FERGUS JOINT VENTURE
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VAUGHAN, ONTARIO, L4L 8M9
TEL: (905) 580-6154

LICENSED PROFESSIONAL ENGINEER — D. WOO — 100073980 — SEPTEMBER 9, 2021 — PROVINCE OF ONTARIO

STORYBROOK SUBDIVISION PHASE 2A+

GENERAL PLAN

DATE:	AUGUST 2021	DESIGNED BY:	C.J.C./D.W.	CHECKED BY:	M.R.C.
SCALE:	1:1000	DRAWN BY:	M.J.O.	CHECKED BY:	S.M.S./P.A.S.

10 5 0 10 20 30 40 50 60 70 80

APPROVED AS TO FORM IN RELIANCE UPON THE PROFESSIONAL SKILL AND ABILITY OF SCS CONSULTING GROUP LTD. CONSULTING ENGINEERS AS TO DESIGN AND SPECIFICATION.

PROJECT No: 2178

DRAWING No: 101

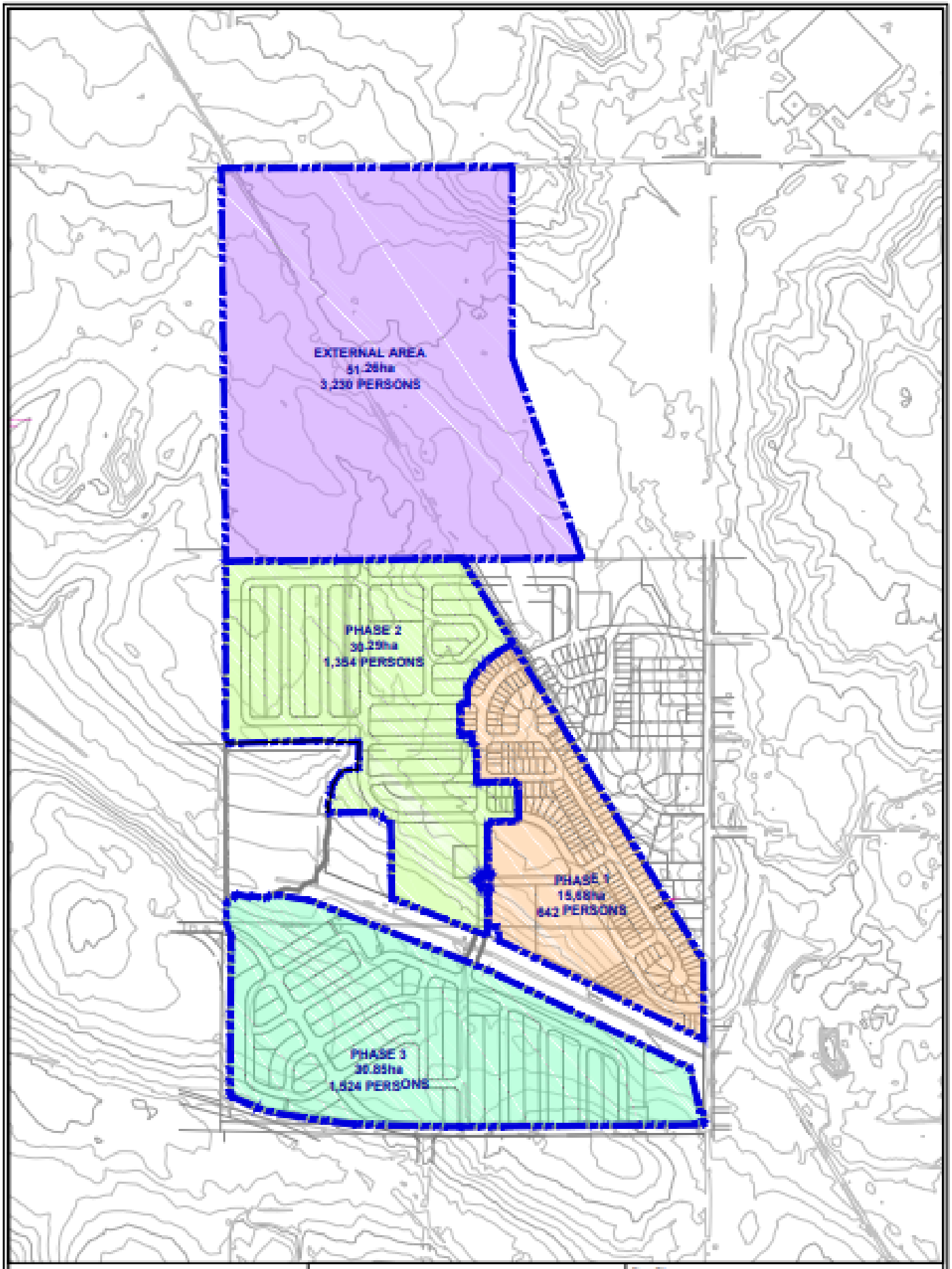
Director Of Engineering — Date

2178 - NIGUS FERGUS JOINT VENTURE - STORYBROOK SUBDIVISION PHASE 2A+ - TOWNSHIP OF CENTRE WELLINGTON - ISSUED FOR CONSTRUCTION - SEPTEMBER 9, 2021

ATTACHMENT B

SANITARY SERVICING BACKGROUND INFORMATION

SCS consulting group ltd



STOREYBROOK SUBDIVISION

PROPOSED SANITARY DRAINAGE BOUNDARIES

NIGUS FERGUS JOINT VENTURE INC.

Drawn	Checked	Date	Figure No.
ET	ET	18/05/14	1
Scale		Project No.	
1:7,500		300031145	