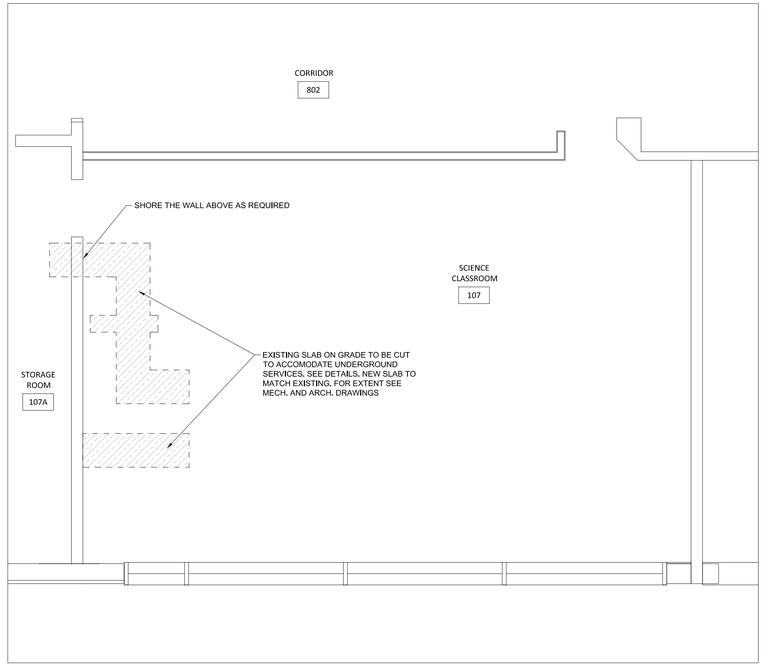
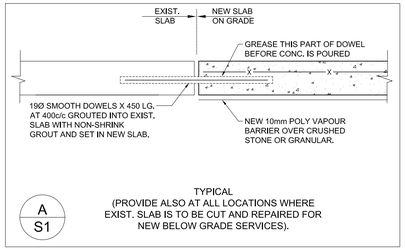
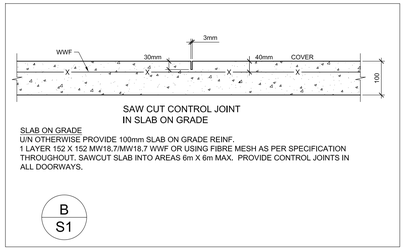


1 / S1 PART GROUND FLOOR PLAN AT SCIENCE LAB 107
1:50



TYPICAL
(PROVIDE ALSO AT ALL LOCATIONS WHERE EXIST. SLAB IS TO BE CUT AND REPAIRED FOR NEW BELOW GRADE SERVICES).

A / S1



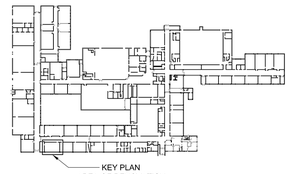
SAW CUT CONTROL JOINT
IN SLAB ON GRADE

SLAB ON GRADE
UIN OTHERWISE PROVIDE 100mm SLAB ON GRADE REINF.
1 LAYER 152 X 152 MW18.7/MW18.7 WWF OR USING FIBRE MESH AS PER SPECIFICATION THROUGHOUT. SAWCUT SLAB INTO AREAS 6m X 6m MAX. PROVIDE CONTROL JOINTS IN ALL DOORWAYS.

B / S1

GENERAL GROUND FLOOR NOTES

1. FLOOR STRUCTURE IS EXISTING UNLESS NOTED OTHERWISE. EXISTING BUILDING IS DESIGNED BY KYLES & KYLES ARCHITECTS ON YEAR 1963.
2. ULESS NOTED OTHERWISE PROVIDE NEW 100mm SLAB ON GRADE AS PER SPECIFICATION THROUGHOUT AND AS PER B/S1, SAWCUT SLAB INTO AREAS 6m x 6m MAX. PROVIDE CONTROL JOINTS IN ALL DOORWAYS. REINF. 1 LAYER 152 X 152 MW18.7/MW18.7 WWF OR USING FIBRE MESH. REFER TO "NEW SLAB ON GRADE" DETAIL ON THIS DRAWING.
3. USE DETAIL A/S1 AT ALL LOCATIONS WHERE EXISTING SLAB IS TO BE CUT AND REPAIRED AND FOR ALL NEW BELOW GRADE SERVICES.
4. SHORE AS REQUIRED.



NOTE: THIS DRAWING IS NOT TO BE SCALED. THE CONTRACTOR IS RESPONSIBLE FOR THE VERIFICATION OF ALL SITE DIMENSIONS AND FOR NOTIFYING THE ARCHITECT OF ANY SITE CONDITIONS AND SITE MEASUREMENTS THAT ARE NOT CONSISTENT WITH THE DRAWINGS.

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1	Issued for Permit and Tender	April 01, 2026
2	Issued for Construction	June 02, 2026

project
WRDSB PRESTON HIGH SCHOOL RENOVATIONS

WATERLOO REGION DISTRICT SCHOOL BOARD
550 ROSE ST., CAMBRIDGE, ON. N3H 2E6

drawing
PART GROUND FLOOR PLAN AT SCIENCE LAB 107

drawing scale
1:50

ward99 project number
25023 - WRDSB PRESTON FAMILY STUDIES AND CLASSROOM

VX
VX ENGINEERING INC
STRUCTURAL ENGINEERS

VX ENGINEERING inc.
2500 - 135Marlee Avenue
Toronto, Ontario M6B 4C6
416 670 9422 www.wxengineering.com

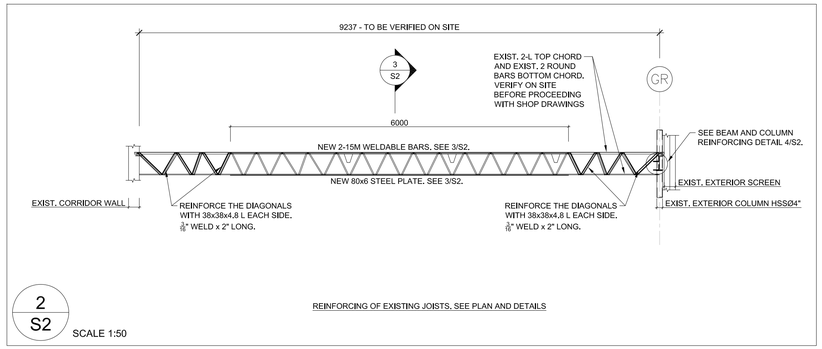
drawing no.
S1

VX PROJECT NO. 2604

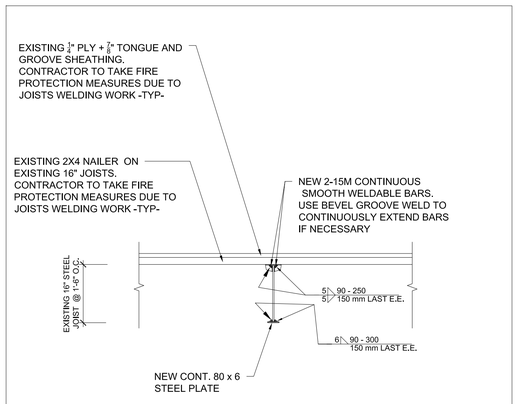
1 S2 PART SECOND FLOOR FRAMING PLAN
1:50

PART 2ND FLOOR FRAMING PLAN SCALE 1:50

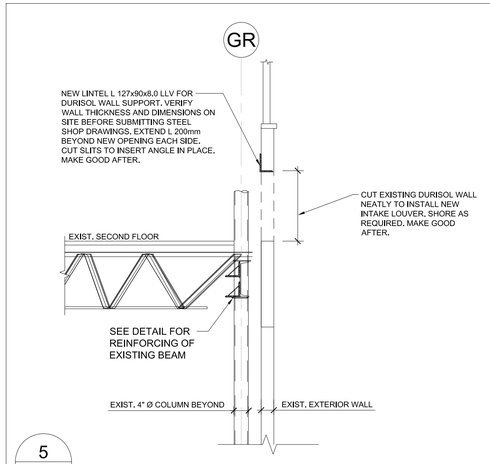
1. FOR SLOPES AND ELEVATIONS SEE ARCHITECTURAL DRAWINGS.
2. FLOOR STRUCTURE IS EXISTING UNLESS NOTED OTHERWISE. EXISTING FRAMING DATA ARE TAKEN FROM THE ORIGINAL DRAWINGS DESIGNED BY KYLES & KYLES ARCHITECTS ON YEAR 1955 AND AGAIN BY KYLES & KYLES ARCHITECTS FOR ADDITION ON YEAR 1963. REPORT TO CONSULTANTS DISCREPANCIES AND NECESSARY ADJUSTMENTS DUE TO ACTUAL CONDITIONS BEFORE PROCEEDING WITH WORK.
3. EXISTING FAMILY STUDIES FLOOR STRUCTURE IS DESIGNED FOR LIVE LOAD 2.4kN/m^2. REINFORCING OF EXISTING FAMILY STUDIES FLOOR STRUCTURE AS PER THESE DESIGN DRAWINGS WILL INCREASE FLOOR BEARING CAPACITY TO LIVE LOAD 4.8kN/m^2.
4. UNLESS NOTED OTHERWISE PROVIDE L89 x 89 x 6.4 ANGLE + NAILER REINFORCING AROUND ALL OPENINGS IN FLOOR DECK THAT ARE BIGGER THAN 150mm x 150mm.
5. SEE ALSO TYPICAL DETAILS AND GENERAL NOTES ON THESE DRAWINGS.
6. UNLESS NOTED OTHERWISE PROVIDE 170 X 12 X 200 BEARING PLATES EACH END OF ALL STEEL BEAMS, ALL BEARING PLATES SHALL BE WITH 2-19Ø WELDED ANCHORS X 250 LG. WELD BEAM TO BEARING PLATES TYPICAL.
7. UNLESS NOTED OTHERWISE PROVIDE 150 X 12 X 150 BEARING PLATES FOR EXISTING OWSJ's WHERE REQUIRED, ALL BEARING PLATES SHALL BE WITH 1-19Ø WELDED ANCHORS X 250 LG. WELD BEAM TO BEARING PLATES TYPICAL.
8. UNLESS NOTED OTHERWISE FOR LINTELS OVER MECHANICAL WALL OPENINGS REFER TO "LINTELS FOR DUCTS AND SERVICES" ON TYPICAL DETAIL SHEET. FOR ALL NEW LINTELS IN EXISTING WALLS CONFIRM WALL THICKNESS BEFORE LINTELS ARE FABRICATED.
   REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR EXACT LOCATIONS.
9. BLOCK VOIDS WITH REINFORCING OR SHOWN AS "FILLED SOLID" SHALL BE FILLED WITH 20MPa CONCRETE WITH PEA GRAVEL OR 20MPa COARSE GROUT.
10. SHORE AS REQUIRED.



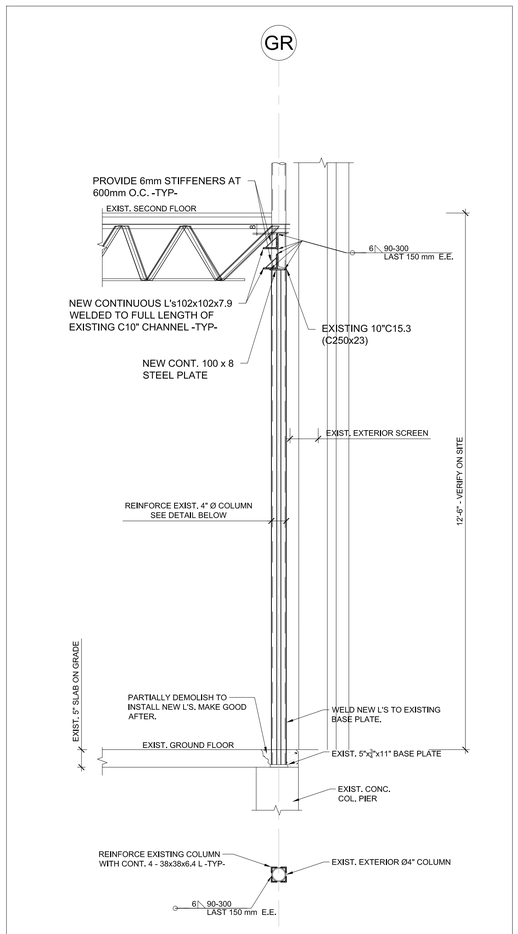
2 S2 SCALE 1:50
REINFORCING OF EXISTING JOISTS, SEE PLAN AND DETAILS



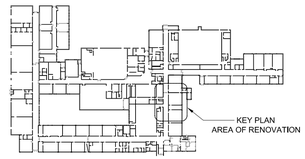
3 S2 SCALE 1:20
DETAIL FOR REINFORCING OF EXISTING STEEL OWSJ



5 S2 SCALE 1:20



4 S2 SCALE 1:20
DETAIL FOR REINFORCING OF EXISTING STEEL BEAMS AND COLUMNS. SEE PLAN.



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WRDSB PRESTON HIGH SCHOOL RENOVATIONS

WATERLOO REGION DISTRICT SCHOOL BOARD
550 ROSE ST., CAMBRIDGE, ON. N3H 2E6

drawing
PART 2ND FLOOR FRAMING PLAN

drawing scale
1:50

ward99 project number
25023 - WRDSB PRESTON FAMILY STUDIES AND CLASSROOM

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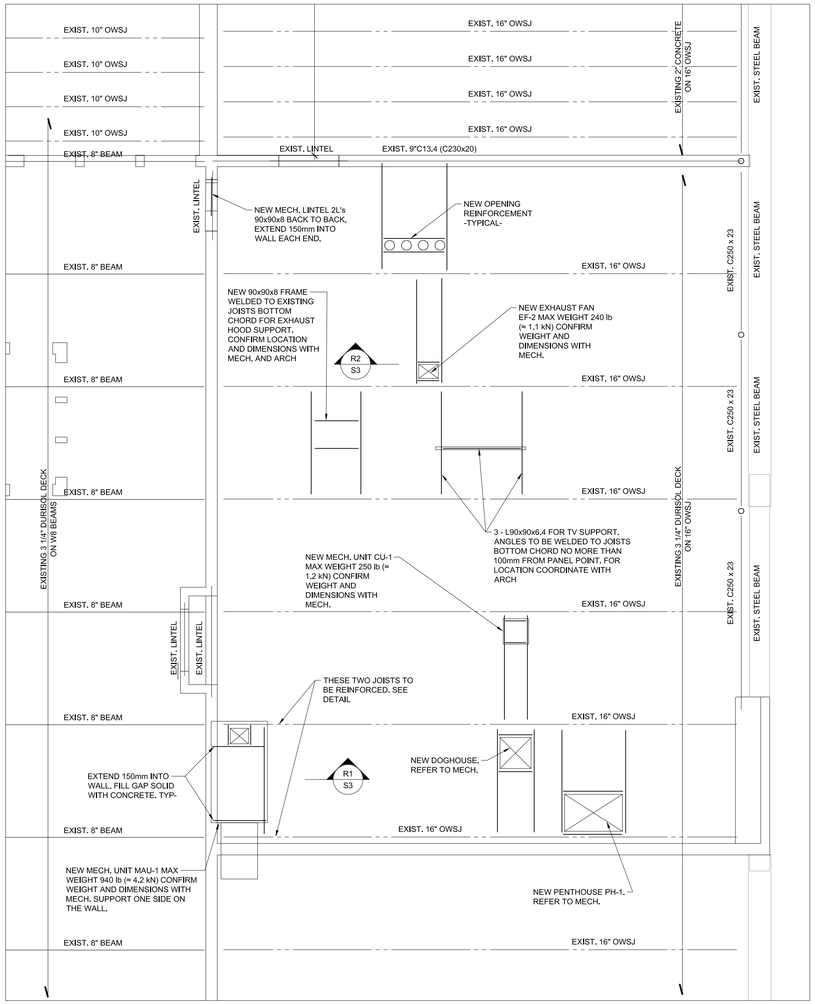
drawing no.
S2



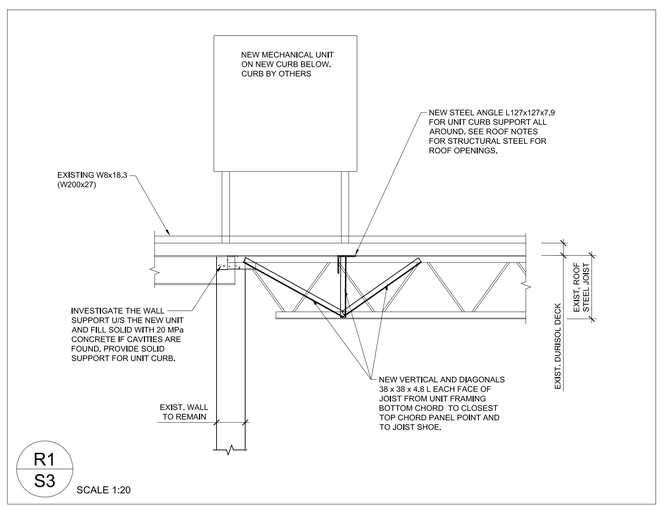
1 S3 PART ROOF FRAMING PLAN
1:50

PART ROOF FRAMING PLAN

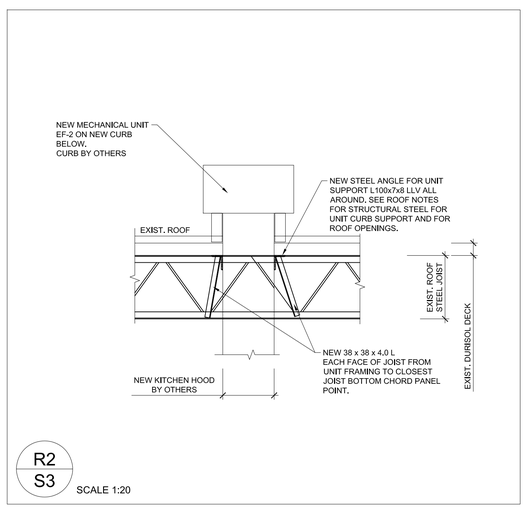
SCALE 1:50

1. FOR ROOF SLOPES AND ELEVATIONS SEE ARCHITECTURAL DRAWINGS.
2. ROOF STRUCTURE IS EXISTING UNLESS NOTED OTHERWISE. EXISTING FRAMING DATA ARE TAKEN FROM THE ORIGINAL DRAWINGS DESIGNED BY KYLES & KYLES ARCHITECTS ON YEAR 1955 AND AGAIN BY KYLES & KYLES ARCHITECTS FOR ADDITION ON YEAR 1963. REPORT TO CONSULTANTS DISCREPANCIES AND NECESSARY ADJUSTMENTS DUE TO ACTUAL CONDITIONS BEFORE PROCEEDING WITH WORK.
3. TOP OF STEEL BEAMS IS 0,00mm BELOW BOTTOM OF STEEL DECK ELEVATION UNLESS NOTED OTHERWISE.
4. SPECIFIED SNOW LOAD IS 1,68kN/m2. ADD DRIFT SNOW AS SHOWN. MULTIPLY SNOW LOADS BY IMPORTANCE FACTOR - SEE IMPORTANCE FACTOR TABLE.
5. UNLESS NOTED OTHERWISE PROVIDE L100x75x8 LLV FRAMING U/S NEW ROOF MECHANICAL UNITS AND L90 X 90 X 8.0 ANGLE REINFORCING AROUND ALL OPENINGS IN ROOF DECK THAT ARE BIGGER THAN 150mm x 150mm.
6. SEE ALSO TYPICAL DETAILS AND GENERAL NOTES ON THESE DRAWINGS.
7. UNLESS NOTED OTHERWISE PROVIDE 170 X 12 X 200 BEARING PLATES EACH END OF ALL STEEL BEAMS. ALL BEARING PLATES SHALL BE WITH 2-19Ø WELDED ANCHORS X 250 LG. WELD BEAM TO BEARING PLATES TYPICAL.
6. UNLESS NOTED OTHERWISE PROVIDE 170 X 12 X 200 BEARING PLATES FOR EXISTING OWSJ's WHERE REQUIRED. ALL BEARING PLATES SHALL BE WITH 2-19Ø WELDED ANCHORS X 250 LG. WELD BEAM TO BEARING PLATES TYPICAL
7. W.PL./ 1 - 75 X 6 CONTINUOUS STEEL PLATE WITH 12Ø X 200 LG. STUDS AT 800c/c SET IN BLOCK VOIDS FILLED WITH 20MPa CONCRETE
8. REFER TO OTHER CONSULTANTS DRAWINGS AND SPECIFICATIONS FOR ROOF MOUNTED OR SUSPENDED UNITS. SHOW THE UNITS ON THE STEEL FABRICATORS SHOP DRAWINGS AND OBTAIN ARCHITECTS, MECHANICAL AND OR ELECTRICAL ENGINEERS APPROVAL OF WEIGHTS AND LOCATIONS BEFORE FABRICATION IS STARTED.
9. UNLESS NOTED OTHERWISE FOR LINTELS OVER MECHANICAL WALL OPENINGS REFER TO "LINTELS FOR DUCTS AND SERVICES" ON TYPICAL DETAIL SHEET. FOR ALL NEW LINTELS IN EXISTING WALLS CONFIRM WALL THICKNESS BEFORE LINTELS ARE FABRICATED. REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR EXACT LOCATIONS.
10. BLOCK VOIDS WITH REINFORCING OR SHOWN AS "FILLED SOLID" SHALL BE FILLED WITH 20MPa CONCRETE WITH PEA GRAVEL OR 20MPa COARSE GROUT.
11. WIND LOAD PARAMETERS, AS PER OBC 2024, PART 4, 1/50 WIND PRESSURE 0,36kPa, 1/10 WIND PRESSURE 0,28kPa.
12. SEISMIC LOAD SEISMIC LOAD PARAMETERS, AS PER OBC 2024 PART 4, EQUIVALENT STATIC ANALYSIS. MASONRY SHEAR WALL SYSTEM AND CONVENTIONAL STEEL STRUCTURE. Sa(0.2, X450) = 0,225, Sa(0,5,X450)=0,13, Sa(1,0,X450)=0,707, Sa(2,0,X450)=0,0333, Sa(5,0,X450)=0,00875, Sa(10,0,X450)=0,00309, PGA (X450)=0,104, PGV(X450)=0,0836, I_E=1,3, RD=1.5, RO=1,5, SEISMIC CATEGORY SC3
13. REFER TO "IMPORTANCE FACTOR" TABLE.
14. SHORE AS REQUIRED.

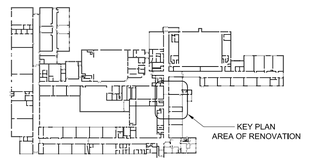
IMPORTANCE FACTOR CATEGORY `HIGH'		
	ULS	SLS
SNOW	1.15	0.9
WIND	1.15	0.75
EARTHQUAKE	1.3	1.0



R1 S3 SCALE 1:20



R2 S3 SCALE 1:20



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WATERLOO REGION DISTRICT SCHOOL BOARD
550 ROSE ST., CAMBRIDGE, ON. N3H 2E6

drawing
PART ROOF FRAMING PLAN

drawing scale
1:50

ward99 project number
25023 - WRDSB PRESTON FAMILY STUDIES AND CLASSROOM

drawing no.
S3

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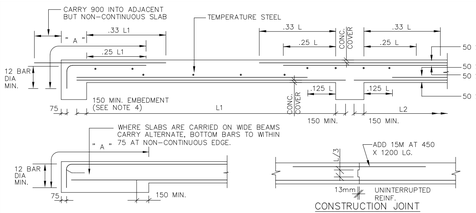
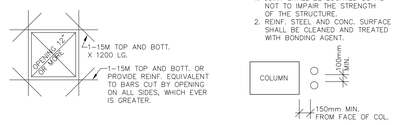
VX PROJECT NO. 2604



CONSTRUCTION JOINT IN FRAMED SLABS

1. JOINT SHALL BE LOCATED SO AS NOT TO IMPAIR THE STRENGTH OF THE STRUCTURE.
2. REINF. STEEL AND CONC. SURFACE SHALL BE CLEANED AND TREATED WITH BONDING AGENT.

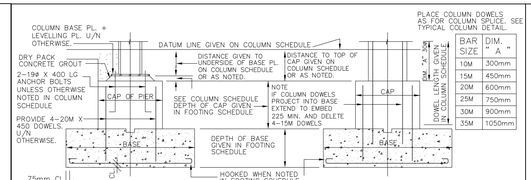


1. MAXIMUM SPACING OF BARS IN ANY ONE WAY SLAB IS 5 X SLAB THICKNESS, MAXIMUM SPACING 500.
2. AT NON-CONTINUOUS END, ALL TOP BARS SHALL BE CARRIED TO WITHIN 75 OF OUTER EDGE OF CONSTRUCTION AND SHALL TERMINATE IN A 90°HOOK, MAINTAINING A MINIMUM DIMENSION "A" AS SHOWN IN TABLE BELOW FOR THE GIVEN STRENGTH OF CONCRETE. WHERE BEAM WILL NOT ACCOMMODATE A 90° HOOK, A 180 HOOK SHALL BE USED, MAINTAINING A MINIMUM DIMENSION "A" FOR BAR SPACING GREATER THAN 150, TABULATE VALUES MAY BE MULTIPLIED BY 0.5.
3. TEMPERATURE REINFORCING SHALL BE PROVIDED IN ALL ONE WAY SLABS. BARS ARE TO BE LAPPED 36 DIAMETERS. MAXIMUM SPACING OF TEMPERATURE REINFORCING SHALL BE 5 TIMES THE SLAB THICKNESS BUT NOT MORE THAN 500. SEE TABLE BELOW.
4. WHERE 150 STRAIGHT EMBEDMENT IS NOT POSSIBLE PROVIDE A STANDARD 90°HOOK LAID FLAT.
5. L IS THE GREATER OF L1 AND L2.
6. LONG BARS SHALL ALTERNATE WITH SHORT BARS.
7. DIMENSIONS GIVEN ARE IN MILLIMETERS.
8. FOR CONCRETE COVER REFER TO CSA 23.1. COVER SHALL NOT BE LESS THAN REQUIRED FOR FIRE RATING.

TEMPERATURE REINFORCING Fy = 400MPa			
SLAB(mm) THICKNESS	REINF. (As= 0.002 Ag)	SLAB(mm) THICKNESS	REINF. (As= 0.002 Ag)
65	10M AT 500	200	15M AT 500
100	10M AT 500	215	15M AT 460
115	10M AT 450	225	15M AT 440
125	10M AT 410	240	15M AT 410
135	10M AT 380	250	15M AT 400
150	10M AT 340	265	15M AT 380
165	10M AT 310	275	15M AT 360
175	10M AT 290	290	15M AT 340
190	10M AT 270	300	15M AT 330

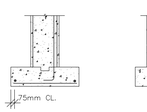
BAR	DIMENSION " A " MINIMUM		
	Fy = 400MPa		
	f'c= 20MPa	f'c= 25MPa	f'c= 30MPa
10M	400mm	370mm	355mm
15M	575mm	540mm	510mm
20M	720mm	675mm	640mm
25M	920mm	870mm	820mm
30M	1115mm	1045mm	995mm
35M	1340mm	1260mm	1200mm

ONE WAY SLAB DETAILS — 1

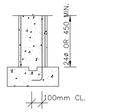


BAR SIZE	DIM. " A "
10M	300mm
15M	450mm
20M	600mm
25M	750mm
30M	900mm
35M	1050mm

SPREAD FOOTING UNDER OTHER THAN POURED CONCRETE COLS.



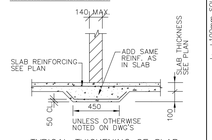
REINFORCED WALL FTG.



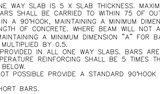
UNREINFORCED WALL FTG.

PROVIDE DOWELS TO FOOTING AT SAME SPACING AND OF SAME SIZE AS WALL VERTS.

SPREAD FOOTING UNDER CONCRETE COLUMNS

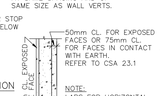


TYPICAL THICKENING OF SLAB ON GRADE UNDER PARTITIONS

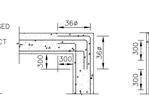


VERTICAL CONSTRUCTION JOINT IN WALLS

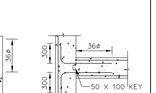
1. JOINT SHALL BE LOCATED SO AS NOT TO IMPAIR THE STRENGTH OF THE STRUCTURE.
2. REINF. STEEL AND CONC. SURFACE SHALL BE CLEANED AND TREATED WITH BONDING AGENT.



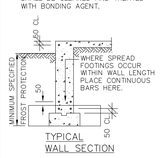
TYPICAL WALL



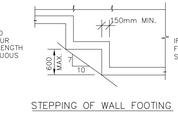
LAPPING AT CORNERS



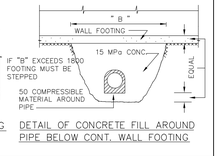
DOWELLING OF INTERSECTING WALL



TYPICAL WALL SECTION

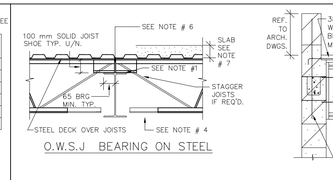


STEPPING OF WALL FOOTING

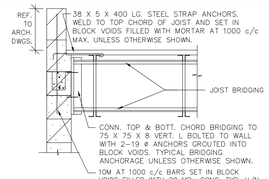


DETAIL OF CONCRETE FILL AROUND PIPE BELOW CONT. WALL FOOTING

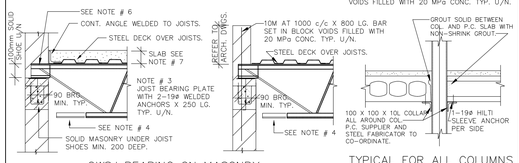
FOUNDATION & WALL DETAILS — 2



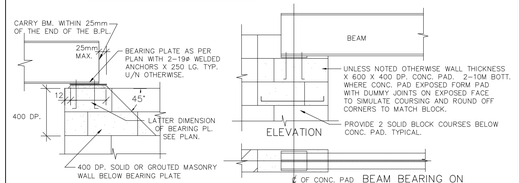
O.W.S.J BEARING ON STEEL



TYPICAL FOR ALL COLUMNS



OWSJ BEARING ON MASONRY



TYPICAL BEAM BEARING

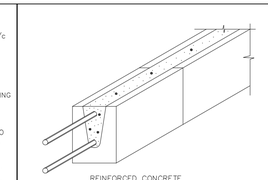
BEAM BEARING ON CONCRETE PAD

(WHERE SHOWN ON PLAN)

NOTES:

1. OWSJ BEARING, ANCHORAGE AND BRIDGING REQUIREMENTS SHALL BE IN ACCORDANCE WITH CAN — S16.1
2. CONTRACTOR TO TAKE ALL NECESSARY PRECAUTIONS WHEN POURING CONC. SLABS OVER OWSJ TO AVOID LATERAL DEFLECTION AND TWISTING OF JOISTS. THIS APPLIES PARTICULAR TO FREE ENDS OF JOISTS RUNS.
3. JOISTS BEARING PLATES SHALL BE DESIGNED BY JOIST DESIGNER AND 50mm WIDER THAN JOIST SHOE.
4. PROVIDE CEILING EXTENSIONS WHERE REQUIRED.
5. JOISTS MARKED T.J. ON PLANS DENOTES TIE JOISTS.
6. JOIST WORKING POINT SHALL BE LOCATED IN MIDDLE ⅓ OF BEAM FLANGE OR SUPPORTING WALL.
7. TYP. SLAB U/N OTHERWISE — 65mm CONC. SLAB OVER STEEL DECK. SLAB REINF. 152 X 152 MW18.7/MW18.7 WWF PLACED 40mm FROM TOP SURFACE.

STRUCTURAL STEEL AND OPEN WEB STEEL JOIST DETAILS — 3



TYPICAL DETAIL

NOTES FOR RCML:

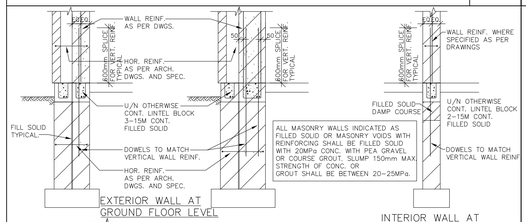
1. FOR LINTELS IN PARTITIONS AND BEARING WALLS, UP TO 1200mm CLEAR SPAN, PROVIDE 1-10M BAR TOP AND BOTTOM FOR EACH 100mm OF WALL THICKNESS OR PORTION THEREOF.
2. FOR CLEAR SPANS FROM 1200mm TO 1800mm PROVIDE 1-15M HOOKED TOP AND BOTTOM AS CALLED FOR NOTE No.1.
3. LINTEL BEAM UNITS SHALL BE FILLED WITH CONCRETE HAVING AN ULTIMATE COMPRESSIVE STRENGTH OF 20MPa AT 28 DAYS. LENGTH OF BEARING SHALL BE 200mm MIN.
4. WHERE LINTELS FRAME INTO REINFORCED CONCRETE COLUMNS, REINFORCED CONCRETE WALLS OR STEEL COLUMNS, PROVIDE 90 X 90 X 10 SHELF ANGLE FOR ANCHORAGE, USE WELDING OR 2-19ø INSERT ANCHORS, EXCEPT AS OTHERWISE SPECIFIED ON DRAWINGS.

CLEAR SPAN	140mm WALL		190mm WALL		240mm WALL		290mm WALL	
	TYPE	MATERIAL	TYPE	MATERIAL	TYPE	MATERIAL	TYPE	MATERIAL
UP TO 1200mm	⊥L	2L"S 90 X 65 X 8 LLV.	⊥L	2L"S 90 X 90 X 8	⊥L	2L"S 100 X 100 X 8	⊥L L	3L"S 90 X 90 X 8
1200mm TO 2000mm	⊥L	2L"S 90 X 65 X 8 LLV.	⊥L	2L"S 150 X 90 X 8 LLV.	⊥L	2L"S 150 X 100 X 8 LLV.	⊥L L	3L"S 150 X 90 X 8 LLV.

NOTES FOR STEEL LINTELS

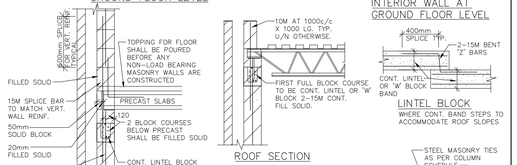
1. DOUBLE ANGLES SHALL BE PLACED BACK TO BACK AND BOLTED TOGETHER WITH BOLTS AT 600o/c OR EQUIVALENT STITCHWELD TOP AND BOTTOM 16ø MIN.
2. MINIMUM BEARING OF LINTELS SHALL BE 150mm SEE PLAN ABOVE
3. FOR WALLS THICKER THAN 290mm ADD 1 ANGLE OF SIZE SPECIFIED ABOVE FOR EVERY 100 OF MASONRY OR PORTION THEREOF.
4. SEE NOTE No.4 ABOVE
5. FOR LINTELS IN NON-LOAD BEARING 140 WALLS OVER 2000mm, PROVIDE W200 X 27 BEAM.
6. PROVIDE SINGLE 90 X 90 X 8L FOR OPENINGS IN 90mm BLOCK ENCLOSURES FOR SPAN UP TO 1200mm. FOR LOCATIONS SEE ARCHITECTURAL AND MECHANICAL DRAWINGS.

LINTEL DETAILS — 4



EXTERIOR WALL AT GROUND FLOOR LEVEL

INTERIOR WALL AT GROUND FLOOR LEVEL

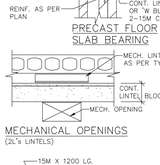


PRECAST FLOOR SLAB BEARING

ROOF SECTION

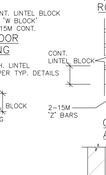
LINTEL BLOCK

WHERE CONT. BAND STEPS TO ACCOMMODATE ROOF SLOPES

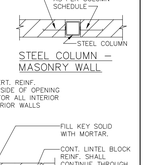


MECHANICAL OPENINGS

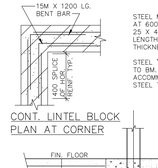
(2L"s LINTELS)



CONT. LINTEL BLOCK AT BEAM BEARING

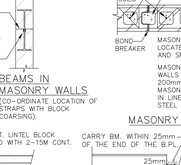


STEEL COLUMN — MASONRY WALL

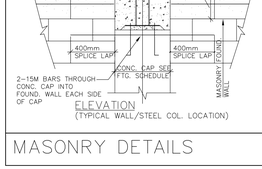


BEAMS IN MASONRY WALLS

(CO-ORDINATE LOCATION OF STRAPS WITH BLOCK COARSING).



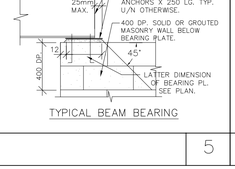
MASONRY CONTROL JOINT



ELEVATION

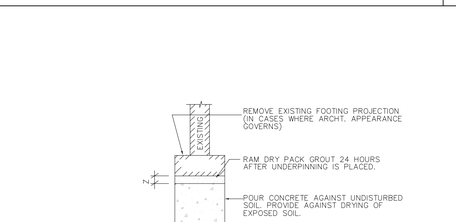
(TYPICAL WALL/STEEL COL. LOCATION)

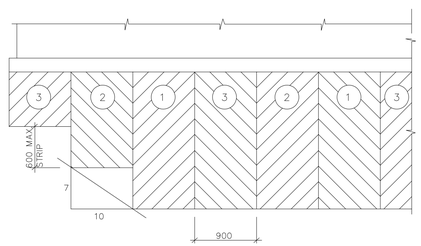
CONT. LINTEL BLOCK PLAN AT CORNER



TYPICAL BEAM BEARING

MASONRY DETAILS — 5

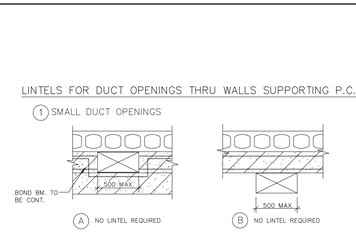




1. UNDERPINNING SHALL BE CARRIED OUT USING 20MPa CONCRETE.
2. UNDERPINNING SHALL BE DONE IN 900 LENGTHS.
3. NUMBERS ON ELEVATION(S) ABOVE INDICATE STAGES IN WHICH UNDERPINNING SHALL PROCEED. i.e. ALL SECTIONS #1 FOLLOWED BY ALL SECTIONS #2 etc. RAM DRY PACK GROUT IN PLACE AND LEAVE FOR 24 HOURS BEFORE PROCEEDING WITH NEXT STAGE.
4. UNDERPINNING FOR EXIST. WALLS ARE SHOWN FOR ASSUMED CONDITIONS. ANY VARIATION BETWEEN ACTUAL JOB CONDITIONS AND DETAILS SHOWN ON THESE DRAWINGS MUST BE REPORTED TO THE ARCHITECT BEFORE PROCEEDING WITH THE WORK.
5. PROVIDE ALL NECESSARY SHORING OR NEEDLING OF EXIST. MASONRY OR OTHER PARTS OF THE EXIST. STRUCTURE IN ORDER TO CARRY OUT THIS WORK.

UNDERPINNING — 6

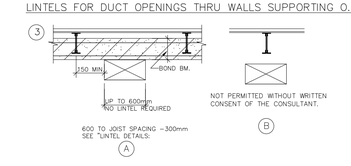
LINTELS FOR DUCT OPENINGS THRU WALLS SUPPORTING P.C. SLABS



CLEAR SPAN	WALL THICKNESS		
	190 WALL	240 WALL	290 WALL
UP TO 700 mm	2 L's 90 X 90 X 8	1 L 125 X 90 X 8 LLH + 1 L 100 X 100 X 8	3 L' 90 X 90 X 8
UP TO 950 mm	2 L's 125 X 90 8 LLV	2 L's 150X100X8 LLV	3 L's 125X90X8 LLV
UP TO 2400 [UNLESS NOTED OTHERWISE ON DWGS]	W150 X 22 OR W150X22 + 170X8 PL. BOT. FOR MAS.	W150 X 22 OR W150X22 + 220X8 PL. BOT. FOR MAS.	W150 X 22 OR W150X22 + 270X8 PL. BOT. FOR MAS.

FOR 390 THICK WALLS PROVIDE LINTELS AS FOR 2-190 WALLS

LINTELS FOR DUCT OPENINGS THRU WALLS SUPPORTING O.W.S.J.



- PROVIDE MINIMUM 400mm SOLID MASONRY BETWEEN MECHANICAL OPENINGS. TYPICAL.
- UNLESS NOTED OTHERWISE, FOR OPENINGS IN EXTERIOR WALLS PROVIDE LINTEL AS NOTED ABOVE FOR BACK UP WALL + STEEL ANGLE FOR VENEER. PROVIDE 90 X 90 X 8L FOR SPAN UP TO 1200mm OR 150 X 90 X 8L LLV FOR SPAN UP TO 2000mm.

LINTELS FOR DUCTS AND SERVICES — 7

CHECK ALL DIMENSIONS SHOWN ON THE STRUCTURAL DRAWINGS AND REPORT DISCREPANCIES TO THE ARCHITECT BEFORE PROCEEDING WITH THE WORK.

FOR LOCATION OF SUMPS, PITS, BASES AND DEPRESSIONS REFER TO ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS.

DO NOT EXCEED THE DESIGN LIVE LOADS SHOWN DURING CONSTRUCTION.

THIS STRUCTURE HAS BEEN DESIGNED TO COMPLY WITH O.B.C. 2024.

THE GENERAL CONTRACTOR SHALL EXAMINE EXISTING SITE CONDITIONS AND REPORT ANY INCONSISTENCIES TO THE ARCHITECT BEFORE STARTING ANY WORK.

REFER TO ARCHITECTURAL DRAWINGS FOR STEPPING OF WALL FOOTINGS.

FOUNDATION NOTES:

FOOTING EXCAVATIONS SHALL BE INSPECTED BY A SOILS ENGINEER BEFORE CONCRETE IS PLACED.

FOOTINGS EXPOSED TO FREEZING SHALL BE PLACED AT LEAST 1200mm BELOW FINISHED GRADE.

PROTECT FOOTINGS EXPOSED TO FROST ACTION DURING CONSTRUCTION BY 1200mm OF SOIL OR ITS EQUIVALENT.

THE LINE OF SLOPE BETWEEN ADJACENT FOOTINGS, EXCAVATIONS OR ALONG STEPPED FOOTINGS SHALL NOT EXCEED A RISE OF 7 IN A RUN OF 10. MAXIMUM STEP 600mm.

WHERE A FOUNDATION WALL RETAINS SOIL ON EACH FACE BACKFILL ON BOTH SIDES SIMULTANEOUSLY.

PROVIDE FOOTINGS FOR PARTITIONS THICKER THAN 150mm.

REFER TO THE SOIL REPORT FOR SOIL CONDITIONS AND BEARING PRESSURES.

STRUCTURAL STEEL NOTES:

CENTRE BEARING PLATES UNDER BEAMS OR AS NOTED. BEARING PLATE DIMENSION GIVEN LAST INDICATES SIDE PARALLEL TO BEAM WEB.

STRUCTURAL STEEL SHALL BE GRADE G40.21M 350W HOLLOW STRUCTURAL SECTIONS WHICH SHALL BE G40.21M 350W CLASS C.

CONCRETE NOTES:

THE ULTIMATE 28 DAY STRENGTH OF CONCRETE SHALL BE 25MPa. REINFORCING STEEL SHALL BE DEFORMED BARS OF 400MPa YIELD STRENGTH.

MASONRY NOTES:

PROVIDE MINIMUM 200mm OF BEARING FOR STEEL OR CONCRETE BEAMS SUPPORTED ON MASONRY. REFER TO DRAWINGS FOR SIZES OF BEARING PLATES. BEARING SHALL BE OF SOLID BLOCK OR BLOCK FILLED SOLID WITH 20MPa CONCRETE 400mm DEEP AND PROJECTING 200mm EACH SIDE OF BEAM BEARING PLATE, BASE PLATE OR CONCRETE PAD. REFER ALSO TO TYPICAL DETAIL SHEET 4M.

PROVIDE 200mm DEPTH OF SOLID MASONRY UNDER STEEL JOISTS BEARING ON MASONRY.

BUILD MASONRY TIGHT INTO WEBS OF BEAMS AT THEIR BEARINGS.

PROVIDE ALL TEMPORARY BRACING REQUIRED TO HOLD ALL WALLS PLUMB AND TRUE TO LINE DURING CONSTRUCTION UNTIL THE BUILDING IS COMPLETED.

ALL LOAD BEARING MASONRY WALLS SHALL BE "ENGINEERED MASONRY" IN COMPLIANCE WITH CAN/CSA S304.1.

ALL BLOCK WALLS SHALL BE CONSTRUCTED FROM CONCRETE BLOCK UNITS IN COMPLIANCE WITH CAN3/CSA-A165 SERIES. MINIMUM COMPRESSIVE STRENGTH 15MPa UNLESS NOTED OTHERWISE ON DRAWINGS.

ALL BLOCK VOIDS WITH REINFORCING BARS SHALL BE FILLED SOLID WITH 20MPa OR COURSE GROUT.

PROVIDE MINIMUM TWO SOLID OR FILLED SOLID WITH 20MPa CONCRETE, BLOCK COURSES FOR ALL PRECAST SLABS SUPPORTED ON MASONRY.

ALL MASONRY PARTITIONS SHALL BE CONSTRUCTED ON TOP OF CONCRETE TOPPING OF PRECAST FLOORS SLABS.

PRECAST CONCRETE SLABS:

PRECAST CONCRETE SLABS SHALL BE DESIGNED IN COMPLIANCE WITH ALL APPLICABLE CODES AND SHOP DRAWINGS SHALL BE STAMPED BY A PROFESSIONAL ENGINEER LISCENCED IN ONTARIO.

THE PRECAST SLAB SUPPLIER SHALL REVIEW THE TENDER DOCUMENTS AND CARRY IN HIS TENDER COSTS FOR ANY ADDITIONAL MATERIAL REQUIRED TO ACCOMMODATE PRECAST BEARING BUT NOT INDICATED ON THE STRUCTURAL DRAWINGS.

GENERAL NOTES — 8

NOTE: THIS DRAWING IS NOT TO BE SCALED. THE CONTRACTOR IS RESPONSIBLE FOR THE VERIFICATION OF ALL SITE DIMENSIONS AND FOR NOTIFYING THE ARCHITECT OF ANY SITE CONDITIONS AND SITE MEASUREMENTS THAT ARE NOT CONSISTENT WITH THE DRAWINGS.

LICENSED PROFESSIONAL ENGINEER — V. KOO — 100062276 — PROVINCE OF ONTARIO — April 01, 2026

no.	revision	date

no.	issue	date
1	Issued for Permit and Tender	April 01, 2026
2	Issued for Construction	June 02, 2026

project

WRDSB PRESTON HIGH SCHOOL RENOVATIONS

WATERLOO REGION DISTRICT SCHOOL BOARD
550 ROSE ST., CAMBRIDGE, ON. N3H 2E6

drawing

GENERAL NOTES

drawing scale

NTS

ward99 project number

25023 - WRDSB PRESTON FAMILY STUDIES AND CLASSROOM

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drawing no.

S4

VX PROJECT NO. 2604