## **GENERAL NOTES**

#### A GENERAL INFORMATION

- READ STRUCTURAL DOCUMENTS IN CONJUNCTION WITH CONTRACT DOCUMENTS, WHICH INCLUDE, BUT ARE NOT LIMITED TO, ARCHITECTURAL MECHANICAL, AND ELECTRICAL DOCUMENTS.
- CONTRACTOR TO BE RESPONSIBLE FOR CHECKING SITE CONDITIONS AGAINST DOCUMENTS BEFORE PROCEEDING WITH THE WORK, AND REPORT DISCREPANCIES TO THE CONSULTANT
- CONTRACTOR TO PROVIDE LABOUR, MATERIALS, AND EQUIPMENT TO COMPLETE ALL STRUCTURAL WORK INDICATED.
- CARRY OUT CONSTRUCTION OPERATIONS, INCLUDING THE INSTALLATION OF TEMPORARY GUYING AND SHORING REQUIRED, ENSURING THAT THE EXISTING STRUCTURE OR MEMBERS ALREADY ERECTED ARE NOT LOADED IN EXCESS OF THEIR SAFE LOAD CARRYING CAPACITY.
- STRUCTURAL DOCUMENTS DO NOT NECESSARILY SHOW ALL OPENINGS AND SLAB VARIATIONS REQUIRED. THE CONTRACTOR SHALL REFER TO ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR THE EXACT LOCATION NUMBER AND SITE OF OPENINGS TORNINGS DISTRICT SUBJECT OF STATE AND DEDECTION DESCRIPTION OF THE ADMINISTRATION OF THE PROPERTY OF THE STRUCTURAL FRAMING AT THESE LOCATIONS IN ACCORDANCE WITH THE APPLICABLE TYPICAL DETAIL

#### REFERENCE STANDARDS / CODES AND ACTS

THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH AND SHALL BE CONSTRUCTED TO CONFORM WITH THE 2024 ONTARIO BUILDING CODE. ONTARIO REGULATION 203/24 (REFERRED TO AS "THE BUILDING CODE! ANY ADDITION OF ANY AUTHORITY HAVING TIPISDICTION AND THE EOI LOWING

#### TARLER 1: REFERENCE STANDARDS

REF	CODE	TITLE
a)	CAN/CSA A23.1	CONCRETE MATERIALS AND METHODS OF CONCRETE CONSTRUCTION
b)	CANICSA A23.2	METHODS OF TEST FOR CONCRETE
c)	CANICSA A23.3	DESIGN OF CONCRETE STRUCTURES
d)	CANICSA-S16	LIMIT STATES DESIGN OF STEEL STRUCTURES
e)	CAN/CSA G40:20/G40:21	STRUCTURAL QUALITY STEEL
f)	RSIC	REINFORCING STEEL INSTITUTE OF CANADA, MANUAL OF STANDARD PRACTICE
g)	CANICSA-A370	CONNECTORS FOR MASONRY
h)	CSA-A371	MASONRY CONSTRUCTION FOR BUILDINGS
i)	S304.1	DESIGN OF MASONRY STRUCTURES
j)	CSA G30.18	CARBON STEEL BARS FOR CONCRETE REINFORCING

- 2. ALL STANDARDS AND PUBLICATIONS REFERENCED BY THE STANDARDS NOTED ABOVE ARE TO APPLY.
- WHERE THERE ARE DIFFERENCES BETWEEN THE DOCUMENTS AND THE STANDARDS, CODES AND ACTS, THE MOST STRINGENT SHALL GOVERN.

# C. MATERIALS

PROVIDE ONLY NEW STRUCTURAL MATERIALS IN ACCORDANCE WITH THE REFERENCE STANDARDS AND THE

1.1.1. CONCRETE STRENGTHS FOR STRUCTURAL ELEMENTS SHALL BE AS PER TABLE BELOW. UNLESS NOTED OTHERWISE ON PLANS SCHEDULES AND/OR SECTIONS

### TABLE C 1: CONCRETE STRENGTHS

STRUCTURAL ELEMENT AND EXPOSURE	EXPOSURE CLASS PER CSA A23.1	CONCRETE STRENGTH f'c (MPa)	SLUMP (mm)	MAX W/C RATIO	AIR CONTENT
SLABS ON GRADE NOT EXPOSED TO CHLORIDES OR FREEZING		25	40°	0.45	
NOTES					

- 1. TOLERANCE FOR SLUMP SHALL BE ± 20 mm FOR SPECIFIED SLUMP LESS THAN 80 mm. AND ± 30 mm EOD SDECIEIED SI IMP RETMEEN 80 mm AND 170 mm
- 2 SPECIAL CONCRETE HANDLING AND PLACING METHODS OR THE LISE OF A SUPER PLASTICIZED WILL BE REQUIRED TO PLACE THIS CONCRETE. FINAL PLASTICIZED SLUMP SHALL BE ± 125 s
- WHERE AGGREGATES SMALLER THAN 14 mm ARE USED. INCREASE AIR CONTENT BY 1%.
- CONCRETE EXPOSED TO DE-ICING CHEMICALS SHALL HAVE DCI TYPE N CORROSION INHIBITOR AT 18 Lim<sup>2</sup> DOSAGE (MINIMUM) OR APPROVED EQUIVALENT.
- 1.2. REINFORCING STEEL: CONFORM TO CSA G30 SERIES, GRADE 400.
- 1.3. WELDED WIRE FABRIC: CONFORM TO CSA G30 SERIES, GRADE 386, IN FLAT SHEETS.
- 1.4. STRUCTURAL STEEL:
  - 1.4.1. STRUCTURAL WIDE FLANGE (W) AND WELDED WIDE FLANGE SHAPES (WWF) TO CONFORM TO
- 1.4.2. ANGLES (L), CHANNELS (C), AND PLATES TO CONFORM TO CAN/CSA-G40.20/G40.21 GRADE 300W.
- 1.6 NON-SHRINK GROUT = COMPRESSIVE STRENGTH OF 35 MPa AT 24 HOURS
- 1.7. BLOCK: CONFORM TO CANS-A165 SERIES, MINIMUM COMPRESSIVE STRENGTH, fm = 15 MPa BASED ON NET AREA.
- 1.8. MORTAR: CONFORM TO CSA A179 TYPE S FOR LOAD-BEARING WALLS UNLESS NOTED.
- 1.9. MASONRY GROUT: CONFORM TO CSA A179. 15 MPs MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS, 250

## D. EXECUTION

- 1.1. PLACE SLAB-ON-GRADE ON SUB-GRADE MATERIAL CAPABLE OF SUSTAINING A MINIMUM BEARING CAPACITY OF 25 kPa (500 psf) WITHOUT SETTLEMENT RELATIVE TO THE BUILDING FOOTINGS.
- 1.2. UNLESS OTHERWISE NOTED. PROVIDE IMMEDIATELY UNDER SLABS-ON-GRADE A MINIMUM OF 200 mm (8") OF COMPACTED (MTC) GRANULAR 'B' MATERIAL. COMPACTION TO ACHIEVE A MINIMUM OF 98%

#### 2 CONCRETE

- 2.1. CONSTRUCTION JOINTS FOR WALLS, SLABS, AND BEAMS NOT SHOWN ON THE DRAWINGS SHALL BE APPROVED BY THE STRUCTURAL CONSULTANT BEFORE CONSTRUCTION. GENERALLY JOINTS IN SLABS SHALL BE AT RIGHT ANGLES TO THE SPANS, AT MD-SPAN IF POSSIBLE. AND BE CLEAR OF SUPPORTS
- 22 WHEN ATMOSPHERIC TEMPERATURE IS AT OR RELOW 5°C. OR WHEN THERE IS A POSSIBILITY OF IT WHICH ATMOSPHERIC TEMPERATURE IS ALL DEEDING BY WHICH THERE IS A POSSIBILITY OF IT FALLING TO THAT LIMIT, PLACE CONCRETE IN ACCIDINGE WITH THE REQUIREMENTS OF CANICSA A23.1 "COLD-WEATHER CONCRETING" AND ACI 306 "RECOMMENDED PRACTICE FOR COLD-WEATHER CONCRETINGS WHEN ATMOSPHERIC TEMPERATURE IS AT OR ABOVE 27° C. DI ACE CONCRETE IN ACCORDANCE WITH CANICSA A23.1 "HOT WEATHER CONCRETING" AND ACI 305 "RECOMMENDED

#### 3 STRUCTURAL STEEL

- 3.1. PAINT ALL STRUCTURAL STEEL TO REQUIREMENTS OF CISCICPMA 2-75. TOUCH UP ALL FIELD WELDS.
- 3.2. ALL STRUCTURAL STEEL EXPOSED TO WEATHER SHALL BE GALVANIZED IN ACCORDANCE WITH CSA G164
- 3.3 ALL WELDS SHALL CONFORM TO CSA STANDARD W59.
- 3.4 ALL WELDS EXPOSED TO VIEW SHALL BE GROUND SMOOTH
- 35. ANY ORGANIZATION UNDERTAKING TO WELD UNDER THIS CONTRACT SHALL BE CERTIFIED BY THE CANADIAN WELDING BUREAU UNDER REQUIREMENTS OF DIVISION 1 OR DIVISION 2.1 OF W47.
- 3.6. UNLESS A REINFORCED MASONRY OR CONCRETE LINTEL IS SHOWN IN MASONRY WALLS OR MASONRY PARTITIONS, PROVIDE LOGSE STEEL LINTELS IN ACCORDANCE WITH REQUIREMENTS OF DOCUMENTS OVER ALL DODRAWS, OTHER OPENINS, AND RECESSES, INCLIDING THOSE FOR MECHANICAL OR ELECTRICAL SERVICES IT IS THE DESPONSIBILITY OF THE CONTRACTOR TO COORDINATE THE LOCATION ELECTRICAL SERVICES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COURCINATE THE LO SIZE, AND NUMBER OF OPENINGS REQUIRED BY THE MECHANICAL AND ELECTRICAL CONSULTANT
- 37. DO NOT SPLICE STRUCTURAL STEEL SECTIONS WITHOUT PRIOR APPROVAL OF THE CONSULTANT, ALL SPLICES SHALL DEVELOP THE FULL CAPACITY OF THE SECTION AND ARE TO BE TESTED BY NON DESTRUCTIVE METHODS BY AN INDEPENDENT INSPECTION AND TESTING COMPANY AT THE CONTRACTORS

#### 4 MASONRY

- 4.1. PROVIDE A MINIMUM LENGTH OF 200 mm (8") OF 100% SOLID MASONRY UNITS FOR BEARING OF STEEL. CONCRETE OR REINFORCED MASONRY LINTELS.
- 42 SUPPLY AND PLACE REINFORCEMENT AND CONCRETE FOR REINFORCED MASONRY LINTELS IN ACCORDANCE WITH TYPICAL DETAILS SHOWN
- 5. ALTERATIONS AND/OR CONNECTIONS TO EXISTING STRUCTURE
- 5.1. INSPECT THE EXISTING BUILDING AND BECOME THOROUGHLY FAMILIAR WITH THE EXISTING CONDITIONS.
- 52 PRIOR TO FARRICATION OF STRUCTURAL STEEL OPEN UP ALL AREAS WHERE CONNECTIONS ARE TO BE MADE TO EXISTING WORK AND TAKE FIELD MEASUREMENTS. MODIFY METHODS FOR CONNECTING TO SUIT SITE CONDITIONS FOUND AND TO THE APPROVAL OF THE CONSULTANT. CARRY OUT LOCAL REPAIRS TO THE EXISTING WORK AS NECESSARY AND AS DIRECTED BY THE CONSULTANT
- 5.3. SHORE EXISTING WORK AS REQUIRED UNTIL ALL NEW WORK HAS BEEN COMPLETED AND REVIEWED BY
- 5.4. MAKE GOOD THE EXISTING WORK

### 6 CUTTING AND CORING OF EXISTING STRUCTURE

- 6.1. FOR ANY OPENINGS WHICH ARE TO BE SAW-CUT INTO THE EXISTING STRUCTURE. PRE-DRILL THE CORNERS USING A 100 mm (4") Ø CORE DRILL. DO NOT OVER-CUT CORNERS OF OPENING.
- 6.2. ALL PRICES FOR CUTTING / CORING ARE TO INCLUDE ANY COSTS ASSOCIATED WITH X-RAYING,

## E. QUALITY CONTROL

- 1.1. IMPLEMENT A SYSTEM OF QUALITY CONTROL TO ENSURE THAT THE MINIMUM STANDARDS SPECIFIED
- 12 BRING TO THE ATTENTION OF THE CONSULTANT ANY DEFECTS IN THE WORK OR DEPARTURES FROM DECIDE UPON CORRECTIVE ACTION AND GIVE RECOMMENDATIONS IN WRITING.
- THE CONSULTANT'S GENERAL REVIEW DURING CONSTRUCTION AND INSPECTION AND TESTING BY INDEPENDENT INSPECTION AND TESTING AGENCIES REPORTING TO THE CONSULTANT ARE BOTH INDERTAKEN TO INFORM THE OWNER / CLIENT OF THE CONTRACTOR'S PERFORMANCE AND SHALL IN NO WAY AUGMENT THE CONTRACTOR'S QUALITY CONTROL OR RELIEVE THE CONTRACTOR O

### 2 MOTIEICATION

2.1 PRIOR TO COMMENCING SIGNIFICANT SEGMENTS OF THE WORK GIVE THE CONSULTANT AND INDEPENDENT INSPECTION AND TESTING COMPANIES APPROPRIATE NOTIFICATION (MINIMIM 24 HOURS) SO AS TO AFFORD THEM REASONABLE OPPORTUNITY TO REVIEW THE WORK, FAILURE TO MEET THIS REQUIREMENT MAY BE CAUSE FOR THE CONSULTANT TO CLASSIFY THE WORK AS DEFECTIVE

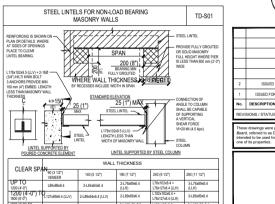
## 3 DEFECTIVE MATERIALS AND WORK

- WHERE EVIDENCE EVICTS THAT DESECTIVE WORK HAS OCCURRED OR THAT WORK HAS BEEN CARRIED WHERE EVIDENCE STATIS THAT DEFECTIVE WORK HAS OCCURRED OR THAT WORK HAS BEEN CARRIED OUT INCORPORATING DEFECTIVE MATERIALS, THE CONSULTANT MAY HAVE TESTS, ROSPECTIONS OF SURVEYS PERFORMED, ANALYTICAL CALCULATIONS OF STRUCTURAL STRENGTH MADE, AND THE LIKE, IN ORDER TO HELP DETERMINE WHETHER THE WORK MUST BE CORRECTED OR REPLACED. TESTS. INSPECTIONS OF SUBJECTS OF OUR CITATIONS CARRIED OUT LINNER THESE CIRCUMSTANCES WILL BE MADE AT THE CONTRACTOR'S EXPENSE, REGARDLESS OF THEIR RESULTS, WHICH MAY BE SUCH THAT, IN THE CONSULTANT'S OPINION. THE WORK MAY BE ACCEPTABLE.
- 3.2. ALL TESTING SHALL BE CONDUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE BUILDING CODE, EXCEPT WHERE THIS WOULD, IN THE CONSULTANT'S OFMION, CAUSE UNDUE DELAY OR GIVE RESULTS NOT REPRESENTATIVE OF THE REJECTED MATERIAL IN PLACE, IN THIS CASE, THE TESTS SHALL BE UCTED IN ACCORDANCE WITH THE STANDARDS GIVEN BY THE CONSULTANT.
- MATERIALS OR WORK WHICH FAIL TO MEET SPECIFIED REQUIREMENTS MAY BE REJECTED BY THE INVESTIGATION OF THE WORK FOUND AT ANY TIME PRIOR TO FINAL ACCEPTANCE OF THE WORK REGARDLESS OF PREVIOUS INSPECTION. IF REJECTED, DEFECTIVE MATERIALS OR WORK SHALL BE PROMPTLY REMOVED. AND REPLACED OR REPAIRED TO THE SATISFACTION OF THE CONSULTANT, AT NO EXPENSE TO THE

## LIST OF STRUCTURAL DRAWINGS

SHEET NO.	SHEET TITLE
S101	GENERAL NOTES AND TYPICAL DETAILS
S201	KEY PLAN & PART FOUNDATION PLAN
S202	PART FOUNDATION PLAN, PART LOW ROOF FRAMING PLAN, AND SECTIONS AND DETAILS

#### STRUCTURAL ABBREVIATIONS TD-G01 A BOLT ANCHOR BOLT OUTSIDE FACE COMPRESSIVE STRENGTH OPEN OPENING OPEN WEB STEEL JOIST AFR ASPHALT IMPREGNATED FAR FACE AXIAI FORCE (FACTORED) FIBREBOARD PRECAST ALT ARCH ASL PLATE POUNDS PER LINEAR FOOT PROJECTION PROJECTION POUNDS PER SQUARE FOOT PRESSURE TREATED ROOF DRAIN REACTION (FACTORED) ADDITIONAL ACCUMULATED B, BOTT B/B BEW BH BLL BLDG BM BPL BRDG RADIUS REINFORCED, REINFORCEMENT REFERENCE RIGHT END REOUIRED REVISION, REVISED REINFORCED WITH BEAM REARING/BASE PLATE REINFORCED WITH SEE ARCHITECTURAL DRAWINGS STEP DOWN FOOTING SECTION BOTTOM LIPPER LAYER CENTRE TO CENTRE COLUMN ABOVE 1000 I RS SLAB SLAB ON GRADE CANTII EVER KID CEET COMPRESSIVE FORCE (FACTORE) STRAIGHT CONTROL JOINT CENTRE! INC CII ONEWTON KII ONEWTON METRE STRUCTURAL KILONEWTON PER METRE STANDARD COMP CONC CONT DEMO DIAG DIAG DIAG DIM DP DWG(S) DN EA EE ELEC ELEC ELEC ELEV EMBED EQ KILOPASCAL KIPS PER SQUARED FOOT COLIADE CONTINUOUS TENSILE FORCE (FACTORED) COMPLETE WITH KIPS PER SOLMRED INCH DEMOLITION SINGLE ANGLE TEMPORARY, TEMPERATURE LEFT END TOP FACH WAY DIAMETER DIAGONAL LONG LIVE LOAD, LOWER LAYER TIE JOIST TOP LOWER LAYER DIMENSION LONG LEG HORIZONTAL TORSIONAL MOMENT (FACTORED) DEAD LOAD LONG LEG VERTICAL TOP OF DECK TOP OF STEEL/SLAB MC N (FULL MOMENT UNLESS NOTED) TOP UPPER LAYER DOWEL(S) TYPICAL UPPER LAYER UNLESS NOTED OTHERWISE EACH END EACH FACE ELECTRICAL ELEVATION ELEVATION EMBEDMENT EQUAL EACH SIDE EXISTING EXPANSION JOINT EAST WEST EACH WAY



#### 127x89x6.4 (LLV) L89x64x7.9 (LLV) 2400 (810°) TO 127x89x6 127x89x9 5 (LLV) 1.89x64x9.5 (1.1.V) 127x127x7.9 DETAIL JL JL JL JLL

## NOTES

- CONNECT BACK TO BACK DOUBLE ANGLE LINTELS USING 16 mm (58°) 0 BOLTS AT 450 mm (18°) ob MAX OR BY WELDING AT TOP AND BOTTOM USING 6 mm (114°) WELDIS x 50 mm (2°) LONG AT 450 mm (18°) ob MAX. FRST BOLT OR WELD TO BE AN MXO F75 mm (5°) FROM BMO OF LINTERS.
- 3. LINTELS AS COVERED UNDER THIS DETAIL ARE NOT NECESSARILY SHOWN ON THE STRUCTURAL DRAWINGS. REFER TO ARCHITECTURAL MECHANICAL AND ELECTRICAL DRAWINGS FOR OPENING LOCATIONS AND SIZES.





2025/02/2

DATE

PELITATE / SMOISIVE These drawings were prepared by the Durham District School Board referred to as DDSB or The Board throughout, and are led to be used for the purpose of completing alter one of its properties

ISSUED FOR COORDINATION

PROJECT:

**VAUGHAN WILLARD** KINDERGARTEN, SCIENCE, & MUSIC ALTERATIONS

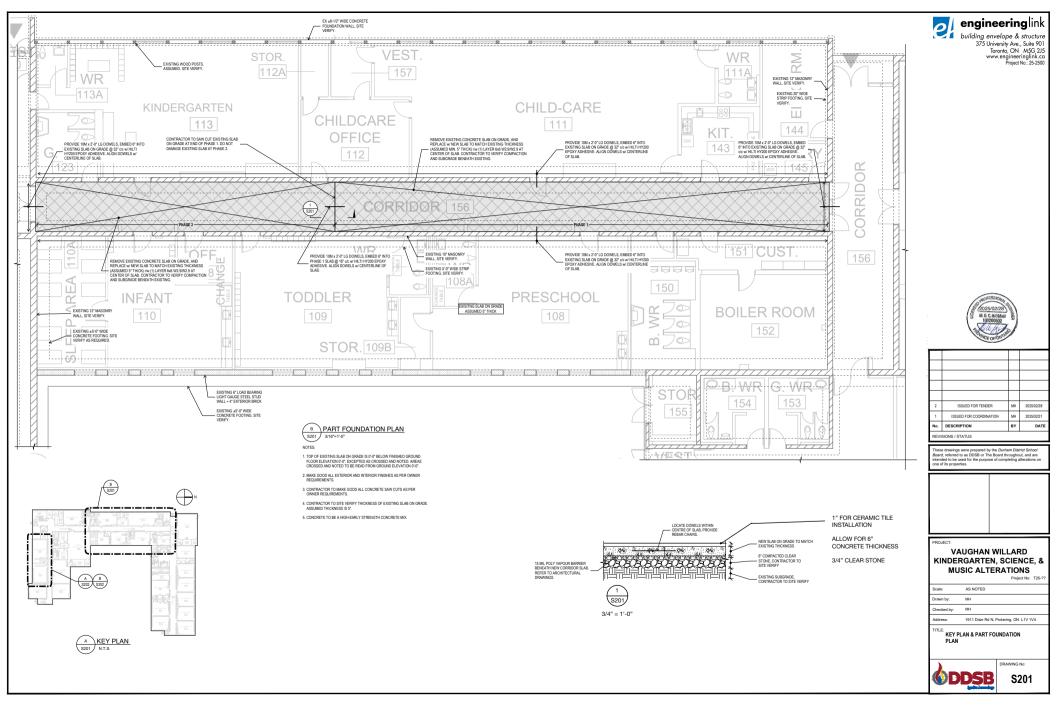
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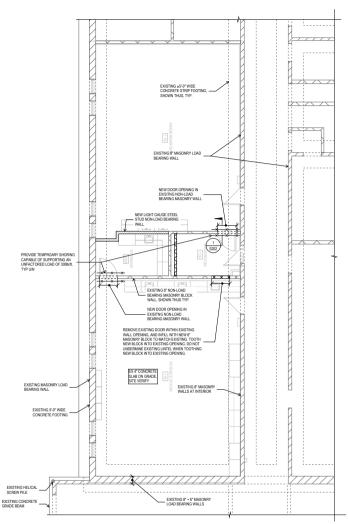
1911 Dixie Rd N. Pickering, ON L1V 1V4 PART FOUNDATION PLAN, PART

ROOF FRAMING PLAN DRAWING No.



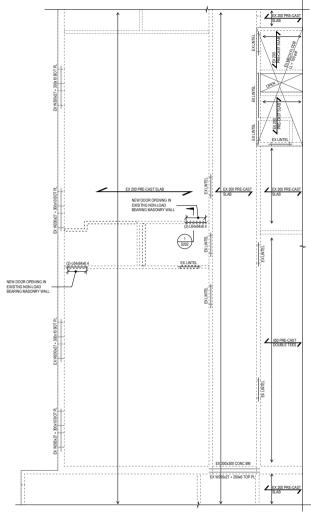
S101







- 1. TOP OF EXISTING SLAB ON GRADE IS 0'-0" BELOW FINISHED GROUND FLOOR ELEVATION 0'-0', EXCEPTED AS CROSSED AND NOTED. AREAS CROSSED AND NOTED TO BE READ FROM GROUND ELEVATION 0'-0'.
- 2. MAKE GOOD ALL EXTERIOR AND INTERIOR FINISHES AS PER OWNER REQUIREMENTS.
- CONTRACTOR TO MAKE GOOD ALL BLOCK SAW CUTS AS PER OWNER REQUIREMENTS.
- 4. REFER TO OWNERS DRAWINGS FOR ELEVATION OF ALL NEW LINTELS AT OPENINGS THROUGH NON-LOAD BEARING MASONRY PARTITION WALLS.
- DUR-O-WAL DAZ200 JOINT STABILIZER ANCHORS @ 400 old VERTICALLY.
- 6. FULLY INFILL ALL ABANDONED DUCT OPENINGS. INFILL USING MASONRY BLOCK TO MATCH EXISTING, PACK TIGHT TO UIS EXISTING LINTELS. CONTRACTOR TO CONFRIM EXACT LOCATION AND NUMBER OF ABANDONED OPENINGS.





- 1. TOP OF PRE-CAST CONCRETE PANELS ARE 0° BELOW LOW ROOF ELEVATION +11°-10°, EXCEPT AS CROSSED AND NOTED ON PLAN. AREAS CROSSED AND NOTED TO BE READ FROM ELEVATION 11°-10°.
- 2. READ DRAWING IN COMBINATION WITH GENERAL NOTES AND TYPICAL DETAILS.
- 3. EXISTING STRUCTURE HAS BEEN CHECKED FOR NEW LOADS (INCL. WIND LOADS) AND WAS FOUND TO BE ACCEPTABLE.
- 4. SNOW LOADS ARE: 25.1 psf + ASL MULTIPLIED BY HIGH IMPORTANCE ( $l_{\rm ax}$  = 1.15,  $l_{\rm ax}$  = 0.9)

MECHANICAL ROOM 75 psf

6. SUPERIMPOSED DEAD LOADS FOR THE MECHANICAL ROOM ARE:

REMOVE EXISTING CEILING FINISHES, MECHANICAL SERVICES AND THE LIKE TO COMPLETE THE STRUCTURAL WORK. PATCH AND MAKE GOOD.



±6" MASONRY WALL, CONTRACTOR TO SITE VERIFY PRIOR TO CONSTRUCTION.

T/O GROUND FLOOR EL. 0-0"

PATCH AND MAKE GOOD EXISTING BLOCK AS REQUIRED

REFER TO TD-S01 FOR ADDITIONAL LINTEL INFORMATION



2	ISSUED FOR TENDER	MH	2025/02/28
1	ISSUED FOR COORDINATION	MH	2025/02/21
No.	DESCRIPTION	BY	DATE
REVI	SIONS / STATUS		•

Board, referred to as DDSB or The Board throughout, and are intended to be used for the purpose of completing alterations o one of its properties.



PROJECT: **VAUGHAN WILLARD** KINDERGARTEN, SCIENCE, & MUSIC ALTERATIONS

AS NOTED

1911 Dixie Rd N, Pickering, ON L1V 1V4

PART FOUNDATION PLAN, PART LOW

ROOF FRAMING PLAN, AND SECTIONS AND DETAILS



DRAWING No: S202

