



PIPE CROSSING TABLE (+)						
CROSSING ID	PROP. 150mm WTR SERV INV	PROP. 150mm SAN SERV OBV	EX. 250mm SAN SWR OBV	EX. 750mm STM SWR OBV	EX. 750mm STM SWR INV	CLEARANCE (m)
1	70.81		69.18			1.63
2	71.14			70.64		0.50
3		69.22			69.89	0.77

**LEGEND:**

- EXISTING PROPERTY LINE TO REMAIN
- PROPOSED CURB
- PROPOSED DEPRESSED CURB
- PROPOSED TERRACING (3:1 MIN.)
- PROPOSED SILT FENCE AS PER OPSD 219.110
- PROPOSED FENCE
- PROPOSED DOOR ENTRANCE/EXIST
- PROPOSED GRASS AREA (100mm TOP SOIL & SOD)
- PROPOSED CONCRETE FEATURES/SLAB
- PROPOSED HEAVY DUTY ASPHALT
- PROPOSED LIGHT DUTY ASPHALT
- PROPOSED RIP RAP
- PROPOSED ELEVATION
- PROPOSED HIGH POINT ELEVATION
- PROPOSED SWALE ELEVATION
- PROPOSED BOTTOM OF CURB / ASPHALT ELEVATION
- PROPOSED TOP OF CURB ELEVATION
- PROPOSED EXPOSED BOTTOM OF RETAINING WALL
- PROPOSED TOP OF RETAINING WALL
- MATCH INTO EXISTING ELEVATION
- EXISTING ELEVATION
- EXISTING OVERLAND MAJOR FLOW ROUTE
- PROPOSED OVERLAND MAJOR FLOW ROUTE
- PROPOSED STORM SEWER
- PROPOSED SANITARY SEWER
- PROPOSED WATERMAIN
- PROPOSED 135mm SAN SERVICE
- PROPOSED STM SERVICE
- PROPOSED 25mm PEX WTR SERVICE
- EXISTING STORM SEWER
- EXISTING SANITARY SEWER
- EXISTING WATERMAIN
- EXISTING MANHOLE
- EXISTING CATCHBASIN
- PROPOSED CATCHBASIN-MANHOLE/CATCHBASIN
- PROPOSED MANHOLE
- PROPOSED CURB STOP
- PROPOSED PIPE INSULATION
- PROPOSED CLAY SEAL AS PER CITY DETAIL S8
- PROPOSED 100 YEAR HIGH WATER LEVEL
- STORM WATERSHED EXTENT
- WATERSHED NAME
- RUNOFF COEFFICIENT
- AREA IN HECTARES

CONTRACTOR TO FIELD VERIFY ALL SEWER / MAIN ELEVATIONS. ANY DISCREPANCIES IN DATA ARE TO BE REVIEWED WITH THE CIVIL ENGINEER PRIOR TO SERVICE INSTALLATION.

CONNECTION TO EXISTING 250mmØ AS PER CITY STD S11. EX SAN SWR INV = +68.93. OBVERT TO OBVERT CONNECTION PROP. SAN SERV INV = 69.03

PIPE CROSSING 3 EX STM SWR INV = +69.89. PROP SAN SERV OBV = 69.22. CLEARANCE = 0.77m

PROP CONNECTION TO EXISTING 750mmØ STM SEWER EX STM SWR INV = +69.89. EX STM SWR SL ELEV = +70.27. PROP STM SERV INV = 70.27

PROP CONNECTION TO 203mmØ WATERMAIN BY CITY FORCES. EXCAVATION AND REINSTATEMENT BY CONTRACTOR. EX. WTR MAIN OBV = +70.96. PROP. WTR SERV OBV = 70.96. TOP OF GRADE = ± 73.45

PIPE CROSSING 1 EX SAN SWR OBV = +69.18. PROP WTR SERV INV = 70.81. CLEARANCE = 1.63m OP ST Slope

PIPE CROSSING 2 EX STM SWR OBV = +70.64. PROP WTR SERV INV = 71.14. CLEARANCE = 0.50m

PROP. AUTOMATIC FLUSHING CHAMBER AS PER CITY OF OTTAWA DETAIL W3.2. PROP. 21.5m - 300mmØ PVC-DR35 STM SERVICE @ 5.50% SLOPE. PROP. 23.7m - 150mmØ PVC-DR28 SAN SERVICE @ 2.00% SLOPE.

PROP. SAN MH01 COVER AS PER S24. TIG = 74.58. NW INV = 69.50. SE INV = 70.08

PROP. STM MH01 COVER AS PER S24.1. TIG = 74.60. NW INV = 71.44. SE INV = 71.47. NW INV TO BE EQUIPPED W/ HYDROVEX 75VHV-1 VERTICAL VORTEX FLOW REGULATOR. DESIGN HEAD = 3.10m. MAX FLOW RATE = 6.62L/s

PROP. 13.3m - 300mmØ PVC-DR35 STM SERVICE @ 0.50% SLOPE

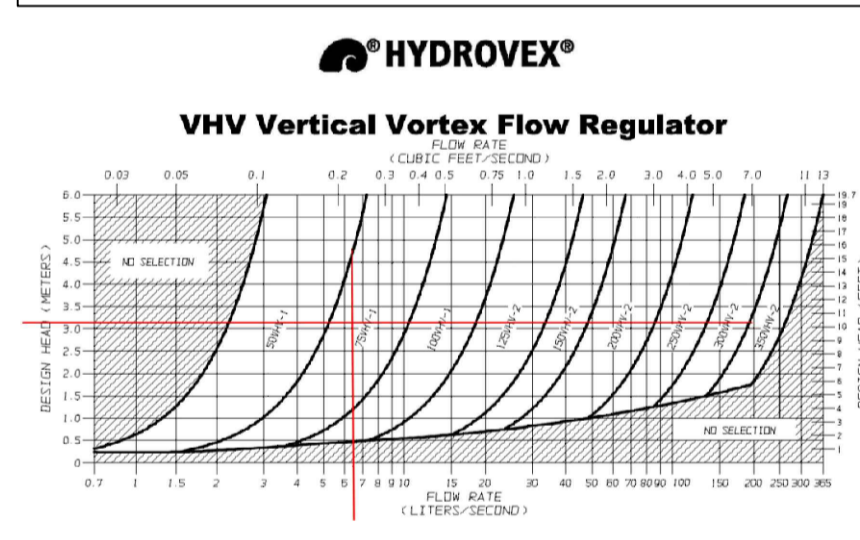
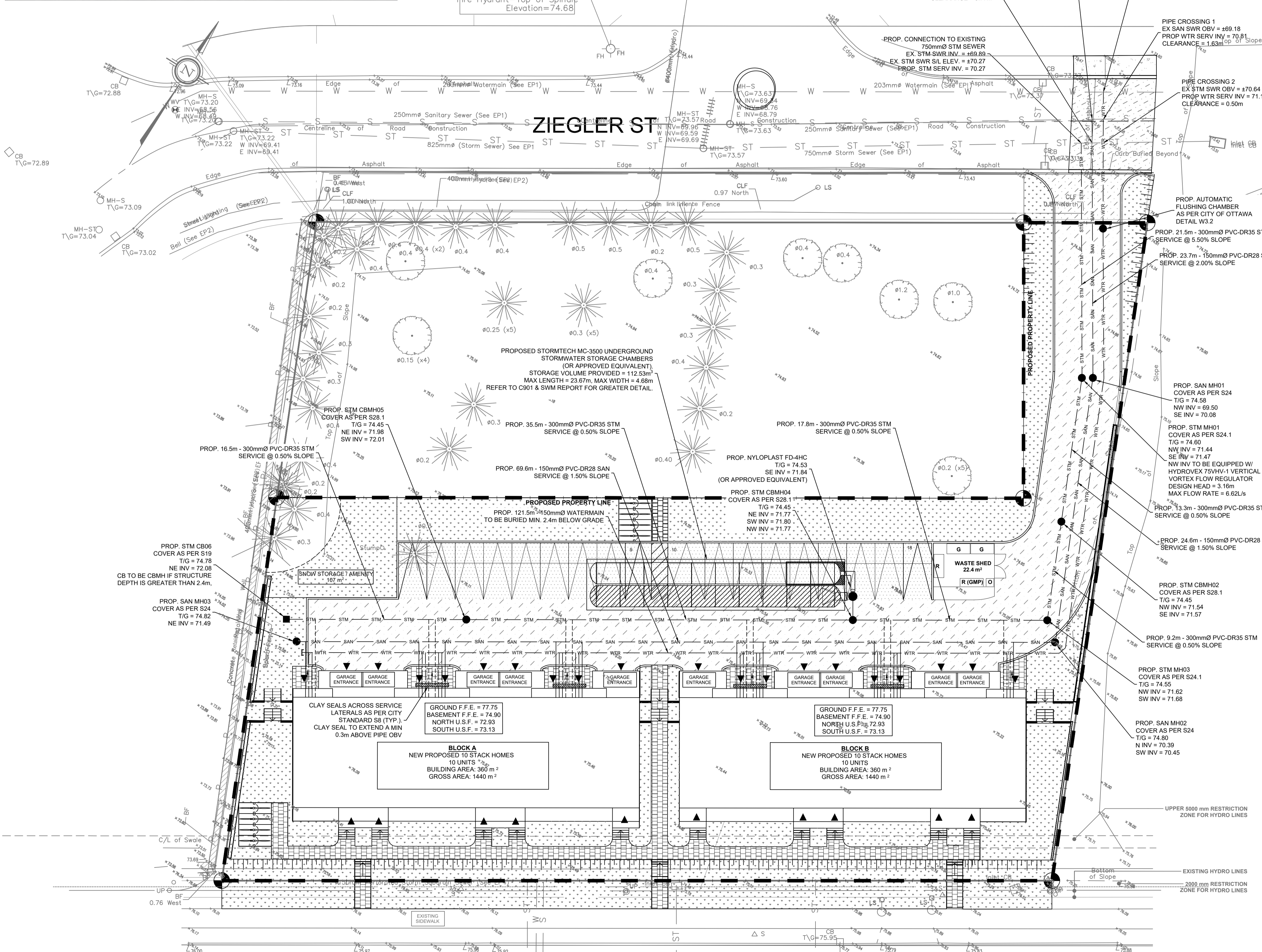
PROP. 24.6m - 150mmØ PVC-DR28 SAN SERVICE @ 1.50% SLOPE

PROP. STM CBMH02 COVER AS PER S28.1. TIG = 74.45. NW INV = 71.54. SE INV = 71.57

PROP. 9.2m - 300mmØ PVC-DR35 STM SERVICE @ 0.50% SLOPE

PROP. STM MH03 COVER AS PER S24.1. TIG = 74.55. NW INV = 71.62. SW INV = 71.68

PROP. SAN MH02 COVER AS PER S24. TIG = 74.80. N INV = 70.39. SW INV = 70.45



JOHN MEUNIER

**USE AND INTERPRETATION OF DRAWINGS**

GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION ARE PART OF THE CONTRACT DOCUMENTS AND DESCRIBE USE AND INTENT OF THE DRAWING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITY.

UNLESS THE REVISION TITLE IS ISSUED FOR CONSTRUCTION, THESE DRAWINGS SHALL BE CONSIDERED PRELIMINARY AND SHALL NOT BE USED AS A CONSTRUCTION DOCUMENT.

THESE DRAWINGS ILLUSTRATE THE WORK TO BE DONE. THE ENGINEER IS NOT RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES USED TO DO THE WORK, OR THE SAFETY ASPECTS OF CONSTRUCTION, AND NOTHING ON THESE DRAWINGS EXPRESSED OR IMPLIED CHANGES THIS CONDITION. CONTRACTOR SHALL DETERMINE ALL CONDITIONS AT THE SITE AND SHALL BE RESPONSIBLE FOR KNOWING HOW THEY AFFECT THE WORK. SUBMITTAL OF A BID TO PERFORM THIS WORK IS AN ACKNOWLEDGEMENT OF THE RESPONSIBILITIES, AND THAT THEY HAVE BEEN FULLY CONSIDERED IN PLANNING OF THE WORK AND THE BIDDING PRICE. NO CLAIMS FOR EXTRA CHARGES DUE TO THESE CONDITIONS WILL BE FORTHCOMING.

UNAUTHORIZED CHANGES:

IN THE EVENT THE CLIENT, THE CLIENT'S CONTRACTORS OR SUBCONTRACTORS, OR ANYONE FOR WHOM THE CLIENT IS LEGALLY LIABLE MAKES OR PERMITS TO BE MADE ANY CHANGES TO ANY REPORTS, PLANS, SPECIFICATIONS OR OTHER CONSTRUCTION DOCUMENTS PREPARED BY LRL ASSOCIATES LTD. (LRL) WITHOUT OBTAINING LRL'S PRIOR WRITTEN CONSENT, THE CLIENT SHALL ASSUME FULL RESPONSIBILITY FOR THE RESULTS OF SUCH CHANGES. THEREFORE THE CLIENT AGREES TO WAIVE ANY CLAIM AGAINST LRL AND TO RELEASE LRL FROM ANY LIABILITY ARISING DIRECTLY OR INDIRECTLY FROM SUCH UNAUTHORIZED CHANGES.

IN ADDITION, THE CLIENT AGREES, TO THE FULLEST EXTENT PERMITTED BY LAW, TO INDEMNIFY AND HOLD HARMLESS LRL FROM ANY DAMAGES, LIABILITIES OR COSTS, INCLUDING REASONABLE ATTORNEY'S FEES AND COST OF DEFENSE, ARISING FROM SUCH CHANGES.

IN ADDITION, THE CLIENT AGREES TO INCLUDE IN ANY CONTRACTS FOR CONSTRUCTION APPROPRIATE LANGUAGE THAT PROHIBITS THE CONTRACTOR OR ANY SUBCONTRACTORS OF ANY TIER FROM MAKING ANY CHANGES OR MODIFICATIONS TO LRL'S CONSTRUCTION DOCUMENTS WITHOUT THE PRIOR WRITTEN APPROVAL OF LRL AND THAT FURTHER REQUIRES THE CONTRACTOR TO INDEMNIFY BOTH LRL AND THE CLIENT FROM ANY LIABILITY OR COST ARISING FROM SUCH CHANGES MADE WITHOUT SUCH PROPER AUTHORIZATION.

GENERAL NOTES:

EXISTING SERVICES AND UTILITIES SHOWN ON THESE DRAWINGS ARE TAKEN FROM THE BEST AVAILABLE RECORDS, BUT MAY NOT BE COMPLETE OR TO DATE. CONTRACTOR SHALL VERIFY IN FIELD FOR LOCATION AND ELEVATION OF PIPES AND CHECK WITH THE UTILITY COMPANIES BEFORE DIGGING OR PERFORMING WORK.

CONTRACTOR IS ADVISED TO COLLECT INFORMATION ON SOIL CONDITIONS BEFORE START OF CONSTRUCTION.

THE ENGINEER WAIVES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR PROBLEMS WHICH ARISE FROM FAILURE TO FOLLOW THESE PLANS, SPECIFICATIONS AND THE DESIGN INTENT THEY CONVEY, OR FOR PROBLEMS WHICH ARISE FROM OTHERS' FAILURE TO OBTAIN AND/OR FOLLOW THE ENGINEER'S GUIDANCE WITH RESPECT TO ANY ERRORS, OMISSIONS, INCONSISTENCIES, AMBIGUITIES OR CONFLICTS WHICH ARE ALLEGED.

CONTRACTOR TO VERIFY ALL DIMENSIONS AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES BEFORE WORK COMMENCES. DO NOT SCALE DRAWINGS.

**SUBJECT TO APPROVAL**

No.	REVISIONS	BY	DATE
03	ISSUED FOR MUNICIPAL APPROVAL	K.H.	19 DEC 2023
02	ISSUED FOR MUNICIPAL APPROVAL	K.H.	09 JUN 2023
01	ISSUED FOR MUNICIPAL APPROVAL	A.S.	24 DEC 2021

**LICENCED PROFESSIONAL ENGINEER**

V. JOHNSON  
100510576  
12-19-2023  
PROVINCE OF ONTARIO

NOT AUTHENTIC UNLESS SIGNED AND DATED

**LRJ**  
ENGINEERING | INGENIERIE  
5430 Canotek Road | Ottawa, ON, K1J 9G2  
www.lrl.ca | (613) 842-3434

CLIENT: **LANDRIC HOMES**  
1173 CYRVILLE RD, SUITE 202,  
OTTAWA ON K1J 7S6

DESIGNED BY: K.H. DRAWN BY: K.H. APPROVED BY: V.J.

PROJECT: **NAVAN STACKED TOWN HOMES**  
6001/6005 RENAUD RD,  
OTTAWA, ONTARIO

DRAWING TITLE: **SERVICING PLAN**

PROJECT NO: 210216  
DATE: NOVEMBER 2021

**C401**