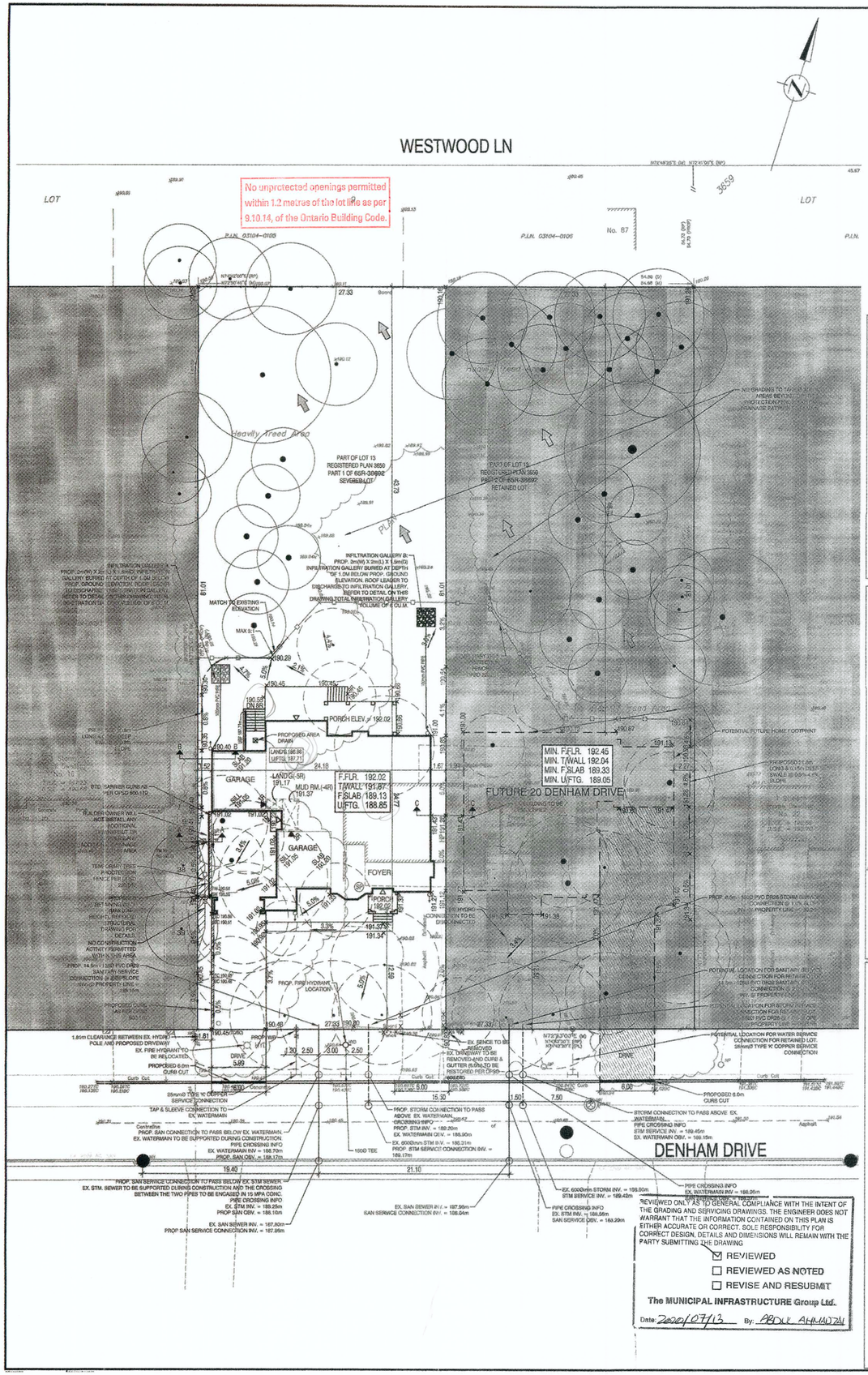
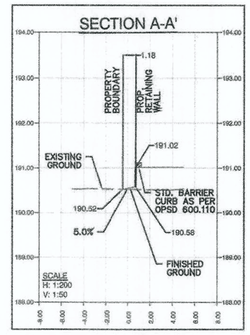
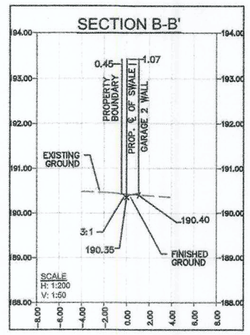
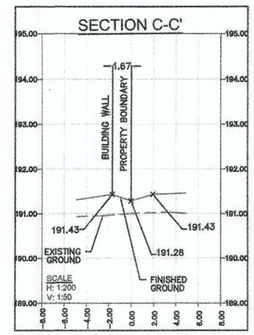
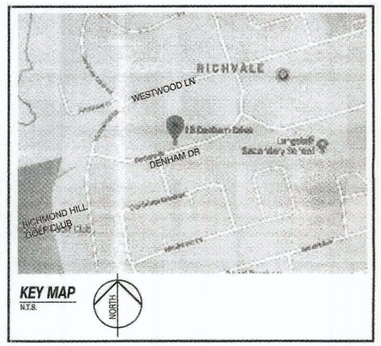
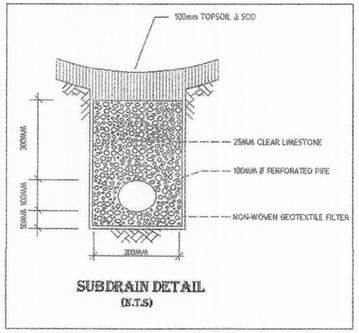




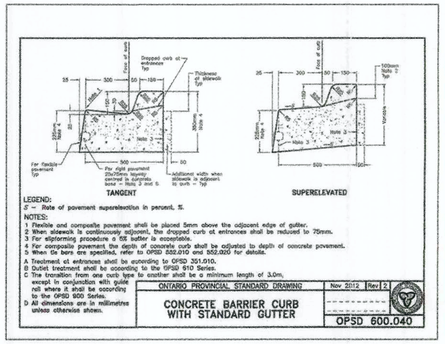


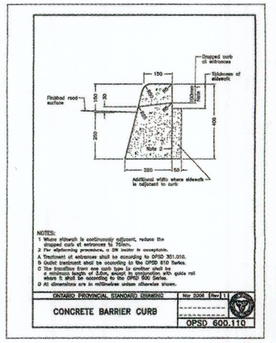




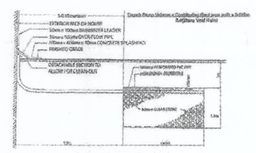


SUBDRAIN DETAIL
(N.T.S.)





Infiltration Galleries A & B

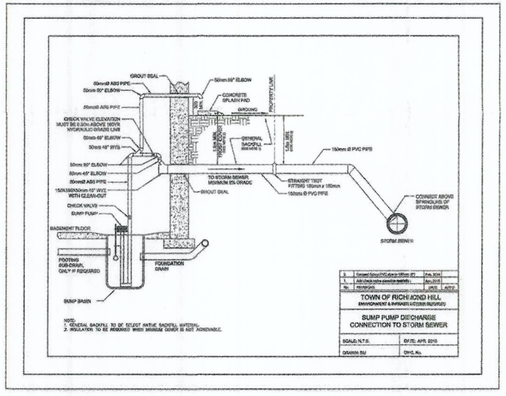


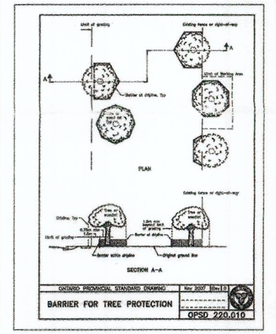
$$\text{Trench stone volume required} = \frac{\text{Contributing Roof Area} \times 0.025m}{0.40\ (\text{Stone Void Ratio})}$$

$$\text{Trench stone volume required} = \frac{172\,m^2 \times 0.025m}{0.40} = 10.75\,m^3$$

∴ We have provided TWO 2.0m × 2.0m × 1.5m Infiltration Galleries for total volume of 12.0 m^3.

Drainage from front of roof goes to the road.





CITY OF RICHMOND HILL STANDARD NOTES
SCHEDULE "D"

MANDATORY STANDARD NOTES FOR GRADING AND SERVICING PLANS

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 CONCRETE.
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. 1996, 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. 1996, 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 SERVICE CONNECTIONS.
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.
13. PROPOSED HOUSE ON SEVERED LOT WILL REQUIRE A SUMP PUMP. SUMP PUMP TO BE INSTALLED AS PER CITY OF RICHMOND HILL STANDARD.
14. RELOCATION OF FIRE HYDRANT TO BE DONE BY THE CITY'S CONTRACTOR AT THE OWNER'S EXPENSE.
15. ALL CURB CUTS TO BE DONE BY THE CITY'S CONTRACTOR AT THE OWNER'S EXPENSE.
16. EXISTING DRIVEWAY TO BE REMOVED AND THE CURB AND GUTTER TO BE RESTORED AS PER OPSD 600.040 BY THE CITY'S CONTRACTOR AT THE OWNER'S EXPENSE.
17. ALL PROPOSED SERVICE CONNECTIONS TO BE DONE BY THE CITY'S CONTRACTOR AT THE OWNER'S EXPENSE.

*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.

MANDATORY CERTIFICATION FOR GRADING PLANS

MUST HAVE SIGNATURE AND SEAL OF A REGISTERED PROFESSIONAL ENGINEER OR ONTARIO LAND SURVEYOR.

"I HAVE REVIEWED THE PLANS FOR THE CONSTRUCTION OF SINGLE TWO-STOREY BUILDING LOCATED AT 18 DENHAM DRIVE 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."

LEGEND

- STORM CONNECTION
- SANITARY CONNECTION
- W WATER CONNECTION
- H HYDRO CONNECTION
- DOUBLE CATCH BASIN
- CATCH BASIN
- STREET LIGHT
- HYDRANT
- ENTRANCE DOOR LOCATION
- GARAGE DOOR LOCATION
- MAIL COMMUNITY MAILBOX
- ENGINEERED FILL LOT
- VALVE AND CHAMBER
- SANITARY MANHOLE
- STORM MANHOLE
- 192.00 PROPOSED GRADE
- 192.00 EXISTING GRADE
- PROPOSED SWALE GRADE
- DOWNSPOUT LOCATION
- PROPOSED BERM
- SWALE DIRECTION
- EX. OVERLAND FLOW ROUTE
- TREE LINE
- STANDARD BARRIER CURB
- SHADED AREA NOT INCLUDED AS PART OF PLOT PLAN APPROVAL
- SP SUMP PUMP
- F.F.LR. FINISHED FLOOR ELEVATION
- T/WALL TOP OF FOUNDATION WALL
- F.SLAB FIN. BASEMENT FLOOR SLAB
- U/FTG. UNDERSIDE FOOTING ELEVATION
- EXISTING TREES TO BE PRESERVED
- EXISTING TREES TO BE REMOVED

THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND ELEVATIONS ON SITE BEFORE COMMENCING ANY CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO JARDIN DESIGN GROUP INC. PRIOR TO COMMENCEMENT OF WORK.

UNDERGROUND UTILITY LOCATE RESPONSIBILITY FOR THE ACCURACY OF SURVEY, STRUCTURAL OR ENGINEERING INFORMATION SHOWN ON THESE DRAWINGS OR FOR CONSTRUCTION STAKED PRIOR TO THE SUBMISSION OF A BUILDING PERMIT, RESTS SOLELY WITH THE CONSULTANT RESPONSIBLE FOR THE PREPARING SAID PLANS PROCEEDING WITH WORK.

AS CONSTRUCTED PARTS MUST BE REVIEWED PRIOR TO POURING FOOTINGS.

ANY INFRINGEMENT OF THE COPYRIGHT ACT, AND WITHOUT LIMITING ITS RIGHTS UNDER SAID ACT, GENERAL REVISION OF THE WORK AND INSURES NO RESPONSIBILITY FOR THE FIGURE OF THE CONSTRUCTION OF THIS ILLUSTRATION TO CONFORM TO THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

THIS DRAWING IS AN INSTRUMENT OF SERVICE IS PROVIDED BY AND IS THE PROPERTY OF JARDIN DESIGN GROUP INC. THE STRUCTURE IS NOT TO BE ALTERED.

BEARINGS ARE UTM GRID DERIVED FROM SPECIFIED CONTROL POINTS 95023 AND 95002, UTM ZONE 17, NAD83

SPECIFIED CONTROL POINTS (SCPs): UTM ZONE 17, NAD 83 (ORIGINAL) COORDINATES TO URBAN ACCURACY PER SECTION 14(2) OF O.REG. 216/10

	NORTHING	EASTING
SCP 95023	4855837.46	625105.65
SCP 95002	4855146.93	624787.01

COORDINATES CANNOT, IN THEMSELVES, BE USED TO RE-ESTABLISH CORNERS OR BOUNDARIES SHOWN ON THIS PLAN

ELEVATIONS ARE GEODETIC AND ARE REFERRED TO THE TOWN OF RICHMOND HILL BENCHMARK NO.93023 HAVING A PUBLISHED ELEVATION OF 194.61 METRES.

CITY OF RICHMOND HILL
BUILDING SERVICES DIVISION
RECEIVED
JUL 24 2020
REVISED

CITY OF RICHMOND HILL
PLANNING AND REGULATORY SERVICES DEPARTMENT
DEVELOPMENT ENGINEERING
RE: 18 Denham Drive (Rev)
REVIEWED SA-18D-Rev
REVIEWED AS MODIFIED
REVISE AND RESUBMIT
N.I.A. JULY 21, 2020
THIS REVIEW IS FOR THE SOLE PURPOSE OF ASCERTAIN AND CONFORMANCE WITH GENERAL DESIGN CONCEPTS. RESPONSIBILITY FOR ERRORS AND OMISSIONS SHALL REST ON THE PERSONS SUBMITTING THIS DRAWING. IT IS THE RESPONSIBILITY OF THE OWNER TO INSURE THAT THE APPROVING CONSULTANT BE MADE AWARE OF ANY REVISIONS / COMMENTS MADE BY THE MUNICIPALITY

No:	DATE:	WORK DESCRIPTION:
10		
9	MAY 6, 2020	REV. AS PER COMMENTS & RE-ISSUED FOR PERMIT
8	MAY 5, 2020	REV. AS PER COMMENTS & RE-ISSUED FOR PERMIT
7	APR. 14, 2020	REV. AS PER COMMENTS & RE-ISSUED FOR PERMIT
6	APR. 6, 2020	REV. AS PER COMMENTS & RE-ISSUED FOR PERMIT
5	JAN. 27, 2020	REV. AS PER COMMENTS & RE-ISSUED FOR PERMIT
4	JAN. 23, 2020	REV. AS PER COMMENTS & RE-ISSUED FOR PERMIT
3	JAN. 22, 2020	REV. AS PER COMMENTS & RE-ISSUED FOR PERMIT
2	OCT. 7, 2019	REV. AS PER COMMENTS & RE-ISSUED FOR PERMIT
1	OCT. 7, 2019	ISSUED TO CLIENT FOR PERMIT

jardin
DESIGN GROUP INC
64 JARDIN DR. SUITE 3A
VAUGHAN ONT. L4K 3P3
TEL: 905 660-3377 FAX: 905 660-3713
EMAIL: info@jardindesign.ca

The undersigned has reviewed and takes responsibility for this design and has the qualifications and meets the requirements set out in the Ontario Building Code to be a designer

QUALIFICATION INFORMATION
Walter Botter — 21031 — BCIN
REGISTRATION INFORMATION
Jardin design group inc. — 27763 — BCIN

SITE PLAN

18 DENHAM DRIVE
PART OF LOT 13, REGISTERED PLAN 3659
CITY OF RICHMOND HILL

BILD

TYPE:	SP
SCALE:	1:250
PROJ. No.	19-42
No.	1