ESTIMATED BILL OF QUANTITIES

No.	WORK DESCRIPTION		REFERENCE DETAIL	DRAWING No.	QUANTITY PER LOCATION	NUMBER OF LOCATIONS	UNITS	TOTAL	COMMENTS
1	DEMOLITION	1.0 EXTERIOR MASONRY DEMISING WALL (8" THICK)	DETAIL – 1.0,	S-1	2.5	25	(sq.m)	63	
		2.0 EXTERIOR DEMISING WALL FOUNDATION (8" THICK)	DETAIL – 1.0	S-1	4.8	25	(sq.m)	120	NO DIRECT ACCESS DURING INVESTIGATION, SITE VERIFY
		3.0 PORCH 6" CONCRETE SLAB	UNIT LAYOUT	S-1	2.4	42	(sq.m)	101	
2	NEW CONSTRUCTION / RECTIFICATION	1.0 MASONRY WALL EDGE RECTIFICATION DUE PART. DEMO.	DETAIL – 1	S-1	1	25	(sq.m)	25	NEW FACE COURSE TO MATCH EXISTING
		2.0 NEW PORCH SLAB INSTALLATION (6" THICK)	DETAIL – 2	S-1	2.4	42	(m)	101	LINTEL IS ASSUMED, NO ACCESS TO VERIFY SUPPORT CONDITION
		3.0 DETERIORATED MASONRY WALL RECTIFICATION	TYP. DETAIL	S-1	–	–	(m)/(sq.m)	–	NOT IN THE SCOPE AS DISCUSSED ON SITE

NOTES:

1. FLOOR LOADS:
   DL= 15 psf
   LL= 40 psf

   LOAD COMBINATIONS FOR ULS & SLS AS PER OBC REQUIREMENTS

4. ALL STRUCTURAL STEEL TO BE 350W AND CONFORM TO CAN/CSA G40.21.
5. PRIOR COMMENCING WORK, CHECK ALL DIMENSIONS ON THE STRUCTURAL DRAWINGS WITH THE SITE CONDITIONS AND REPORT ANY INCONSISTENCIES. DO NOT SCALE DRAWINGS
6. WHERE EXISTING WORK IS TO BE MADE GOOD, THE NEW WORK SHALL EXACTLY MATCH THE O.L.D WORK IN MATERIALS, CONSTRUCTION AND FINISH.
7. WHEREVER IT BECOMES NECESSARY TO CUT OR INTERFERE IN ANY MANNER WITH EXISTING EQUIPMENT OR SERVICES, DO SUCH WORK AT TIMES AGREED UPON AND COORDINATION WITH THE OWNER.
8. ALL WELDING IS TO CONFORM TO CSA STANDARD W59 & W47 AND TO BE 3/8" THICK TYPICAL U/N.
9. GOVERNING CODE – OBC 2012

LUMBER NOTES:

1. ALL LUMBER EXPOSED TO WEATHER TO BE PRESSURE TREATED
2. ALL TIMBER SHALL CONFORM TO RECOGNIZED NOMINAL SIZES SHOWN ON PLAN AND STRESS RATING FOR APPROPRIATE SPECIES. NO TIMBER SHALL BE USED THAT DOES NOT CONFORM TO DIMENSIONS AND SPECIES.
3. ALL SAWN LUMBER TO BE S-P-F GRADE #1 & #2 U/N AND TO CONFORM TO CSA STANDARD CSA-O86.1 LATEST EDITION.
4. ALL NAILS TO BE SPIRAL TYPE IN LENGTH TO CONFORM TO O.B.C. REQUIREMENTS. WHEN EXPOSED TO WEATHER NAILS TO BE HOT DIP GALVANIZED.
5. GUARDS, RAILINGS & THEIR CONNECTIONS TO BE DESIGNED AND PROVIDED BY SUPPLIER. SHOP DRAWINGS STAMPED BY P. ENG. OF ONTARIO TO BE SUBMITTED FOR REVIEW TO STRUCTURAL ENGINEER.
6. ALL WOOD FIELD CONNECTIONS ARE TO BE DESIGNED AND PROVIDED BY SUPPLIER.

MASONRY NOTES:

1. ALL MASONRY IS TO CONFORM TO CSA STANDARD A370-04
2. ALL AVAILABLE BEARING AREAS OF MASONRY UNITS SHALL BE FULLY COVERED WITH MORTAR, SPREADED IN AN EVEN LAYER AND VERTICAL JOINTS SHALL BE FILLED SOLIDLY WITH MORTAR.
3. ALL INTERSECTING MASONRY WALLS TO HAVE MASONRY BOND OR HEAVY DUTY (BLOCK-LOCK) OR EQUIVALENT AT 8" VERTICALLY MAXIMUM.
4. FOR BONDING BRICK AND BLOCK USE HEAVY DUTY TRUSS TYPE REINFORCING OR EQUIVALENT @ 8" VERTICALLY, MAXIMUM COMPLETELY EMBEDDED IN MORTAR.
6. ALL SOLID MASONRY SHALL BE LAID WITH FULL HEAD AND BED JOINTS.
7. STEEL BEAMS BEARING ON MASONRY WALLS SHALL HAVE A MINIMUM BEARING OF 8" UNLESS OTHERWISE NOTED ON PLAN.
8. PROVIDE 3 COURSES OF SOLID BLOCK MASONRY UNDER ALL BEARING PLATES BEARING ON MASONRY FOR A DISTANCE OF NOT LESS THAN 8" PAST BEARING PLATE ON EACH SIDE.
9. MORTAR SHALL BE TYPE "S" WITH A MINIMUM COMPRESSIVE STRENGTH OF A 13 MPA BASED ON A NET CROSS-SECTIONAL AREA.
10. SOLID CONCRETE BLOCK MASONRY WITH MORTAR TYPE "S" SHALL HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 13 MPA – F'M.
11. HOLLOW CONCRETE BLOCK MASONRY WITH MORTAR TYPE "S" SHALL HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 13 MPA – F'M.
12. COMPRESSIVE STRENGTH OF CONCRETE BLOCKS SHALL BE 20 MPA , BASED ON NET CROSS-SECTIONAL AREA.

TEMPORARY SHORING NOTES:

1. PROVIDE TEMPORARY SHORING FOR EXISTING STRUCTURE AT ALL LOCATIONS WHERE EXISTING LOAD BEARING MEMBERS ARE REMOVED.
2. ALL EXIST. BRIDGING, BRACING AND OTHER STR. ELEMENTS WHICH IS INTERFERENCE WITH NEW STR. TO BE REMOVED AND RESTORED AFTER INSTALLATION OF NEW STR. IS COMPLETE.
3. ALL EXIST. MECHANICAL & ELECTRICAL PIPES, CONDUITS, EQUIPMENT etc. SHOULD BE REMOVED AND RESTORED INTO ORIGINAL POSITION AFTER INSTALLATION OF NEW STR. IS COMPLETE. THE CONTRACTOR SHOULD COORDINATE THIS SCOPE OF WORK WITH MECH. AND ELECTRICAL ENGINEER BEFORE STARTING THE WORK.
4. THE CONTRACTOR SHOULD INCLUDE ALL NOTED ABOVE WORK INTO PRICE.
5. CONTRACTOR SHOULD VISIT THE SITE BEFORE SUBMITTING THE PRICE AND SHOULD CHECK EXIST. CONDITIONS, DIMENSIONS, LOCATIONS & DEPTH OF EXIST. MECHANICAL AND ELECTRICAL EQUIPMENT, CONDUITS, PIPES (INCL. UNDERGROUND) ETC.
6. THE CONTRACTOR MUST ADVISE THE STR. ENGINEER IN A CASE OF ANY INTERFERENCE OF THE NEW AND EXIST. STRUCTURES AND IN CASE IF EXIST. STRUCTURES SHOWN ON THIS PROJECT DO NOT CORRESPOND TO EXIST. STRUCTURES ON SITE.

THIS DRAWING, AS AN INSTRUMENT OF SERVICE, IS PROVIDED BY AND IS THE PROPERTY OF LEONARD KALISHENKO & ASSOCIATES.

THE CONTRACTOR MUST VERIFY AND ACCEPT RESPONSIBILITY FOR ALL DIMENSIONS AND CONDITIONS ON SITE AND MUST NOTIFY LEONARD KALISHENKO AND ASSOCIATES OF ANY VARIATIONS FROM THE SUPPLIED INFORMATION.

THIS DRAWING IS NOT TO BE SCALED.

THE ENGINEER IS NOT RESPONSIBLE FOR THE ACCURACY OF SURVEY, ARCHITECTURAL, MECHANICAL, ELECTRICAL ETC. INFORMATION SHOWN ON THIS DRAWING. REFER TO THE APPROPRIATE CONSULTANT'S DRAWINGS BEFORE PROCEEDING WITH THE WORK.

CONSTRUCTION MUST CONFORM TO ALL APPLICABLE CODES AND REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION.

THE CONTRACTOR WORKING FROM DRAWINGS NOT SPECIFICALLY MARKED "FOR CONSTRUCTION" MUST ASSUME FULL RESPONSIBILITY AND BEAR COSTS FOR ANY CORRECTIONS OR DAMAGES RESULTING FROM HIS WORK.

NO.	DATE	ISSUED	BY
1	JUNE19.2018	ISSUED FOR COORDINATION	L.K.
2	SEP 2, 2018	ISSUED FOR CLIENT	L.K.

NO.	DATE	REVISION	BY

REGISTERED PROFESSIONAL ENGINEER
L. KALISHENKO
JUNE 18,2018
PROVINCE OF ONTARIO

LEONARD KALISHENKO & ASSOCIATES LIMITED
STRUCTURAL ENGINEERS

5050 DUFFERIN STR., #240,
TORONTO, ONTARIO, M3H 5T5

TEL.(416) 665-7165
FAX.(416) 665-4259

Project:

FACADE MODIFICATION

435 MARKHAM RD.
SCARBOROUGH, ONTARIO

Drawing Title:

BILL OF QUANTITIES& NOTES&

Drawn by: S.V.	Date: JUNE 18 2018
Checked by: L.K.	Scale: N.T.S.
Project Nr. 18-3111	Drawing Nr. S-1

CAD FILE \DWG\

LAST UPDATED:

ARCH. "D" SIZE 36"x24"

METRIC PRINTING COLOR SETTINGS: 1=0.152, 2=0.305, 3=0.381, 4=0.508, 5=0.381, 6=0.508, 7=0.381, 8=0.152, 9=0.305, 10->255=0.203
IMPERIAL PRINTING COLOR SETTINGS: 1=0.006, 2=0.012, 3=0.015, 4=0.020, 5=0.015, 6=0.020, 7=0.015, 8=0.006, 9=0.012, 10->255=0.008