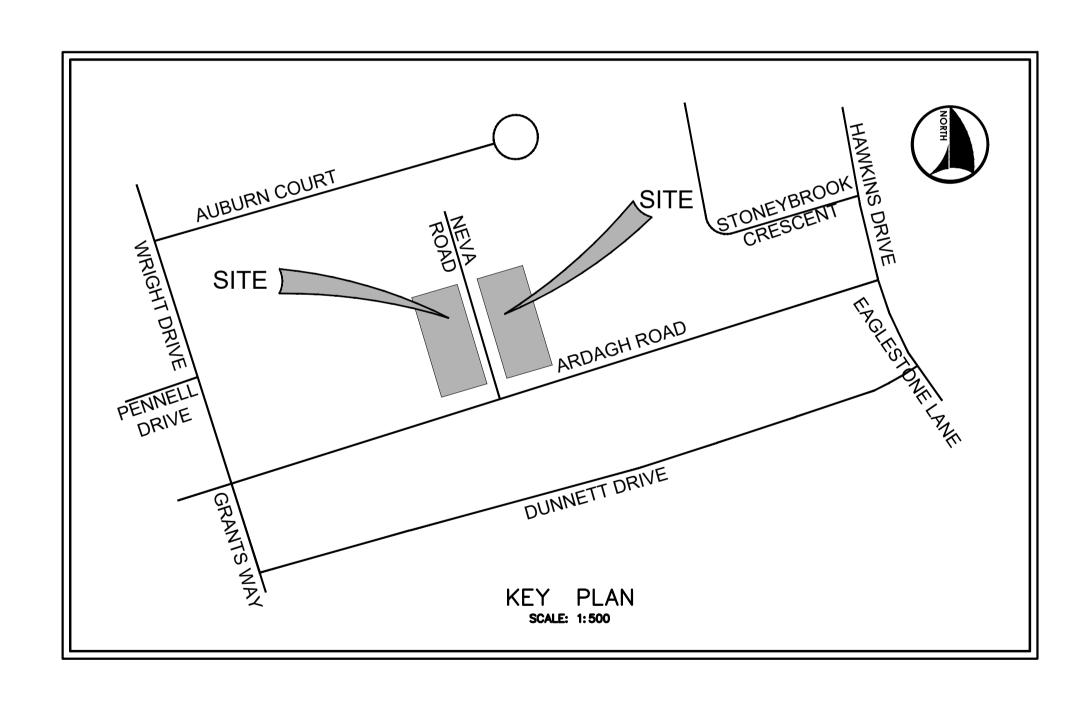


ENGINEERING DEPARTMENT

KING RICH HOMES GROUP.

# 334 + 340 ARDAGH ROAD, BARRIE, ON CITY FILE NO. D28-071-2023



# LIST OF DRAWINGS

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EROSION AND SEDIMENT CONTROL PLAN



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### ENGINEERING DRAWING NOTES

- 1. ALL FOOTING FORMWORK ELEVATIONS AND SETBACKS ARE TO BE CONFIRMED BY A REGISTERED PROFESSIONAL ENGINEER OR REGISTERED ONTARIO LAND SURVEYOR PRIOR TO THE PLACING OF ANY
- 2. PRIOR TO THE SUPERSTRUCTURE WORKS PROCEEDING AND THE RELEASE OF THE COMPLETION STAGE PERMIT, THE OWNER'S CONSULTANT MUST CERTIFY THAT THE TOP OF FOUNDATIONS ARE IN CONFORMITY WITH THE GRADING PLAN REVIEWED BY THE CITY.
- 3. ALL RAINWATER LEADERS SHALL DISCHARGE ONTO CONCRETE SPLASH PADS AT GROUND LEVEL AT THE LOCATIONS INDICATED ON THIS PLAN.
- 4. EXISTING BOUNDARY ELEVATIONS ALONG THE SITE PERIMETER SHALL REMAIN UNDISTURBED. DRAINAGE RECEIVED FROM ADJACENT PROPERTIES SHALL BE ACCOMMODATED AND DRAINAGE FROM THE SUBJECT LANDS SHALL BE SELF-CONTAINED.
- 5. ALL YARD AREAS SHALL RECEIVE A MINIMUM OF 100MM OF TOPSOIL PLUS SOD.
- 6. PURSUANT TO BY-LAW NO. 41-07, ALL TREES WITHIN 6 METERS OF THE CONSTRUCTION ACTIVITY\*, MUST BE PROTECTED USING THE PROTECTION FENCING CONSISTENT WITH THE DETAIL ON THE BACK OF THE TREE DECLARATION PAGE WHILE WORK IS UNDERWAY. ALL WORKS MUST BE KEPT OUTSIDE OF THE MINIMUM PROTECTION ZONE (MPZ) FOR ALL TREES. ANY WORKS WITHIN THE MPZ COUNT AS INJURY. DESTRUCTION/ INJURY TO TREES GREATER THAN OR EQUAL TO 20CM DBH WITHOUT A PERMIT WOULD BE A CONTRAVENTION OF THE BY-LAW AND MAY RESULT IN CHARGES BEING LAID.
- 7. BOUNDARY TREES: IN ADDITION TO THE MUNICIPAL BY-LAWS, IT IS REQUIRED BY LAW IN THE PROVINCE OF ONTARIO TO OBTAIN THE CONSENT OF ANY BOUNDARY TREE'S OWNED PRIOR TO INJURING OR REMOVING THAT TREE. PARAGRAPH 10 OF THE FORESTRY ACT, R.S.O. 1990, C. F.26 STATES THAT: 10. (2) EVERY TREE WHOSE TRUNK IS GROWING ON THE BOUNDARY BETWEEN ADJOINING LANDS IS THE COMMON PROPERTY OF THE OWNERS OF THE ADJOINING LANDS. 1998, C. 18. SCHED. I. S. 21. (3) EVERY PERSON WHO INJURES OR DESTROYS A TREE GROWING ON THE BOUNDARY BETWEEN ADJOINING LANDS WITHOUT THE CONSENT OF THE LAND OWNERS IS GUILTY OF AN OFFENCE UNDER THIS ACT. 1998, C. 18, SCHED. I, S. 21. THE DETERMINATION OF OWNERSHIP OF THE SUBJECT TREE(S) IS THE RESPONSIBILITY OF THE APPLICANT. ANY CIVIL OR COMMON-LAW ISSUES BETWEEN PROPERTY OWNERS WITH RESPECT TO JOINT/MULTIPLE OWNERSHIP OF TREES MUST BE RESOLVED BY THE APPLICANT. A PERMIT/APPROVAL TO INJURE OR DESTROY (A) TREE(S) ON PRIVATE PROPERTY DOES NOT GRANT AUTHORITY TO ENCROACH IN ANY MANNER OR ENTER ONTO ADJACENT PRIVATE PROPERTIES. PLEASE CONTACT A PARK & NATURAL HERITAGE PLANNING REPRESENTATIVE IF YOU REQUIRE MORE INFORMATION.
- 8. THE OWNER SHALL CONTACT THE PUBLIC WORKS OPERATIONS DIVISION OF THE COMMUNITY SERVICES DEPARTMENT AND MAKE ARRANGEMENTS NECESSARY FOR DRIVEWAY ACCESS AND SITE
- 9. THE OWNER SHALL CONTACT THE CITY BUILDING SERVICES DIVISION A MINIMUM OF 48 HOURS IN ADVANCE OF CONSTRUCTION OF ANY RETAINING WALL DEEMED TO BE A "DESIGNATED STRUCTURE" IN ORDER TO ARRANGE FOR ANY NECESSARY INSPECTIONS.
- 10. THE OWNER IS RESPONSIBLE TO ENSURE ALL CONSTRUCTION ACTIVITY AND FINAL PRODUCT CONFORMS TO ALL CITY BYLAWS AND CITY STANDARDS.
- 11. FOR PROPOSED INFILTRATION GALLERIES, THE OWNER SHALL PROVIDE THE CITY WITH CONSTRUCTION PHOTOS AFTER EXCAVATION OF THE GALLERY AND TRENCHES FOR ROOF DRAIN PIPE CONNECTIONS. PRIOR TO BACKFILLING, THE OWNER SHALL ALSO PROVIDE CONSTRUCTION PHOTOS AFTER INSTALLATION OF CLEAR STONE AND ROOF DRAIN PIPE.
- 12. THE OWNER IS RESPONSIBLE TO ENSURE ALL CONSTRUCTION AND GRADING IS IN CONFORMITY WITH THIS APPROVED SITE GRADING PLAN OR/ SITE ALTERATION PLAN AND TO THE SATISFACTION OF CITY STAFF. ANY DEVIATION FROM THIS APPROVED SITE GRADING PLAN OR / SITE ALTERATION PLAN COULD RESULT IN AN AMENDMENT TO THE SITE PLAN AGREEMENT OR / SITE ALTERATION PERMIT AND/OR DELAY RELEASE OF THE SECURITY DEPOSIT.

\*CONSTRUCTION ACTIVITY INCLUDES, BUT IS NOT LIMITED TO: DEMOLITION WORK; SOIL EXCAVATION; GRADING OR BORING; CARPENTRY; ELECTRICAL OR PLUMBING WORK; AND, MOVEMENT/ STORAGE OF CONSTRUCTION MATERIALS, EQUIPMENT, VEHICLES, SOIL OR DEBRIS.

1 HAVE REVIEWED THE PLANS FOR THE CONSTRUCTION OF THE PROPOSED PLAN OF THE 20 UNIT TOWNHOUSES LOCATED AT 334 & 340 ARDAGH ROAD AND HAVE PREPARED THIS PLAN TO INDICATE THE COMPATIBILITY OF THE PROPOSAL WITH ALL ADJACENT PROPERTIES AND EXISTING MUNICIPAL SERVICES. IT IS MY BELIEF THAT ADHERENCE TO THE PROPOSED ELEVATIONS AND GRADIENTS AS SHOWN WILL PRODUCE ADEQUATE SURFACE DRAINAGE AND PROPER FACILITY OF MUNICIPAL SERVICES WITHOUT DETRIMENTAL EFFECT TO THE EXISTING DRAINAGE PATTERNS OR ADJACENT PROPERTIES.

I ALSO CONFIRM THAT THE EXISTING SEWERS AND WATERMAINS SHOWN ON THIS PLAN HAVE BEEN FIELD VERIFIED AS TO THE LOCATION AND ELEVATION."

### **WATERMAIN NOTES:**

- 1. CONTRACTORS SHALL INFORM THE CITY OF BARRIE WATER OPERATIONS DEPARTMENT A MINIMUM OF 48 HOURS IN ADVANCE OF THEIR INTENTIONS TO PERFORM WORK ON WATER INFRASTRUCTURE.
- 2. OPERATION OF HYDRANTS AND VALVES ON THE POTABLE WATER SYSTEM BY OTHER THAN QUALIFIED WATER OPERATIONS STAFF IS PROHIBITED BY CURRENT BY-LAW. CITY SERVICE FEES ARE PER THE CURRENT FEES BY-LAW. THE CITY'S WATER OPERATIONS STAFF WILL SWAB, PRESSURE TEST, CHLORINATE AND FLUSH ALL NEW WATERMAINS.
- 3. MINIMUM COVER OVER WATERMAIN SHALL BE 1.7m. THE MINIMUM HORIZONTAL SEPARATION BETWEEN WATERMAIN AND SEWERS SHALL BE 2.5m. WHERE WATERMAIN CONFLICTS WITH SEWER PIPES, DEFLECT WATERMAIN HORIZONTALLY OR VERTICALLY WHILE PROVIDING A MINIMUM OF 0.5m CLEARANCE BETWEEN WATERMAIN AND SEWERS. MAINTAIN MINIMUM DEPTH OF COVER AT ALL TIMES.
- 4. WATERMAIN SHALL BE INSTALLED IN BEDDING AS PER OPSD 802.010 (GRANULAR 'A' EMBEDMENT MATERIAL) FOR FLEXIBLE PIPES AND OPSD 802.030 OR 802.031 CLASS 'B' (GRANULAR 'A' BEDDING MATERIAL, GRANULAR 'A' OR SELECT NATIVE COVER MATERIAL) FOR RIGID PIPE UNLESS OTHERWISE APPROVED BY THE DIRECTOR OF WATER OPERATIONS. ALTERNATIVE EMBEDMENT MATERIAL - SAND MEETING GRADATION REQUIREMENTS OF OPSS.MUNI 1004.05.07 COMPACTED TO 95% STANDARD PROCTOR MAXIMUM DRY DENSITY IS PERMISSIBLE WHERE NOTED IN STANDARD DETAILS. GEOTECHNICAL CERTIFICATION OF MATERIAL AND COMPACTION TESTING MUST BE PROVIDED EVERY 150 METRES. THE COMPACTION TESTING MUST INCLUDE THE ENTIRE EMBEDMENT ENVELOPE (HAUNCHES, BEDDING, TOP OF PIPE AND COVER).
- 5. COPPER WATER MAINS AND SERVICES 25mm TO 50mm IN DIAMETER SHALL BE EMBEDDED IN SAND 100mm ABOVE AND BELOW TO CONFORM TO OPSS.MUNI
- 6. RESTRAINING WILL BE REQUIRED ON ALL HYDRANTS. THRUST BLOCKS. AS PER OPSD 1103.010 AND 1103.020. RESTRAINING DEVICES MAY BE REQUIRED IN ADDITION TO STANDARD CONCRETE THRUST BLOCKING WHERE SOIL CONDITIONS WARRANT AT THE CITY'S DISCRETION.
- 7. NEW WATERMAINS TO BE PVC DR18 CL150 MINIMUM: DUCTILE IRON CL52 AS PER THE APPROVED MANUFACTURERS PRODUCTS FOR LINEAR WATER SYSTEMS LIST.
- 8. TRACING WIRE SHALL BE #12 AWG HIGH STRENGTH COPPER CLAD (HS-CSS) AND SHALL BE INSTALLED ON "THE TOTAL LENGTH OF ALL WATERMAIN AND BROUGHT UP AT EACH HYDRANT AND TERMINATED INSIDE A HYDRANT TEST STATION. ALL SPLICES TO UTILIZE CONNECTORS AS PER THE APPROVED MANUFACTURERS PRODUCTS FOR LINEAR WATER SYSTEMS LIST.
- 9. ALL WATER SERVICES SHALL BE MINIMUM 25mm TYPE 'K' COPPER OR 25mm CROSS-LINKED POLYETHYLENE UNLESS OTHERWISE APPROVED BY THE DIRECTOR OF WATER OPERATIONS. WATER SERVICE SADDLES SHALL BE USED WHEN TAPPING INTO PVC WATERMAIN.
- 10. SERVICE TAPPINGS SHALL BE PLACED AT A MINIMUM SEPARATION OF 1.0m AND A MINIMUM OF 0.6m FROM JOINTS. (ENDS OF PIPE)
- 11. RISER PIPES ARE TO BE INSTALLED AS PER BSD-510, AND REMOVED AS DIRECTED. SWABBING SCHEDULE TO BE SUPPLIED BY A WATER OPERATIONS FIELD REPRESENTATIVE. ALL RISERS ARE TO BE RESTRAINED OR THRUST BLOCKED.
- 12. ALL NEW CURB STOPS AND BOXES TO BE LOCATED AT PROPERTY LINE AND OUT OF DRIVEWAYS AND SIDEWALKS.

# STORM SEWER NOTES:

- A. STORM SEWER TO BE PROVIDED ON ALL ROADS WITH CURB AND GUTTER.
- B. PLACE ALL CATCH BASIN LATERALS AT 2% GRADE UNLESS OTHERWISE NOTED. PIPE SIZE MINIMUM 250mm DIA. SINGLE, 300mm DIA. DOUBLE.
- C. STORM SEWERS SHALL BE CONSTRUCTED WITH BEDDING AS PER OPSD-802.010 (GRAN. 'A' EMBEDMENT MATERIAL) FOR FLEXIBLE PIPES AND OPSD-802.030 OR 802.031 CLASS B (GRAN, 'A' BEDDING MATERIAL) FOR RIGID PIPE UNLESS. OTHERWISE APPROVED BY THE DIRECTOR OF ENGINEERING.
- D. MAINTENANCE HOLE TOPS (FRAMES) AND CATCH BASIN (FRAMES) ARE TO BE SET TO BASE COURSE ASPHALT GRADE AND THEN ADJUSTED TO FINAL GRADE WHEN THE TOP LIFT OF ASPHALT IS PLACED. ALL ADJUSTMENT WILL BE ACCORDANCE WITH BSD-N2.
- E. STORM SEWER TO BE LOCATED OFFSET 3.0m SOUTH OR EAST OF CENTRELINE UNLESS OTHERWISE SPECIFIED.
- F. ALL CONNECTIONS TO THE STORM MAIN SHALL BE MADE WITH A STORM MANHOLE OR APPROVED FACTORY TEE CONNECTION AS PER OPSD-708.01 OR 708.03.
- G. PIPE MATERIAL TO BE REINFORCED CONCRETE WITH A MINIMUM STRENGTH OF 50 N/m/mm CERTIFIED TO C.S.A. STANDARD A247.2-1982, CLASS 50-D (PREVIOUSLY C.S.A. STANDARD A257.2-1974, CLASS II) OR PVC CERTIFIED TO C.S.A. STANDARDS 182.2 AND 182.4.
- H. STORM SEWER TO BE MINIMUM 300mm DIAMETER WITH JOINTS CONFORMING TO C.S.A. STANDARD A257.3.
- I. ALL PIPE BEDDING MUST CONFORM TO OPSD. MAXIMUM COVER TABLE. NO FLEXIBLE PIPE SEWERS WILL BE INSTALLED WITH A DEPTH OF COVER GREATER THAN 6 METRES UNLESS SPECIFICALLY APPROVED BY THE DIRECTOR OF ENGINEERING.
- J. ALL PIPE HANDLING INSTALLATIONS MUST BE IN STRICT COMPLIANCE WITH MANUFACTURES INSTALLATION GUIDES AND THE O.C.P.A. OR UNIBELL GUIDELINES.
- K. SUMP PUMP DISCHARGE PIPING IN BOULEVARD:

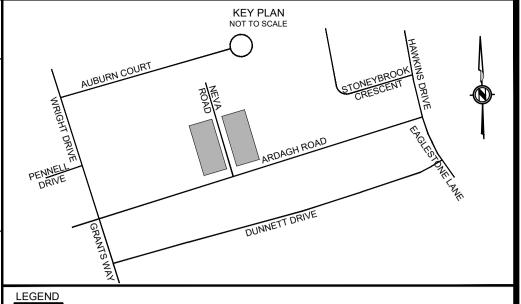
IN THE EVENT OF OVERACTIVE SUMP PUMP ACTIVITY, A 150mm DIAMETER PVC DR-28 SEWER MAY BE INSTALLED. WHEN SO DIRECTED BY THE DIRECTOR OF ENGINEERING, ALONG THE FRONTAGES OF DESIGNATED LOTS, WITH AN OFFSET OF 0.6m FROM BACK OF CURB. THIS SEWER IS TO BE CAPPED AT THE UPSTREAM END AND IS TO OUTLET INTO THE NEAREST CATCHBASIN DOWNSTREAM. DEPTH OF SEWER IS TO BE EQUAL TO SUBDRAIN DEPTH. NOT TO BE DIRECTLY CONNECTED TO FOUNDATION DRAINS.

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### NOTICE TO CONTRACTOR

IT IS THE RESPONSIBILITY OF THE CONTRACTOR'S SURVEYOR TO VERIFY THAT ALL LEGAL SURVEY DIMENSIONS SHOWN ON THE ENGINEERS DRAWINGS AGREE WITH THOSE ON THE REGISTERED LEGAL SURVEY PLAN. SHOULD THERE BE ANY DISCREPANCIES. THEN IMMEDIATELY NOTIFY THE ENGINEER OF RECORD.

THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY & HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL LINDERGROUND LITHLITIES



### **SANITARY SEWER NOTES:**

- A. SANITARY SEWER TO BE LOCATED AT THE CENTRELINE OF THE ROAD.
- B. SEWERS SHALL BE CONSTRUCTED WITH BEDDINGS AS PER OPSD-1005.02, (GRAN. 'A' EMBEDMENT MATERIAL) FOR FLEXIBLE PIPES AND OPSD-1005.01 CLASS B (GRAN. 'A') FOR RIGID PIPE UNLESS
- C. MAXIMUM DEFLECTION FROM COMBINED LIVE AND DEAD LOADING SHALL NOT EXCEED ANY C.S.A.,
- D. PVC, CONCRETE AND PROFILE WALL PVC SEWERS SHALL HAVE RUBBER GASKET TYPE JOINTS AND SHALL BE CERTIFIED TO CONFORM TO ALL APPLICABLE CURRENT C.S.A. SPECIFICATIONS.
- E. CONCRETE SANITARY SEWERS SHALL HAVE A MINIMUM STRENGTH OF 50 N/m/mm CONFORMING TO CSA STANDARD A257.2-1982, CLASS 50-D (PREVIOUSLY C.S.A. STANDARD A257.2-1974, CLASS II). O.P.S. OR MANUFACTURES RECOMMENDED SPECIFICATIONS. OTHERWISE APPROVED BY THE DIRECTOR OF MUNICIPAL WORKS.
- F. MAINTENANCE HOLE TOPS (FRAMES) ARE TO BE SET TO BASE COURSE ASPHALT GRADE AND THEN ADJUSTED TO FINAL GRADE WHEN THE TOP LIFT OF ASPHALT IS PLACE. ALL ADJUSTMENT WILL BE ACCORDANCE WITH BSD-N2.
- G. ALL CONNECTIONS TO NEW SANITARY MAINS SHALL BE PRE-MANUFACTURED. FABRICATED TEES. CONNECTIONS TO EXISTING SANITARY SEWER SHALL BE MADE WITH APPROVED FACTORY MADE TEES OR INSERTA-TEES IN STRICT ACCORDANCE TO MANUFACTURES GUIDELINES.

# BENCH MARKS

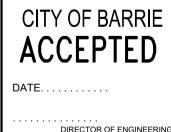
LEGAL DESCRIPTION SURVEYOR'S REAL PROPERTY REPORT-PART 1 PLAN OF SURVEY OF PART OF LOTS 5 & 6

REGISTERED PLAN 1192, CITY OF BARRIE, COUNTY OF SIMCOE

ELEVATIONS ARE GEODETIC AND ARE REFERRED TO A CITY OF TORONTO

STATION#: 03120080013 ELEVATION = 284.792m (DATUM: CGVD28: 78)

NO.	REVISIONS	DATE	APPROVED
1.	FIRST SUBMISSION	2023/06	CAB
2.	SECOND SUBMISSION	2024/11	JC
			·





CLIENT KING RICH HOMES GROUP 4 DAIRY AVENUE, RICHMOND HILL, ON L4E 4X5

ARDAGH ROAD SUBDIVISION

334 & 340 ARDAGH ROAD, BARRIE, ON

STANDARD NOTES



VERIFIED BY THE OWNER OR TIS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK,	ENGINEERING DE				PARTMENT	
AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE	SCALE HOR.	1:250	VERT.	1:50	PROJECT NO.	22-7049
OCCASIONED BY THE CONTRACTOR'S FAILURE	DESIGN	JC	DRAWN	MY	SHEET NO.	004
TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.	REVIEWED	CAB	DATE	DECEMBER 2022		C01

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THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE

