

March 14, 2023

Attention: Adam Corvari
Bradley and Co.
150 Shade Street
Wellesley ON N3A 4J2

Via email: adamcorvari@gmail.com

Dear Adam Corvari:

REFERENCE: 1060 QUEENS BUSH ROAD - SERVICING BRIEF

This preliminary servicing overview has been prepared for the proposed redevelopment of the property located at the municipal address 1060 Queens Bush Road. The proposed redevelopment consists of 12 residential stacked townhouse units, 18 parking spaces, a common amenity area, an associated concrete sidewalk, and landscaped areas, herein referred to as the site. Refer to the appendix for the proposed concept plan.

The site encompasses an area of 0.18 ha with an existing single-family detached residential house. The property is bounded by Queens Bush Road to the north, Village Road to the west, existing residential developments to the south, and an existing Bell utility building to the east. For the exact location of the site refer to the figure below.



The purpose of this letter is to provide inventory of the existing storm, sanitary, and water servicing infrastructure for the feasibility of developing this site as proposed.

Based on the appended record drawings obtained from the Township of Wellesley, the site at 1060 Queens Bush Road has servicing infrastructure available at Queens Bush Road.

GRADING

Existing topographic information was obtained from a detailed survey completed by J.D. Barnes Limited in January 2023. In the existing condition, surface runoff from the majority of the site drains southwest toward Village Road. The site generally falls from the northeast corner from an elevation of about 367.0m toward the southwest corner to an elevation of about 365.6m. The average slope of the site under existing conditions is approximately 2.4%.

The grading of the site will generally direct drainage from the proposed parking area and amenity area to the adjacent Queens Bush Road and direct drainage from west of the building southwest to the adjacent Village Road by sheet flow, with the grading matching adjacent property line elevations.

A minimum of 0.5% and a maximum of 10% slope will be used on all hard surfaces for vehicular and pedestrian access routes to ensure accessibility. A minimum of 2% (50:1) and a maximum of 33% (3:1) slope will be used for landscaped areas.

It is anticipated that in order to account for the drainage on site to be directed towards Queens Bush Road, a retaining wall will be constructed neighbouring the south and east property lines.

SANITARY

Arcadis IBI Group obtained and reviewed the record drawings prepared by TSH Engineers, Architects and Planners in November 1992. There is one existing 200mm diameter sanitary sewer on Queens Bush Road draining west. Arcadis IBI Group has also obtained and reviewed 90% design drawings prepared by GM BluePlan in July 2018.

The existing sewage flow from the site is estimated at approximately 0.04 L/s. The development is proposed to have 12 residential units. Using the Region of Waterloo's population density per unit type (2.44 people per townhouse unit), the calculated total population for the proposed development is 29.3 people and the total sewage design flow is estimated to be 0.41 L/s. Based on that, the excess sewage flow due to the redevelopment is estimated at 0.41 L/s – 0.04 L/s = 0.37 L/s.

Arcadis IBI Group proposed to utilize one connection on Queens Bush Road. The theoretical capacity of the receiving 200mm diameter sanitary sewer on Queens Bush Road, at its existing 0.27% slope is 17.04 L/s. The sanitary capacity of the downstream system will need to be confirmed to have the surplus capacity to provide sanitary service.

WATER

The subject site has existing watermains on the two adjacent streets as follows:

- An existing 200mm diameter watermain on Queens Bush Road; and,
- An existing 200mm diameter watermain on Village Road.

One municipal hydrant is located on the north side of Queens Bush Road at the intersection with Village Road connected to the 200mm watermain on Queens Bush Road.

STORM

Arcadis IBI Group has obtained and reviewed drawings prepared by GM BluePlan in July 2018 and revised in January 2023. These drawings were completed as 90% design for a storm sewer replacement on Queens Bush Road. We have completed our proposed storm servicing based on these drawings prepared by GM BluePlan.

As part of GM BluePlan's draft design drawing no. 9 provided by the Township of Wellesley, a 300mm diameter storm sewer is proposed on Queens Bush Road flowing west with a catch basin manhole on the south curb of Queens Bush Road, east of Village Road. The Township will need to confirm if the storm sewer has been constructed and operational and provide record drawings to better inform the design of the proposed storm sewer connection.

Water quality control infrastructure such as oil/grit separators may be required if the number of parking spaces is greater than 29 parking spaces. The proposed concept plan shows that 18 parking spaces are proposed, hence, no stormwater quality control is required for the proposed site. The site has an estimated existing runoff coefficient of 0.40. For the proposed townhouse redevelopment, the runoff coefficient is anticipated to be at about 0.60. As the design runoff coefficient exceeds the proposed, quantity control will be required to attenuate flows in excess of the 0.40 runoff coefficient.

Arcadis IBI Group proposes to provide a 300mm diameter storm service for the development connected to the existing 300mm storm sewer on Queens Bush Road.

UTILITIES

Electric, natural gas, and telecommunication services exist within close proximity to the subject development on Queens Bush Road. Servicing of the proposed development by the various utilities will be provided by the extension of these facilities. It is anticipated that each of these utilities will, as required, identify its specific requirements through the standard application circulation, review, and design process.

EROSION AND SEDIMENT CONTROL

During construction, erosion and sediment control measures will be required for the site area and will be designed and provided by others. The following is required during construction:

- Protect adjacent areas from the migration of sediment in overland flow;
- Minimize the amount of sediment transported off-site via construction vehicles; and
- Stabilize all disturbed areas as quickly as possible to minimize erosion.

We trust this meets your requirements at this time for the inventory of the existing storm, sanitary, and water servicing infrastructure for the feasibility of developing this site at 1060 Queens Bush Road. Should there be any questions or if further information is required, please do not hesitate to contact the undersigned.

All of which is respectfully submitted.

Yours truly

ARCADIS IBI GROUP

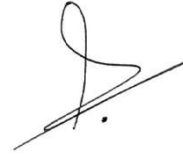


Isabella Biondi, EIT

Engineer-in-Training

Tel: 519-585-2255 ext 61992

Email: Isabella.Biondi@ibigroup.com



Mohammad Meqdad, P.Eng.

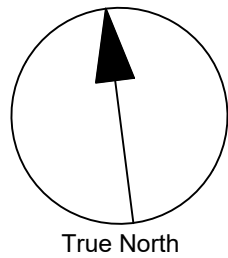
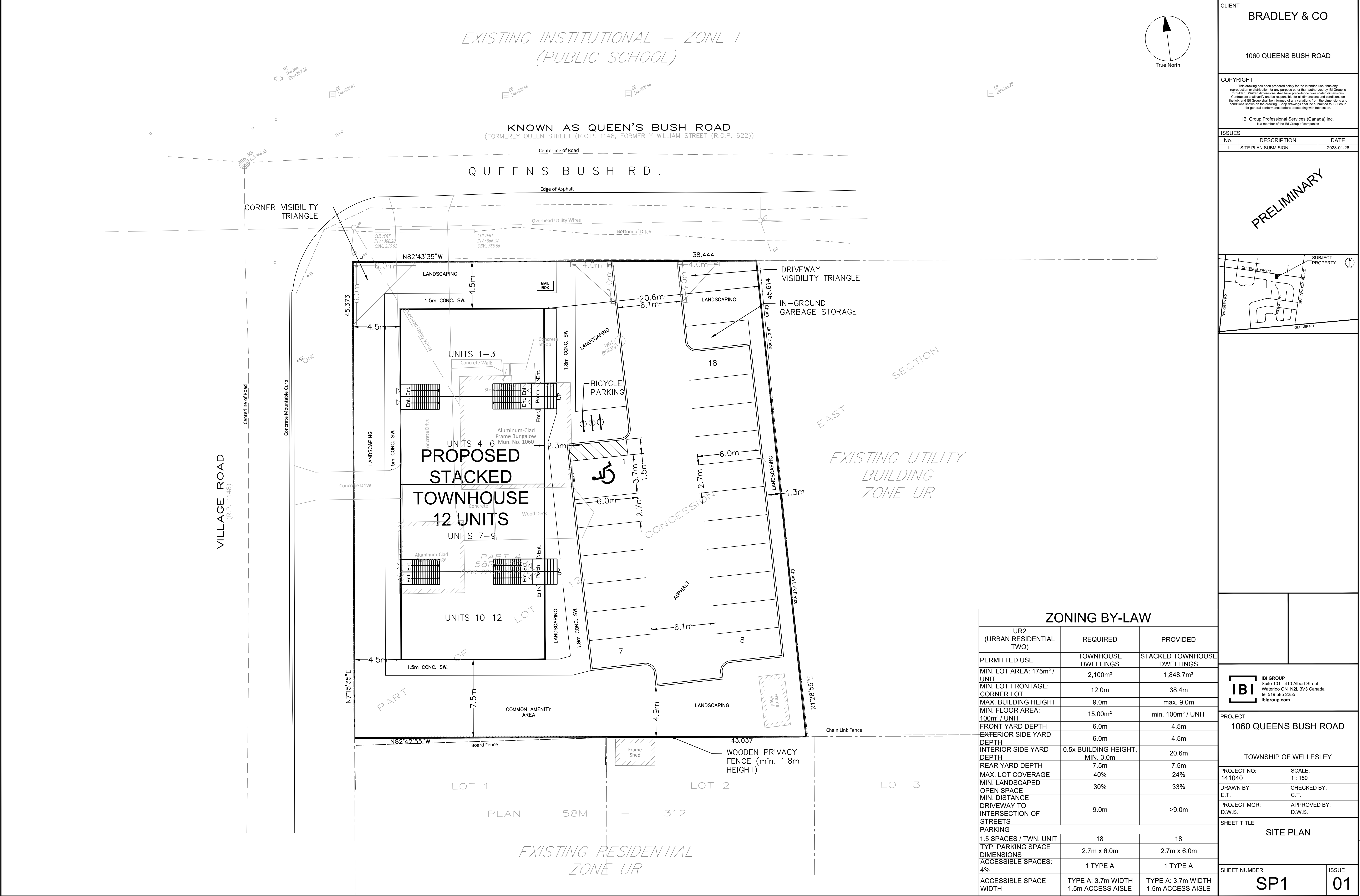
Project Engineer

Tel: 519-585-2255 ext 63018

Email: Mohammad.Meqdad@ibigroup.com

LIST OF ATTACHMENTS:

- Site Plan
- Plan of Topographic Features
- Drawings Prepared by TSH Engineers, Architects and Planners
- Drawings Prepared by GM BluePlan
- Site Grading Plan
- Site Servicing Plan



CLIENT

BRADLEY & CO

1060 QUEENS BUSH ROAD

COPYRIGHT

This drawing has been prepared solely for the intended use, thus any reproduction or distribution for any purpose other than that authorized by IBI Group is forbidden. Written dimensions shall have precedence over scaled dimensions. Contractors shall verify and be responsible for all dimensions and conditions on the job, and IBI Group shall be informed of any variations from the drawings and conditions shown on the drawing. Shop drawings shall be submitted to IBI Group for general conformance before proceeding with fabrication.

IBI Group Professional Services (Canada) Inc.
is a member of the IBI Group of companies.

ISSUES

No.	DESCRIPTION	DATE
1	SITE PLAN SUBMISSION	2023-01-26

PRELIMINARY

ZONING BY-LAW		
UR2 (URBAN RESIDENTIAL TWO)	REQUIRED	PROVIDED
PERMITTED USE	TOWNHOUSE DWELLINGS	STACKED TOWNHOUSE DWELLINGS
MIN. LOT AREA: 175m² / UNIT	2,100m²	1,848.7m²
MIN. LOT FRONTAGE: CORNER LOT	12.0m	38.4m
MAX. BUILDING HEIGHT	9.0m	max. 9.0m
MIN. FLOOR AREA: 100m² / UNIT	15,00m²	min. 100m² / UNIT
FRONT YARD DEPTH	6.0m	4.5m
EXTERIOR SIDE YARD DEPTH	6.0m	4.5m
INTERIOR SIDE YARD DEPTH	0.5x BUILDING HEIGHT, MIN. 3.0m	20.6m
REAR YARD DEPTH	7.5m	7.5m
MAX. LOT COVERAGE	40%	24%
MIN. LANDSCAPED OPEN SPACE	30%	33%
MIN. DISTANCE DRIVEWAY TO INTERSECTION OF STREETS	9.0m	>9.0m
PARKING	18	18
1.5 SPACES / TOWN. UNIT	18	18
TYP. PARKING SPACE DIMENSIONS	2.7m x 6.0m	2.7m x 6.0m
ACCESSIBLE SPACES: 4%	1 TYPE A	1 TYPE A
ACCESSIBLE SPACE WIDTH	TYPE A: 3.7m WIDTH 1.5m ACCESS AISLE	TYPE A: 3.7m WIDTH 1.5m ACCESS AISLE

PROJECT

1060 QUEENS BUSH ROAD

TOWNSHIP OF WELLESLEY

PROJECT NO: 141040	SCALE: 1:150
DRAWN BY: E.T.	CHECKED BY: C.T.
PROJECT MGR: D.W.S.	APPROVED BY: D.W.S.

SHEET TITLE

SITE PLAN

SHEET NUMBER	SP1
ISSUE	01

IBI GROUP

Suite 101 - 410 Albert Street
Waterloo ON N2L 3V3 Canada
tel 519 585 2255
ibigroup.com

FILE LOCATION: J:\141040_1060_Queens_V_0_Production\03_Design\17_Planning\Sheets\141040_SPP.dwg

LAST SAVED: February 2, 2023, by emma.tillery

PLOTTED: Thursday, February 2, 2023 11:02:20 AM by Emma Tillery

SCALE CHECK

1 m




SCALE 1 : 200

5 0 5 10 metres

J.D.BARNES LIMITED
© COPYRIGHT 2022

UP	DENOTES	UTILITY POLE
GA	DENOTES	GUY ANCHOR
LSC	DENOTES	CONCRETE LIGHT STANDARD
CB	DENOTES	CATCHBASIN
MH	DENOTES	MANHOLE
FH	DENOTES	HYDRANT
WV	DENOTES	WATER VALVE
NP	DENOTES	'NO PARKING' SIGN
SS	DENOTES	'STOP' SIGN



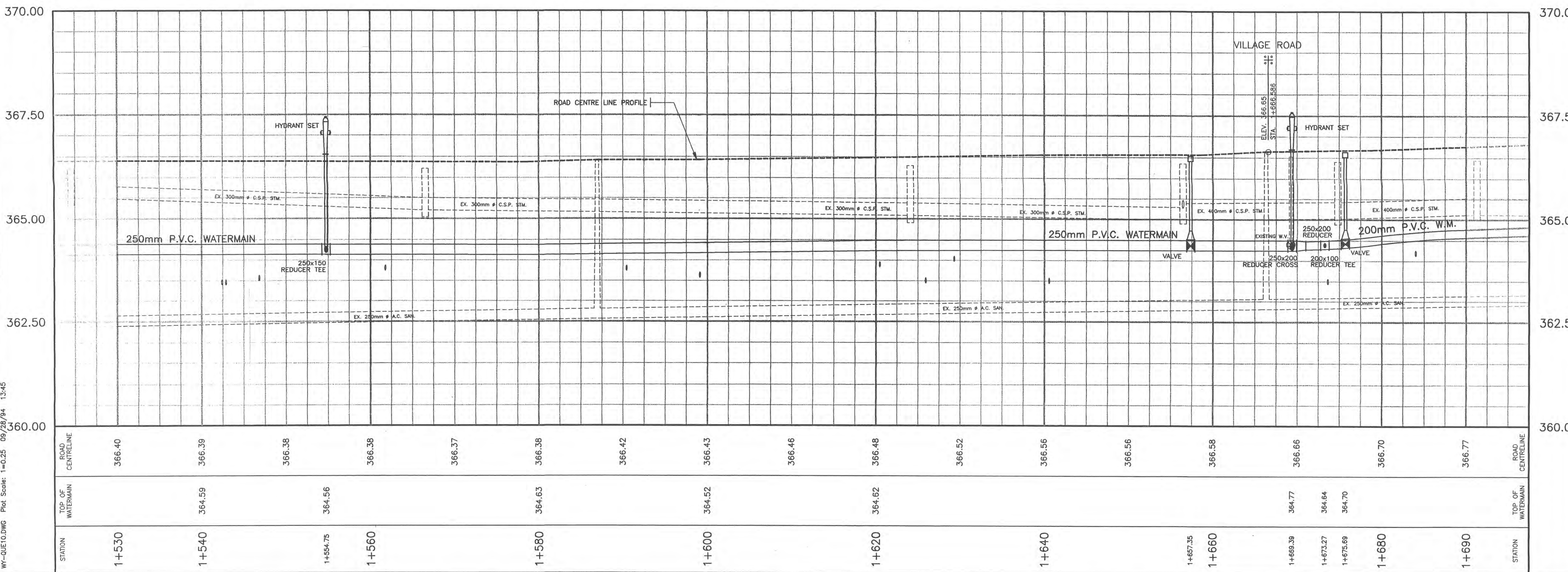
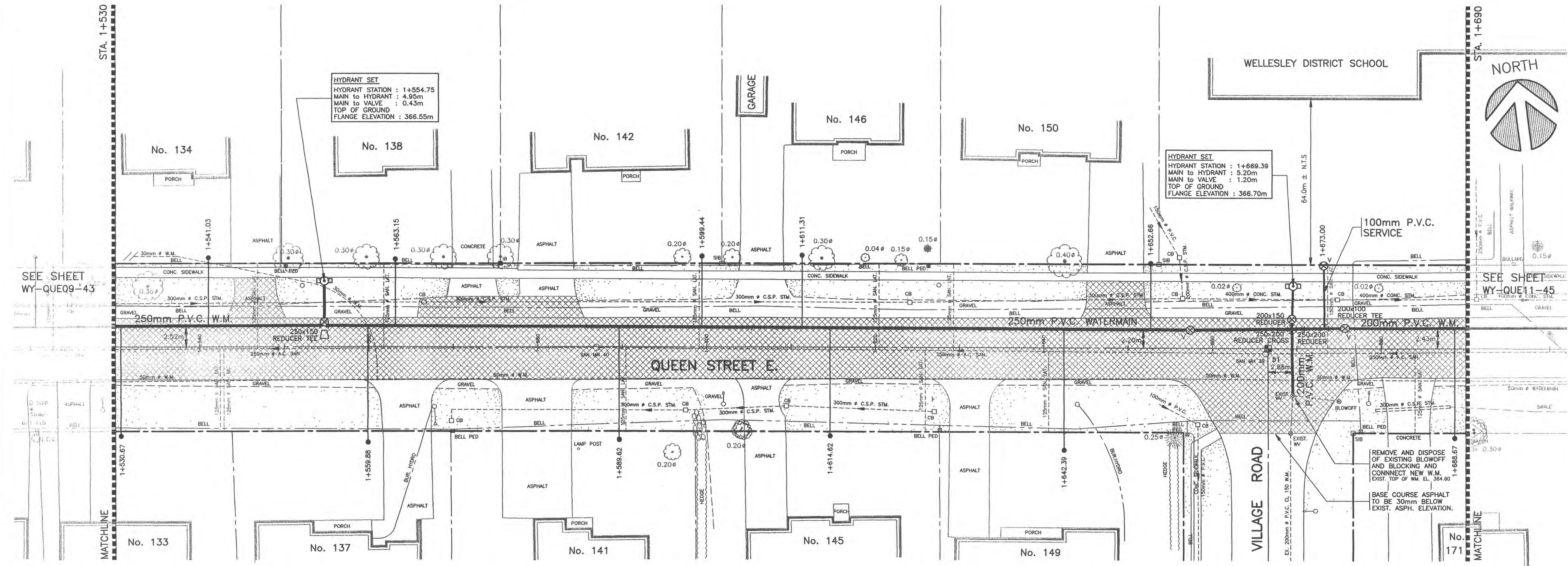
J.D.BARNES
LIMITED

LAND INFORMATION SPECIALISTS

4273 KING ST. E, #100, KITCHENER, ON, N2P 2E9
T: (519) 578-2220 F: (519) 650-5625 www.jdbarnes.com

SURVEYING
MAPPING
GIS

DRAWN BY: <div style="text-align: center; height: 40px;">HvW</div>	CHECKED BY: <div style="text-align: center; height: 40px;">JPH</div>	REFERENCE NO.: <div style="text-align: center; height: 40px;">22-40-676-00</div>
		DATED: 01/16/2023



GENERAL NOTES:

- WATERMAIN TO BE P.V.C. DR18 CERTIFIED TO CSA B137.3-M (AWWA C900 CLASS 150) WITH RUBBER GASKET BELL AND SPIGOT JOINTS AND TWO #10 g. (3.2mm) STRANDED COPPER TRACER WIRE. BEDDING AND COVER MATERIAL SHALL BE GRANULAR 'A'.
- FITTINGS TO BE INJECTION MOULDED P.V.C. DR18 (CLASS 150) CERTIFIED TO CSA B137.2 FOR P.V.C. WATERMAINS UP TO AND INCLUDING 200mm DIAMETER FITTINGS FOR LARGER DIAMETER MAINS TO BE GRAY OR DUCTILE IRON COMPLETE WITH DENSO ANTI-CORROSION PROTECTION.
- SERVICE CONNECTIONS TO BE 25mm DIAMETER, OR LARGER AS NOTED, TYPE 'K' COPPER INSTALLED WITH A MINIMUM DEPTH OF COVER OF 1.8m COMPLETE WITH MAINSTOP AND CURBSTOP AND BOX AT PROPERTY LINE. CONNECTION TO NEW P.V.C. WATERMAIN UP TO AND INCLUDING 200mm DIAMETER SHALL BE MADE WITH INJECTION MOULDED P.V.C. TAP TEE. CONNECTION TO LARGER P.V.C. WATERMAINS AND EXISTING WATERMAINS SHALL BE MADE WITH SERVICE SADDLES.
- LIMITS OF ASPHALT REMOVAL SHOWN SHADED. ASPHALT TO BE SAWCUT FULL DEPTH IN STRAIGHT LINES ALONG REMOVAL LIMITS PRIOR TO REMOVAL. CONTRACTOR TO PROVIDE SHORING/SHEETING/FRENCH BOX AS REQUIRED TO LIMIT AREAS REQUIRING RESTORATION AND TO SATISFY MINISTRY OF LABOUR REQUIREMENTS.
- ALL BEDDING AND THRUST BLOCKING TO BE FOUNDED ON COMPETENT SOIL.
- ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH APPLICABLE ONTARIO PROVINCIAL STANDARD SPECIFICATIONS AND DRAWINGS.
- CONTRACTOR TO ENSURE THAT EXISTING WATER SUPPLY TO ALL RESIDENCES AND OTHER FACILITIES IS MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.
- SEE SHEET WY-DET01-56 FOR RESTORATION NOTES

AREA OF ASPHALT PAVEMENT REMOVAL

No.	DATE	REVISIONS
2	12/15/93	AS-CONSTRUCTED
1	06/11/93	ISSUED FOR CONSTRUCTION
0	11/30/92	ISSUED FOR APPROVAL

ALL DIMENSIONS AND INFORMATION SHALL BE CHECKED AND VERIFIED ON THE JOB AND ANY DISCREPANCIES MUST BE REPORTED TO THE CONSULTANT BEFORE COMMENCING THE WORK.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INFORM HIMSELF OF THE EXISTING LOCATION OF, AND ASSUME ALL LIABILITY FOR DAMAGE TO ALL UTILITIES, SERVICES AND STRUCTURES WHETHER ABOVE GROUND OR BELOW GRADE BEFORE COMMENCING THE WORK. SUCH INFORMATION IS NOT NECESSARILY SHOWN ON THE DRAWINGS, AND WHERE SHOWN, THE ACCURACY CANNOT BE GUARANTEED.

ALL DRAWINGS REMAIN THE PROPERTY OF THE CONSULTANT AND MAY NOT BE REPRODUCED OR REVISED WITHOUT THE CONSULTANT'S WRITTEN PERMISSION.

WITH THE SOLE EXCEPTION OF THE BENCHMARK(S) SPECIFICALLY DESCRIBED FOR THIS PROJECT, NO ELEVATION INDICATED OR ASSUMED HEREON IS TO BE USED AS A REFERENCE ELEVATION FOR ANY PURPOSE.

totten sims hubicki associates
ENGINEERS ARCHITECTS AND PLANNERS
30 Dupont Street East, Waterloo, Ontario N2J 2G9

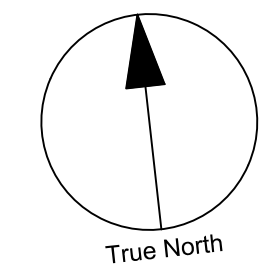
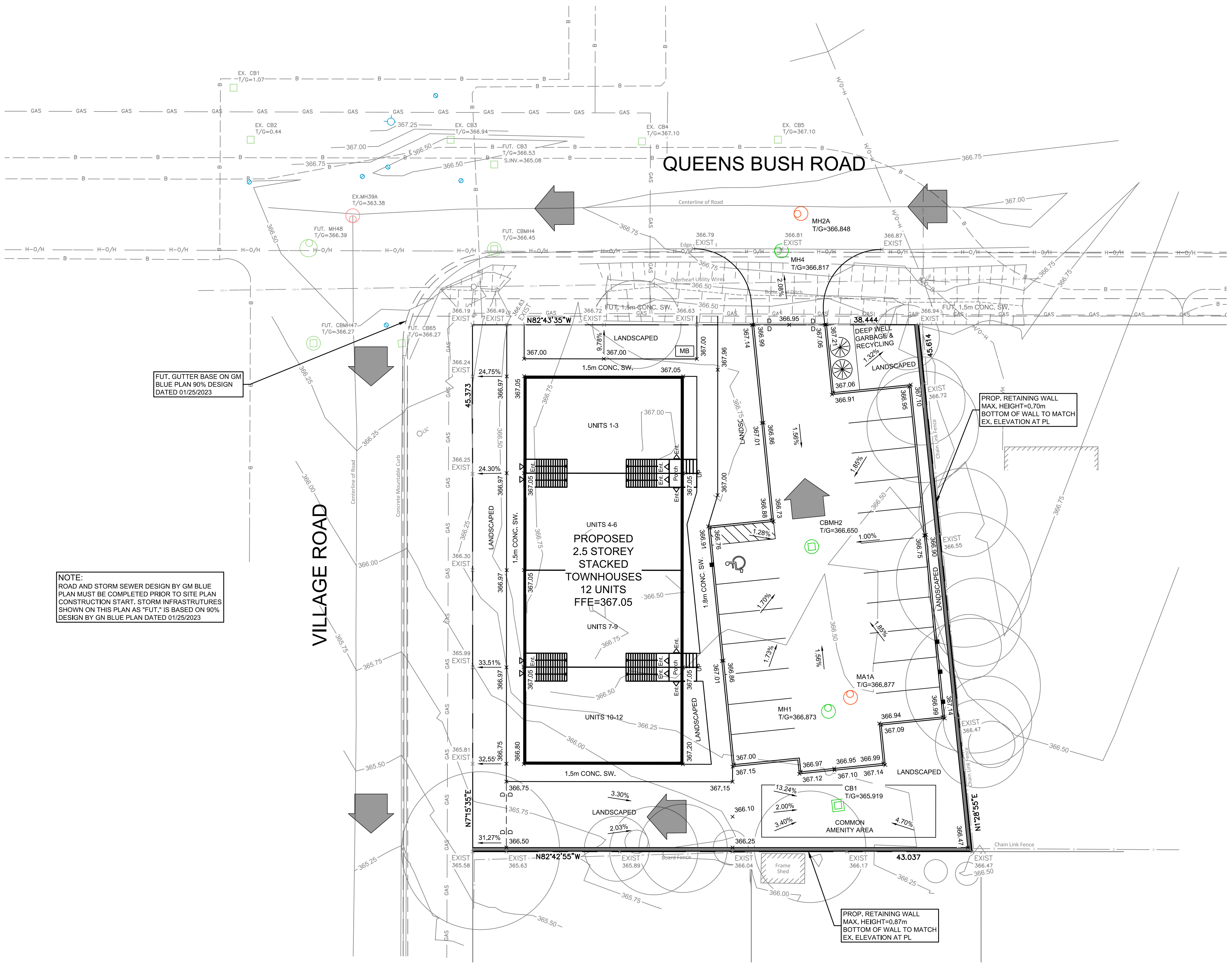
WELLESLEY WATER DISTRIBUTION
CORPORATION OF THE TOWNSHIP OF WELLESLEY

PLAN & PROFILE
QUEEN STREET E.
STATION 1+530.00 TO 1+690.00

DRAWN BY	DESIGNED BY	DATE
WSM/AK/BM	DM/RFC	NOV. 30/92

CHECKED BY	APPROVED BY	PROJECT No.
RFC	RFC	21110-01

SCALE	DRAWING No.
Horiz. 1 : 250 Vert. 1 : 50	WY-QUE10-44



LEGEND:

- 234.75
x 235.16
EXIST
 - 2.3%
 - 235.60
x 6.00%
 - D
D
 - MAJOR OVERLAND FLOW
- EXISTING GROUND CONTOURS
EXISTING GROUND ELEVATION
EXISTING SLOPE LABEL
FUTURE STORM MANHOLE
EXISTING SANITARY MANHOLE
EXISTING WATER VALVE
EXISTING FIRE HYDRANT
PROPOSED WATER VALVE
PROPOSED FIRE HYDRANT
PROPOSED GROUND ELEVATION
PROPOSED SLOPE LABEL
PROPOSED STORM MANHOLE
PROPOSED SANITARY MANHOLE
DRAINAGE DIVIDE

NOTE:
ROAD AND STORM SEWER DESIGN BY GM BLUE
PLAN MUST BE COMPLETED PRIOR TO SITE PLAN
CONSTRUCTION START. STORM INFRASTRUCTURES
SHOWN ON THIS PLAN AS "FUT." IS BASED ON 90%
DESIGN BY GM BLUE PLAN DATED 01/25/2023

FUT. GUTTER BASE ON GM
BLUE PLAN 90% DESIGN
DATED 01/25/2023

PROP. RETAINING WALL
MAX. HEIGHT=0.70m
BOTTOM OF WALL TO MATCH
EX. ELEVATION AT PL

PROP. RETAINING WALL
MAX. HEIGHT=0.87m
BOTTOM OF WALL TO MATCH
EX. ELEVATION AT PL

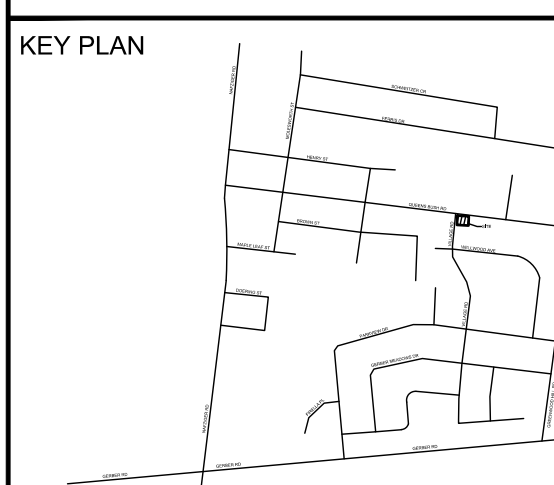
CLIENT
BRADLEY & CO.

150 SHADE STREET,
WELLESLEY, ON N3A 4J2

COPYRIGHT
This drawing has been prepared solely for the intended use, thus any reproduction or distribution for any purpose other than authorized by IBI Group is prohibited. Written dimensions shall have precedence over scaled dimensions. Contractors shall verify and be responsible for all dimensions and conditions on the job, and IBI Group shall be informed of any variations from the dimensions and conditions shown on the drawing. Shop drawings shall be submitted to IBI Group for general conformance before proceeding with fabrication.
IBI Group Professional Services (Canada) Inc.
is a member of the IBI Group of companies.

ISSUES		
No.	DESCRIPTION	DATE
1	ISSUED FOR SERVICING REPORT	2023-03-10

DRAFT



LOCAL BENCHMARK
TOP NUT OF FIRE HYDRANT ON THE NORTH SIDE OF THE
INTERSECTION OF QUEEN'S BUSH ROAD AND VILLAGE ROAD
LOCATED NORTH WEST OF THE SUBJECT PROPERTY AS
SHOWN ON THE FACE OF PLAN.
ELEVATION= 367.36m

THE POSITION OF POLE LINES, CONDUITS, WATERMANS,
SEWERS AND OTHER UNDERGROUND AND ABOVEGROUND
UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON
THE CONTRACT DRAWINGS, AND, WHERE SHOWN, THE
ACCURACY OF THE POSITION OF SUCH UTILITIES AND
STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK,
THE CONTRACTOR SHALL INFORM HIMSELF OF THE EXACT
LOCATION OF ALL SUCH UTILITIES AND STRUCTURES, AND
SHALL ASSUME ALL LIABILITY FOR ANY DAMAGE TO THEM.



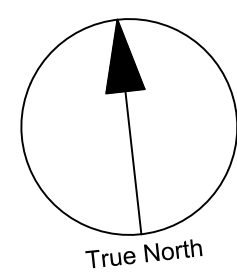
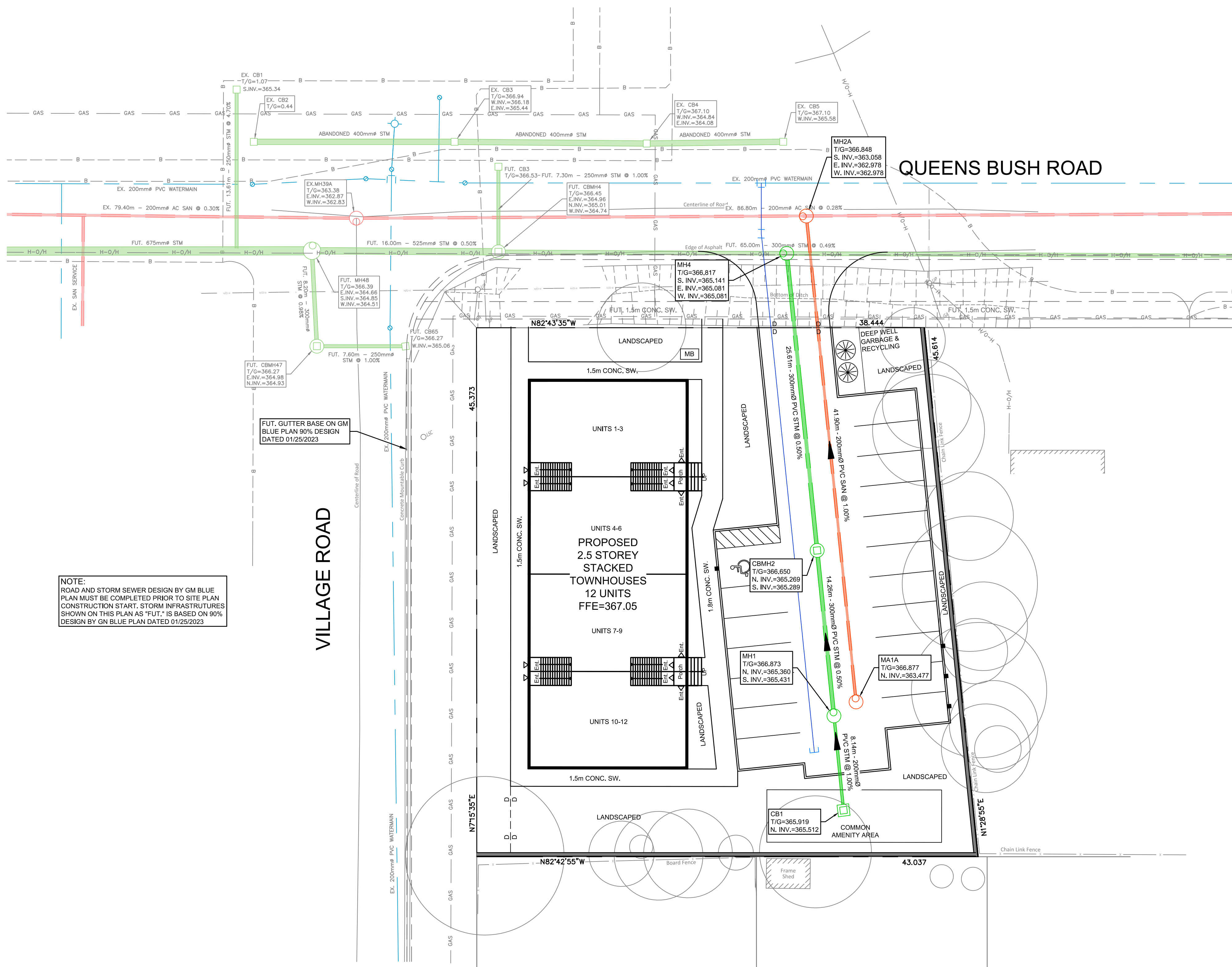
PROJECT
PROPOSED TOWNHOUSES

1060 QUEENS BUSH ROAD, WELLESLEY

PROJECT NO: 141040	SCALE: 1:200
DRAWN BY: I. AHOSSIVO	CHECKED BY:
PROJECT MGR: M. MEQDAD	APPROVED BY: M. MEQDAD

SHEET TITLE
SITE GRADING PLAN

SHEET NUMBER C01	ISSUE 1
----------------------------	-------------------



LEGEND:

- FUTURE STORM SEWER
- EXISTING SANITARY
- EXISTING WATERMAIN / VALVE / CS
- EXISTING FIRE HYDRANT
- EXISTING WMC / PLUG
- PROP. STORM SEWER
- PROP. SANITARY
- PROP. WATERMAIN / VALVE / CS
- PROP. WMC / PLUG

CLIENT

BRADLEY & CO.

150 SHADE STREET,
WELLESLEY, ON N3A 4J2

COPYRIGHT

This drawing has been prepared solely for the intended use, thus any reproduction or distribution for any purpose other than that authorized by IBI Group is prohibited. Written dimensions shall have precedence over scaled dimensions. Contractors shall verify and be responsible for all dimensions and conditions on the job, and IBI Group shall be informed of any variations from the dimensions and conditions shown on the drawing. Shop drawings shall be submitted to IBI Group for general conformance before proceeding with fabrication.

IBI Group Professional Services (Canada) Inc.
is a member of the IBI Group of companies.

ISSUES

No.	DESCRIPTION	DATE
1	ISSUED FOR SERVICING REPORT	2023-03-10

KEY PLAN

LOCAL BENCHMARK

TOP NUT OF FIRE HYDRANT ON THE NORTH SIDE OF THE INTERSECTION OF QUEEN'S BUSH ROAD AND VILLAGE ROAD LOCATED NORTH WEST OF THE SUBJECT PROPERTY AS SHOWN ON THE FACE OF PLAN.
ELEVATION= 367.36m

THE POSITION OF POLE LINES, CONDUITS, WATERMANS, SEWERS AND OTHER UNDERGROUND AND ABOVEGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND, WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, THE CONTRACTOR SHALL INFORM HIMSELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES, AND SHALL ASSUME ALL LIABILITY FOR ANY DAMAGE TO THEM.

IBI GROUP

Suite 101 - 410 Albert Street
Waterloo ON N2L 3V3 Canada
tel 519 585 2255
ibigroup.com

PROJECT

PROPOSED TOWNHOUSES

1060 QUEENS BUSH ROAD, WELLESLEY

PROJECT NO:

141040

SCALE:

1:200

DRAWN BY:

I. AHOSSIVO

CHECKED BY:

PROJECT MGR:

M. MEQDAD

APPROVED BY:

M. MEQDAD

SHEET TITLE

SITE SERVICING PLAN

SHEET NUMBER

C02

ISSUE

1