COVER	RS AND DRAWING LISTS	<u>MECH</u>	ANICAL
00	COVER SHEET	DM10	DEMOLITION PLUMBING - WING B LEVEL 1
CIVIL		DM11 DM12	DEMOLITION PLUMBING - WING B LEVEL 2 DEMOLITION PLUMBING - WING C LEVEL 1
C01	SITE SERVICING PLAN	DM13	DEMOLITION FLOMBING - WING C LEVEL 1
C02	CIVIL DETAILS	DM14	DEMOLITION HVAC - WING B LEVEL 2
		DM15	DEMOLITION HVAC - WING C LEVEL 1
ARCHII	<u>rectural</u>	DM16 M10	DEMOLITION MECHANICAL - RM 120 AND PENTHOUSE 302 PLUMBING - WING B LEVEL 1
A01	OBC REVIEW	M11	PLUMBING - WING B LEVEL 1 PLUMBING - WING B LEVEL 2
A02 A05	OBC DATA CONSTRUCTION TYPES	M12	PLUMBING - WING C LEVEL 1
A10	EXISTING FLOOR PLAN - WING B LEVEL 1	M20	HEATING - WING B LEVEL 1
A11	EXISTING FLOOR PLAN - WING B LEVEL 2	M21 M22	HEATING - WING B LEVEL 2 HEATING - WING C LEVEL 1
A12	EXISTING FLOOR PLAN - PENTHOUSES AND WING C	M30	VENTILATION - WING B LEVEL 1
A13 A14	ALTERED FLOOR PLAN - WING B LEVEL 1 ALTERED FLOOR PLAN - WING B LEVEL 2	M31	VENTILATION - WING B LEVEL 2
A15	ALTERED FLOOR PLAN - PENTHOUSES AND WING C	M32	VENTILATION - WING C LEVEL 1
A16	PARTIAL ALTERED FLOOR PLANS	M40 M50	FIRE SUPPRESSION - WING B AND C MECHANICAL ROOM - WING B
A17	ALTERATIONS TO DIGESTER ROOM	M51	PENTHOUSE - WING B
A20 A21	EXISTING EXTERIOR ELEVATIONS ALTERED EXTERIOR ELEVATIONS	M52	ROOF PLAN
A22	PARTIAL ALTERED EXTERIOR ELEVATIONS	M53 M54	MECHANICAL SECTIONS MECHANICAL STANDARD DETAILS
A25	INTERIOR ELEVATIONS	M60	STEAM DISTRIBUTION SCHEMATICS
A26 A27	INTERIOR ELEVATIONS INTERIOR ELEVATIONS AND DETAILS	M61	HOT WATER HEATING SCHEMATICS
A27 A28	INTERIOR ELEVATIONS AND DETAILS INTERIOR ELEVATIONS AND DETAILS	M62	CHILLED WATER AND GLYCOL SCHEMATIC
A30	BUILDING SECTIONS	M63	VENTILATION SCHEMATICS
A31	BUILDING SECTIONS	M64 M66	PLUMBING SCHEDULE AND SCHEMATICS HEATING SCHEDULES
A32 A33	EXISTING WALL SECTIONS EXISTING WALL SECTIONS	M67	VENTILATION SCHEDULES 1 OF 2
A33 A34	EXISTING WALL SECTIONS EXISTING WALL SECTIONS	M68	VENTILATION SCHEDULES 2 OF 2
A35	ALTERED WALL SECTIONS	M70 M71	CONTROLS SCHEMATIC 1 OF 3 CONTROLS SCHEMATIC 2 OF 3
A36	ALTERED WALL SECTIONS	M72	CONTROLS SCHEMATIC 2 OF 3 CONTROLS SCHEMATIC 3 OF 3
A37 A40	ALTERED WALL SECTIONS PLAN DETAILS	M73	CONTROLS PLAN
A40 A41	PLAN DETAILS PLAN DETAILS	M80	MSCL
A42	PLAN DETAILS	ГІГОТ	DICAL
A43	PLAN DETAILS	ELECT	
A44 A45	PLAN DETAILS SECTION DETAILS	DE10 DE11	EXISTING POWER AND FIRE ALARM - WING B LEVEL 1 EXISTING POWER AND FIRE ALARM - WING B LEVEL 2
A46	SECTION DETAILS	DE12	EXISTING FOWER AND FINE ALARM - WING B LEVEL 2  EXISTING ELECTRICAL SYSTEMS - WING C
A47	SECTION DETAILS	DE13	EXISTING LIGHTING - WING B LEVEL 1
A50	EXISTING RCP - WING B LEVEL 1 EXISTING RCP - WING B LEVEL 2	DE14	EXISTING LIGHTING - WING B LEVEL 2
A51 A52	EXISTING RCP - WING B LEVEL 2  EXISTING RCP - PENTHOUSE AND WING C	DE15 E01	SINGLE LINE DEMOLITION ELECTRICAL COVER SHEET & LUMINAIRE SCHEDULE
A53	ALTERED RCP - WING B LEVEL 1	E02	SINGLE LINE DIAGRAM
A54	ALTERED RCP - WING B LEVEL 2	E03	ELECTRICAL SITE PLAN
A55 A56	ALTERED RCP - PENTHOUSE AND WING C PARTIAL REFLECTED CEILING PLANS AND DETAILS	E09 E10	STAIR SECTIONS - WING B LIGHTING LAYOUT - WING B LEVEL 1
A57	PARTIAL REFLECTED CEILING PLANS AND DETAILS	E11	LIGHTING LAYOUT - WING B LEVEL 1 LIGHTING LAYOUT - WING B LEVEL 2
A58	PARTIAL REFLECTED CEILING PLANS AND DETAILS	E12	LIGHTING LAYOUT - WING C
A59 A60	CEILING AND BULKHEAD DETAILS ELEVATOR DETAILS	E15	LIGHTING CONTROL SCHEMATICS SHEET No.1
A65	EXISTING PARTIAL FLOOR PLANS - STAIRS	E16 E17	LIGHTING CONTROL SCHEMATICS SHEET No.2 LIGHTING CONTROL SCHEMATICS SHEET No.3
A66	ALTERED PARTIAL FLOOR PLANS - STAIRS	E18	LIGHTING CONTROL SCHEMATICS SHEET No.4
A67	STAIR SECTIONS	E20	POWER LAYOUT - WING B LEVEL 1
A68 A70	STAIR DETAILS EXISTING ROOF PLAN	E21 E22	FIRE ALARM LAYOUT - WING B LEVEL 1 MECHANICAL EQUIPMENT - WING B LEVEL 1
A71	ALTERED ROOF PLAN AND DETAILS	E23	POWER LAYOUT - WING B LEVEL 1
A72	ROOF DETAILS	E24	FIRE ALARM LAYOUT - WING B LEVEL 2
A75 A80	CANOPY DETAILS DOOR AND FRAME SCHEDULE, DOOR AND FRAME TYPES	E25	MECHANICAL EQUIPMENT - WING B LEVEL 2
A81	INTERIOR SCREEN AND WINDOW TYPES	E26 E27	ELECTRICAL LAYOUT - WING B MECHANICAL PENTHOUSE POWER AND FIRE ALARM LAYOUT - WING C
A82	CURTAIN WALL TYPES AND DETAILS	E28	MECHANICAL EQUIPMENT - WING C
A85	ROOM FINISH SCHEDULE	E29	ROOF LAYOUT
A86 A87	FLOOR FINISH PLAN - WING B LEVEL 1 FLOOR FINISH PLAN - WING C LEVEL 2	E30 E31	LIGHTING CONTROL SCHEDULE AND DETAILS MOTOR STARTER AND CONTROL LIST
A88	FLOOR FINISH PLAN - WING C AND DETAILS	E32	FIRE ALARM RISER DIAGRAM
A90	MILLWORK PLANS, ELEVATIONS AND DETAILS	E33	PANEL SCHEDULES - 1 OF 4
A91 A92	MILLWORK PLANS, ELEVATIONS AND DETAILS MILLWORK PLANS AND ELEVATIONS	E34	PANEL SCHEDULES - 2 OF 4
A92 A93	MILLWORK PLANS AND ELEVATIONS  MILLWORK PLANS AND ELEVATIONS	E35 E36	PANEL SCHEDULES - 3 OF 4 PANEL SCHEDULES - 4 OF 4
A94	MILLWORK PLANS AND ELEVATIONS	200	1711422 0011200220 4 01 4
A95	MILLWORK PLANS AND ELEVATIONS	COMM	UNICATIONS
A96 A97	MILLWORK SECTIONS MILLWORK SECTIONS	T100	TITLE PAGE
A98	MILLWORK SECTIONS	T100	SCHEMATICS
A99	MILLWORK SECTIONS AND DETAILS	T102	B-WING FLOOR 1 LAYOUT
STRUC	TURAL	T103	B-WING FLOOR 2 LAYOUT
		T104 T105	PATHWAYS DETAILS INSTALLATION DETAILS
S00 S01	GENERAL NOTES SCHEDULES AND STANDARD DETAILS	T105	GROUNDING AND BONDING DETAILS
S02	STANDARD DETAILS	T107	RACK ELEVATIONS
S10	EXISTING FOUNDATION PLAN - WING B AND C LEVEL 1	T108	AVELEVATIONS WING B LEVEL 1
S11	EXISTING FRAMING PLAN - WING B LEVEL 2	T109 T110	AV LAYOUT AND RISERS AV ELEVATIONS WING B LEVEL 2
S12 S13	EXISTING FRAMING PLAN - WING B ROOF EXISTING FRAMING PLANS - WING B AND C ROOF	1110	, .v LLL v/. I I O I VV II VO D LL V LL Z
S13	ALTERED FRAMING PLANS - WING B LEVEL 2		
S15	ALTERED FRAMING PLAN - WING B ROOF		
S16 S20	ALTERED FRAMING PLAN - WING C ROOF  ENLARGED FRAMING PLANS - WING B		

ENLARGED FRAMING PLANS - WING B

FRAMING ELEVATIONS FRAMING ELEVATIONS

SECTIONS AND DETAILS



Design, Engineering & Construction Physical Resources Guelph, Ontario. N1G 2W1

# BUILDING #046 RENOVATIONS

JLR JOB NO. 27915 ISSUED FOR PERMIT & TENDER NOVEMBER 2, 2018

STRUCTURAL DRAWING SET



#### GENERAL NOTES

- 1. PERFORM ALL WORK TO THE REQUIREMENTS OF THE ONTARIO BUILDING CODE (2012). OBSERVE ALL LOCAL AND PROVINCIAL REGULATORY REQUIREMENTS AND EXECUTE ALL WORK TO THE REQUIREMENTS OF THE APPLICABLE CSA STANDARDS. ALL WORKMANSHIP TO BE REPRESENTATIVE OF THE HIGHEST INDUSTRY STANDARD.
- 2. STRUCTURAL DESIGN IN ACCORDANCE WITH THE ONTARIO BUILDING CODE 2012 AND THE USER'S GUIDE - NBC 2010 STRUCTURAL COMMENTARIES (PART 4 DIVISION B).
- 3. COMPLY WITH ALL REQUIREMENTS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT.
- 4. READ THESE DRAWINGS IN CONJUNCTION WITH THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, COMMUNICATIONS / IT, AND CIVIL DRAWINGS. COORDINATE THE REQUIREMENTS OF THESE TRADES WITH THE STRUCTURAL WORK AND PROVIDE FOR OPENINGS, SLEEVES, DUCTS, ETC. IN THE CASE OF DISCREPANCIES, NOTIFY THE CONSULTANT IMMEDIATELY FOR CLARIFICATION.
- 5. IT IS THE INTENT OF THIS CONTRACT TO PROVIDE FINISHED WORK. ITEMS THAT ARE CLEARLY REQUIRED TO PROVIDE A FINISHED INSTALLATION ARE INCLUDED IN THE SCOPE WHETHER SPECIFICALLY NOTED OR NOT.
- 6. CONFIRM ALL DIMENSIONS, ELEVATIONS, GRADES AND EXISTING CONDITIONS PRIOR TO COMMENCING THE WORK AND REPORT ANY DISCREPANCIES TO THE CONSULTANT. EXISTING DIMENSIONS ARE BASED ON ORIGINAL DESIGN DRAWINGS AND ARE NOT WARRANTED FOR ACCURACY.
- THESE DRAWINGS SHOW FINISHED STRUCTURES ONLY. THE CONTRACTOR IS RESPONSIBLE FOR ANY TEMPORARY SUPPORT STRUCTURES REQUIRED TO COMPLETE THE WORK. THE CONTRACTOR IS TO PROVIDE SHOP DRAWINGS SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF ONTARIO, FOR ANY SUCH TEMPORARY SUPPORT STRUCTURES. EXTENTS OF SHORING DENOTED ON DRAWINGS IS CONCEPTUAL ONLY AND TO BE CONFIRMED BY CONTRACTOR TO SUIT THEIR PLANNED SEQUENCE OF
- 8. PROPRIETARY SYSTEMS ARE TO BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- 9. INSTALL TEMPORARY HOARDING AND SHORING, AS REQUIRED, TO PROTECT WORKERS AND OCCUPANTS OF THE SITE. MAINTAIN EXITS AT ALL TIMES. RESTORE DAMAGED CONSTRUCTION TO THE SATISFACTION OF THE CONSULTANT.
- 10. DO NOT SCALE DRAWINGS. DRAWING UNITS ARE METRIC AND REFERENCE DIMENSIONS ARE IN MILLIMETERS, UNLESS NOTED OTHERWISE.
- 11. EXISTING REINFORCING IN WALLS AND SLABS TO BE LOCATED PRIOR TO CORING OR CUTTING ANY NEW OPENINGS. SEE STANDARD DETAILS. CONTRACTOR TO ADVISE ENGINEER ON RESULTS AND OBTAIN APPROVAL PRIOR TO COMMENCEMENT OF CORING CORES TO BE LOCATED SUCH THAT THE NUMBER OF REINFORCING BARS CUT IS AT A

#### COLD & HOT WEATHER WORK

- 12. PROTECT ALL EXCAVATIONS, TEMPORARY WORKS, EXISTING/NEW STRUCTURES FROM FROST ACTION DURING CONSTRUCTION.
- 13. PROVIDE TEMPORARY HEAT, INSULATION MATERIALS OR OTHER MEANS AS REQUIRED TO PROTECT CONCRETE FROM FREEZING.
- 14. PERFORM HOT AND COLD WEATHER CONCRETE WORK IN ACCORDANCE WITH CAN/CSA

- 15. ALL NEW STRUCTURES DESIGNED TO HIGH IMPORTANCE LEVEL, UNLESS NOTED OTHERWISE.
- 16. GRAVITY AND LIVE LOADS APPEAR ON PLAN DRAWINGS.

- 17. PERFORM ALL CONCRETE WORK TO CAN/CSA A23.1, A23.2 AND A23.3 LATEST EDITION.
- 18. CONCRETE COMPRESSIVE STRENGTHS & CLASS OF EXPOSURE

<ul> <li>UNSHRINKABLE CONCRETE FILL</li> <li>MUD SLABS / LEAN CONCRETE</li> <li>HOUSEKEEPING PADS</li> </ul>	fc= 7 MPa fc= 0.5 MPa fc= 25 MPa	CLASS N CLASS N CLASS N
<ul> <li>FOOTINGS, INTERIOR PIERS, INTERIOR FOUNDATION WALLS:</li> <li>EXTERIOR FOUNDATION WALLS &amp; PIERS:</li> <li>SIDEWALKS AND CURBS</li> <li>INTERIOR SLABS-ON-GRADE:</li> </ul>	fc= 35 MPa fc= 35 MPa fc= 35 MPa fc= 35 MPa	CLASS N CLASS F-2 CLASS C-1 CLASS N

- 19. CONTRACTOR TO NOTIFY CONSULTANT PRIOR TO CONCRETE PLACEMENT IN ACCORDANCE WITH CONTRACTORS QUALITY PLAN.
- 20. DOWELS, ANCHOR BOLTS, EMBEDDED PLATES, ETC., ARE TO BE IN PLACE AND ACCURATELY LOCATED PRIOR TO CASTING CONCRETE.
- 21. PREVIOUSLY PLACED CONCRETE AT CONSTRUCTION JOINTS OR WHERE NEW CONCRETE IS BEING PLACED AGAINST EXISTING TO BE WIRE BRUSHED, CLEANED AND MOISTENED IMMEDIATELY PRIOR TO PLACING FRESH CONCRETE. INTENTIONALLY ROUGHEN CONCRETE AT CONSTRUCTION JOINTS TO 5mm AMPLITUDE TO EXPOSE AGGREGATES AND PROVIDE INTERLOCK BETWEEN CONCRETE PLACEMENTS.
- 22. FORMWORK FOR CONCRETE TO CAN/CSA S269.1 LATEST EDITION. DESIGN, FABRICATION, INSPECTION AND DISMANTLING OF FORMWORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ALL FORMWORK SHALL BE LEFT IN PLACE UNTIL THE CONCRETE HAS SUFFICIENT STRENGTH TO SUPPORT THE SELF WEIGHT OF THE CAST MEMBERS AND CONSTRUCTION LOADS.
- 23. ALL TEMPORARY STRUCTURAL SUPPORTS FOR CONCRETE FORMWORK TO BE DESIGNED AND INSPECTED BY A PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF
- 24. A SMOOTH-FORM FINISH WILL BE REQUIRED FOR ALL SURFACES EXPOSED TO VIEW IN THE
- 25. ALL EXPOSED CONCRETE EDGES TO HAVE FORMED 25mm CHAMFER UNLESS NOTED OTHERWISE.
- 26. CURE ALL CONCRETE IN ACCORDANCE WITH THE REQUIREMENTS OF CSA A23.1.
- 27. REMOVE ALL DEFECTIVE AND HONEYCOMBED CONCRETE DOWN TO SOUND CONCRETE TO CONSULTANT'S SATISFACTION. SUBMIT REPAIR PROCEDURE FOR REVIEW BY CONSULTANT.
- 28. CONFIRM LOCATION AND SIZE OF HOUSEKEEPING PADS WITH THE MECHANICAL AND ELECTRICAL DRAWINGS. ALL EQUIPMENT CURBS TO BE CONSTRUCTED TO TYPICAL DETAILS UNLESS NOTED OTHERWISE.

## REINFORCING

- 29. ALL REINFORCING STEEL TO BE NEW, DEFORMED BARS CONFORMING TO CSA G30.18 GRADE 400. PROVIDE GRADE 400W WHERE WELDABLE REINFORCING STEEL IS REQUIRED.
- 30. CONCRETE CLEAR COVER TO PRIMARY REINFORCING:
- CONCRETE DEPOSITED AGAINST AND PERMANENTLY EXPOSED TO EARTH OR ROCK LIQUID RETAINING STRUCTURES CONCRETE DEPOSITED IN FORMS AND EXPOSED TO EARTH OR ROCK PIERS 50 mm EXTERIOR SLAB INTERIOR SLAB
- 31. DETAIL, PLACE AND PROTECT REINFORCING STEEL IN ACCORDANCE WITH CAN/CSA-A23.1
- 32. LAP LENGTHS AND BAR DEVELOPMENT LENGTHS TO BE IN ACCORDANCE WITH CAN/CSA A23.3. TENSION LAP SPLICES TO BE CLASS 'B'.

- 33. PROVIDE HOOKED ENDS OR 'L' CORNER BARS AT ALL END BEAMS, HORIZONTAL WALL AND FOOTING REINFORCING. UNLESS NOTED OTHERWISE, WALL FOOTING INTERSECTIONS, AND COLUMN FOOTING INTERSECTIONS. REFER TO STANDARD DETAILS.
- 34. ALL REINFORCING STEEL TO BE CHAIRED AND SECURELY TIED IN PLACE USING STANDARD TIES AND CHAIRS TO THE REQUIRED COVER FOR EXPOSED CONCRETE, CHAIRS AND BOLSTERS TO BE PLASTIC TIPPED OR STAINLESS STEEL.
- 35. STRAIGHTENING OR REBENDING OF REINFORCING BARS IS NOT PERMITTED.
- 36. WELDING OF REINFORCING SHALL NOT BE PERFORMED WITH PRIOR APPROVAL OF CONSULTANT. APPROVED WELDING SHALL CONFORM TO CSA W186 AND SHALL ONLY BE PERFORMED BY WELDERS CERTIFIED BY THE CWB.
- 37. DRILLED IN DOWELS TO BE SET IN HILTI HIT-HY 200 ADHESIVE ANCHORAGE SYSTEM (SAFE SET). REFER TO DRAWINGS FOR EMBEDMENT DEPTHS. PROVIDE MINIMUM 10x BAR DIAMETER EMBEDMENT WHERE NOT INDICATED ON DRAWINGS.
- 38. SUBMIT REINFORCEMENT SHOP DRAWINGS DETAILING ALL REINFORCEMENT IN ACCORDANCE WITH RSIC MANUAL OF STANDARD PRACTICE.

- 39. MASONRY WORK TO BE PERFORMED IN ACCORDANCE WITH CSA S304.1 LATEST EDITION AND CSA A371 "MASONRY CONSTRUCTION FOR BUILDINGS".
- 40. CONCRETE BLOCKS TO BE TYPE H/15/A/M UNLESS NOTED OTHERWISE AND TO CONFORM TO CSA A165 - LATEST EDITION.
- 41. MORTAR TO BE TYPE S, MIXED TO PROPORTION SPECIFICATIONS TO CSA A179-04.
- 42. GROUT TO BE FINE, MIXED TO PROPORTION SPECIFICATIONS TO CSA A179-04.
- 43. FILL ALL CELLS CONTAINING VERTICAL OR HORIZONTAL REINFORCING BARS AND CAST-IN OR DRILLED-IN ANCHORS WITH GROUT.
- 44. PROVIDE MASONRY LINTELS AS NOTED AND AS REQUIRED IN NEW CONSTRUCTION.
- 45. EXTEND ALL LINTEL REINFORCING AND SOLID GROUT FILL 200mm PAST EDGE OF OPENING ON BOTH SIDES, UNLESS NOTED OTHERWISE. 46. MASONRY CONTRACTOR TO BE RESPONSIBLE FOR SUPPLYING AND ERECTING ALL

TEMPORARY WORKS AND SUPPORTS REQUIRED TO COMPLETE MASONRY WORK. MAINTAIN

BRACING UNTIL GROUT/CONCRETE HAS ACHIEVED SPECIFIED STRENGTH INDICATED ON 47. REINFORCE MASONRY INFILL WITH A MINIMUM OF EXTRA HEAVY DUTY LADDER TYPE

HOT-DIPPED GALVANIZED HORIZONTAL REINFORCEMENT AT 400 crs. (IN EVERY 2ND

#### STRUCTURAL STEEL

- 48. STRUCTURAL STEEL DESIGN IN ACCORDANCE WITH CAN/CSA S16-09 LIMIT STATES DESIGN OF STEEL STRUCTURES AND THE CANADIAN INSTITUTE OF STEEL CONSTRUCTION HANDBOOK OF STEEL.
- 49. ALL STRUCTURAL STEEL CONSTRUCTION AND MISCELLANEOUS METALS TO CONFORM TO:
- HOT ROLLED STRUCTURAL SECTIONS AND BARS TO:
- CAN/CSA-G40.20/G40.21 GRADE 350W ANGLES AND PLATES TO:
- CAN/CSA-G40.20/G40.21 GRADE 300W
- HOLLOW STRUCTURAL SECTIONS (HSS) TO: CAN/CSA-G40.20/G40.21 GRADE 350W, CLASS H
- 50. BOLTS IN STRUCTURAL STEEL CONNECTIONS TO A325 WITH SUITABLE NUTS AND WASHERS.
- 51. ANCHOR BOLTS TO ASTM F1554 GRADE 36 WITH HEADED STUD OR NUTS AND WASHERS. "J" BOLTS ARE NOT ACCEPTABLE.
- 52. STRUCTURAL STEEL CONNECTIONS TO BE DESIGNED BY STEEL FABRICATOR. PROVIDE A MINIMUM OF TWO A325 BOLTS PER BOLTED CONNECTION.
- 53. STRUCTURAL STEEL SHOP DRAWINGS TO BE SEALED AND SIGNED BY A QUALIFIED PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF ONTARIO IN THE EMPLOY OF THE STEEL FABRICATOR.
- 54. SHOP AND SITE INSPECTIONS TO ENSURE CONFORMANCE WITH THE PROJECT SPECIFICATIONS WILL BE CONDUCTED BY TESTING COMPANY APPOINTED BY THE
- 55. THE CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY SHORING, BRACING AND SUPPORTS TO ADEQUATELY MAINTAIN THE PARTIALLY ERECTED STEEL IN PLACE DURING THE WORK. SUBMIT ERECTION DRAWINGS STAMPED AND SIGNED BY A QUALIFIED PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE OF ONTARIO INDICATING SEQUENCE OF ERECTION, ALL BRACING, AND LOADS.
- 56. ALL WELDING TO BE DONE BY QUALIFIED WELDERS FULLY APPROVED FOR STRUCTURAL WELDING BY THE CANADIAN WELDING BUREAU IN ACCORDANCE WITH CSA SPECIFICATION
- 57. WELDING IN ACCORDANCE WITH CSA W59. ELECTRODES TO BE E49XX.
- 58. ALL WELDS TO BE CONTINUOUS UNLESS NOTED OTHERWISE. THE MINIMUM FILLET WELD UNLESS NOTED OTHERWISE IS 6mm.
- 59. IF EXISTING METAL DECK IS DAMAGED DURING DEMOLITION, CONTRACTOR TO PROVIDE PROPOSED REPAIR DETAIL TO BE SUBMITTED TO CONSULTANT FOR REVIEW PRIOR TO

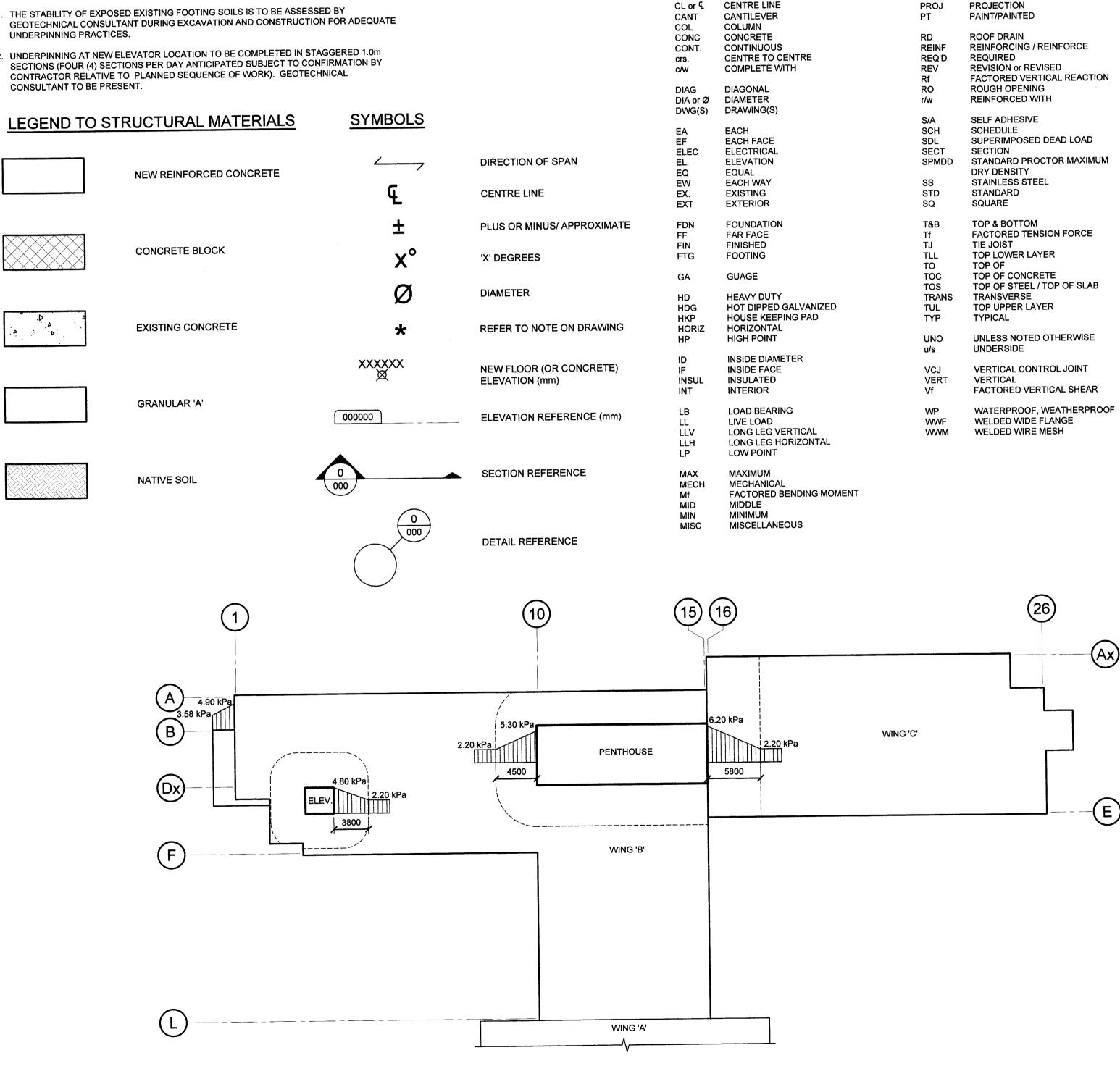
## ARCHITECTURALLY EXPOSED STRUCTURAL STEEL

- 60. STRUCTURAL STEEL ELEMENTS OR CONNECTIONS INDICATED ON DRAWINGS TO BE ARCHITECTURALLY EXPOSED STRUCTURAL STEEL (AESS), ARE TO BE DETAILED, FABRICATED, INSTALLED AND FINISHED IN CONFORMANCE WITH EITHER THE REQUIREMENTS OF CISC-AESS CATEGORY 2 or 3 FEATURE ELEMENTS AS INDICATED ON THE
- 61. PRIOR TO BLAST CLEANING, ANY DEPOSITS OF GREASE OR OIL ARE TO BE REMOVED BY SOLVENT CLEANING IN ACCORDANCE WITH SSPC-SP 1.
- 62. ROUGH SURFACES ARE TO BE DEBURRED AND GROUND SMOOTH. SHARP EDGES RESULTING FROM FLAME CUTIING, GRINDING AND SHEARING ARE TO BE SOFTENED.
- 63. INTERMITTENT WELDS ARE TO BE MADE CONTINUOUS, EITHER WITH ADDITIONAL WELDING, CAULKING OR BODY FILLER. SEAMS OF HOLLOW STRUCTURAL SECTIONS SHALL BE ACCEPTABLE AS PRODUCED.
- 64. ALL BOLT HEADS IN CONNECTIONS SHALL BE ON THE SAME SIDE, AS SPECIFIED, AND CONSISTENT FROM ONE CONNECTION TO ANOTHER.
- 65. WELD SPLATTER, SLIVERS AND SURFACE DISCONTINUITIES ARE TO BE REMOVED. WELD PROJECTIONS UP TO 2 mm ARE ACCEPTABLE FOR BUT AND PLUG WELDED JOINTS.
- 66. MEMBERS MARKED WITH SPECIFIC NUMBERS DURING THE FABRICATION AND ERECTION PROCESSES ARE NOT TO BE VISIBLE.
- 67. ALL MILL MARKS ARE NOT TO BE VISIBLE IN THE FINISHED PRODUCT.
- 68. THE MATCHING OF ABUTTING CROSS-SECTIONS SHALL BE REQUIRED.
- 69. A CLEAR DISTANCE BETWEEN ABUTTING MEMBERS OF 3 mm IS REQUIRED.
- 70. HIDDEN BOLTS MAY BE CONSIDERED.

#### STRUCTURAL METAL STUD FRAMING

- 71. MATERIAL FOR COLD FORMED STEEL STUDS, BRACING, BRIDGING CHANNELS, AND CLIPS, ETC., SHALL MEET THE REQUIREMENTS OF CAN/CSA-S136-12.
- 72. DESIGN AND DETAIL MEMBERS AND CONNECTIONS IN ACCORDANCE WITH REQUIREMENTS OF CAN/CSA S136-16. SUBMIT SHOP SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF ONTARIO IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
- 73. ALL STUD TRACKS ARE TO BE SAME GAUGE AS STUDS, WITH A WIDTH TO MATCH STUD AND STANDARD LEGS, UNLESS NOTED OTHERWISE.
- 74. FASTENERS FROM STUDS OR TRACKS:
  - TO STRUCTURAL STEEL: POWDER ACTUATED PINS (HILTI X-S13) 12.7 mm LONG @ 400 crs UNLESS INDICATED OTHERWISE.
  - TO CONCRETE: UNLESS INDICATED OTHERWISE PROVIDE POWDER ACTUATED PINS (HILTI XC) WITH MINIMUM EMBEDMENT OF 30 mm (1 1/4") INTO CONCRETE @ 400 crs. MINIMUM EDGE DISTANCE FOR PINS TO CONCRETE TO BE 3".
- 75. STEEL STUDS SHALL NOT BE NOTCHED UNLESS DETAIL IS PROVIDED.
- 76. TENSION STRAPS AND ACCESSORIES IN ACCORDANCE WITH MANUFACTURER
- 77. METAL STUD WORK TO BE DONE IN ACCORDANCE WITH CSSBI S5, CSSBI S6 AND MANUFACTURERS SPECIFICATIONS.
- 78. ERECT METAL STUDS IN ACCORDANCE WITH NOTED CONTRACT DRAWINGS AND APPROVED
- 79. ERECT STUDS PLUMB, ALIGNED AND SECURED WITH (2) SCREWS MINIMUM.

- 80. REFER TO GEOTECHNICAL REPORT, BY CHUNG & VANDER DOELEN, NUMBER M181172 FOR FOOTING AND SUBGRADE INSPECTION AND RECOMMENDATIONS, DATED JULY 7, 2018.
- 81. THE STABILITY OF EXPOSED EXISTING FOOTING SOILS IS TO BE ASSESSED BY GEOTECHNICAL CONSULTANT DURING EXCAVATION AND CONSTRUCTION FOR ADEQUATE
- 82. UNDERPINNING AT NEW ELEVATOR LOCATION TO BE COMPLETED IN STAGGERED 1.0m SECTIONS (FOUR (4) SECTIONS PER DAY ANTICIPATED SUBJECT TO CONFIRMATION BY CONTRACTOR RELATIVE TO PLANNED SEQUENCE OF WORK). GEOTECHNICAL



**SNOW LOADING DIAGRAM** 

SCALE: 1:300

**ABBREVIATIONS** 

ADDITIONAL

BUILDING

BOTTOM

BLDG

BOT

ABOVE FINISHED FLOOR

**BOTTOM LOWER LAYER** 

BOTTOM UPPER LAYER

FACTORED COMPRESSIVE FORCE

BOTTOM EACH WAY

BLOCK (CONCRETE)

## DO NOT SCALE DRAWINGS:

Contractors must check and verify all site conditions. Notify the Owner's Representative in writing before proceeding with the work if discrepancies are evident between the drawings and the site condition. No extras to the contract will be allowed if discrepancies were evident prior to start of work.

#### UNEXPECTED DISCOVERY OF ASBESTOS:

Where a friable material is discovered during construction, renovations and/or demolition, and it is suspected to contain asbestos, the Contractor must stop all work that may disturb the material. The Contractor shall advise the Owner of the discovery and await instructions from the owner.



NOT APPLICABLE

NOT IN CONTRACT

NOT TO SCALE

OUTSIDE FACE

OVER HEAD

OWSJ

NON LOAD BEARING

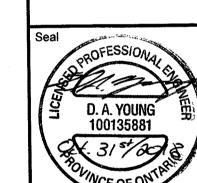
OUTSIDE DIAMETER

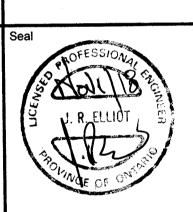
OPEN WEB STEEL JOIST

NEAR FACE

A = Detail number B = Drawing number where detailed

0 ISSUED FOR PERMIT & TENDER TA NOV 2, 2018 Orientation





Design, Engineering & Construction

Physical Resources Guelph, Ontario. N1G 2W1

RENOVATIONS

**BUILDING #046** 

STRUCTURAL

GENERAL NOTES

Cad File No. ----

UNIVERSITY OF GUELPH BUILDING #046

NOV 2, 2018 AS NOTED Drawing No. hecked By pproved B DAY/JRE 27915

PIER SCHEDULE				
MARK	SIZE	REINFORCING	TOC ELEV	
P1	400 x 400	(8) 15M VERTICAL & 10M TIES @ 200 crs	328.717	
P2	500 x 500	(8) 15M VERTICAL & 10M TIES @ 200 crs	327.756	
P3	550 x 400	(6) 15M VERTICAL & 10M U-BARS @ 200 crs	327.470	

1. REFER TO \$30 FOR PIER PLAN DETAILS.

COLUMN SCHEDULE					
MARK	SIZE	BASE PLATE TYPE	U/S BASE PLATE ELEV	REMARKS	
xC1	W200x46	EXISTING	EXISTING	-	
xC2	W150x37	EXISTING	EXISTING	-	
хСЗ	W150x22	EXISTING	EXISTING	-	
xC4	W150x22	BP2	328.742	SEE NOTES 3 & 4	
C5	W200x27	BP4	327.450	-	
C6	W150x22	BP6	330.724	-	
C7	W150x22	BP5	330.845	-	
C8	HSS152x152x8.0	BP3	327.736	SEE NOTE 4	
C9	HSS152x152x8.0	BP1	328.742	SEE NOTE 4	
C10	HSS152x152x9.5	BP1	327.370		
C11	HSS76x76x6.4			SEE S21 FOR DETAILS	

REFER TO S30 FOR BASE PLATE DETAILS.

TOP OF COLUMN ELEVATIONS AS NOTED ON PLAN UNLESS NOTED (-XXX). 3. EXISTING COLUMN TO BE CUT. PROVIDE BASE PLATE AT ELEVATION NOTED.

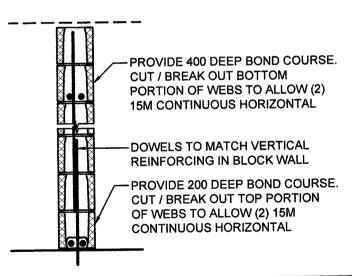
REFER TO \$20 FOR DETAILS.

4. ARCHITECTURALLY EXPOSED STRUCTURAL SECTION (AESS), AS NOTED ON PLAN. REFER TO GENERAL NOTES AND SPECIFICATIONS FOR INFORMATION.

LINTEL SCHEDULE				
MARK	SIZE	TYPE	DETAIL	
xL	EXISTING	<u> </u>	-	
L1	(2) L152x102x13 LLV		1 / 801	
L2	(2) L127x89x7.9 LLV		2 / S01	
L3	200 DEEP BLOCK BOND BEAM	**	3 / S01	
L4	400 DEEP BLOCK BOND BEAM	-	4 / S01	
L5	AS PER DETAIL	LJ	5 / S01	

CONCRETE BLOCK WALL SCHEDULE				
MARK	SIZE	VERTICAL REINFORCING	HORIZONTAL REINFORCING	REMARKS
xW1	245 BLOCK	EXISTING	EXISTING	-
xW2	190 BLOCK	EXISTING	EXISTING	-
xW3	140 BLOCK	EXISTING	EXISTING	-
xW4	200 CONC.	EXISTING	EXISTING	-
xW5	150 CONC.	EXISTING	EXISTING	-
W6	245 BLOCK	SEE NOTE 2.	SEE NOTE 2.	SEE NOTE 1.
W7	245 BLOCK	-	SEE NOTE 2.	INFILL EX. OPENING
W8	190 BLOCK		SEE NOTE 2.	INFILL EX. OPENING

1. WALLS TO EXTEND TO U/S ROOF DECK OR STRUCTURE. 2. REFER TO DETAIL 12 FOR BLOCK REINFORCING AND BOND COURSING DETAILS.



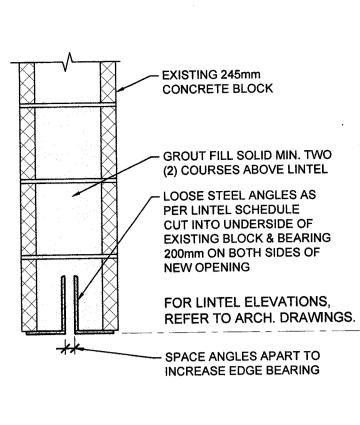
CONCRETE BLOCK REINFORCING SCHEDULE					
SIZE	VERTICAL REINFORCING	HORIZONTAL REINFORCING			
140 NON-LOAD BEARING	15M @ 600 crs. PROVIDE (1) 15M AT END CORES AND ON EACH SIDE OF OPENINGS	HEAVY DUTY LADDER TYPE @ 400 crs.			
190 NON-LOAD BEARING	15M @ 600 crs. PROVIDE (1) 15M AT END CORES AND ON EACH SIDE OF OPENINGS	HEAVY DUTY LADDER TYPE @ 400 crs.			
245 NON-LOAD BEARING	20M @ 400 crs. PROVIDE (1) 20M AT END CORES AND ON EACH SIDE OF OPENINGS	EXTRA HEAVY DUTY LADDER TYPE @ 400 crs.			
245 LOAD BEARING (AT ELEVATOR SHAFT)	20M @ 400 crs. PROVIDE (1) 20M AT END CORES AND ON EACH SIDE OF OPENINGS. GROUT CORES SOLID AT ELEVATOR GUIDE RAIL SUPPORT LOCATIONS. PROVIDE BOND BEAM AT EACH FLOOR AS PER NOTE 2.	EXTRA HEAVY DUTY LADDER TYPE @ 200 crs. PROVIDE 400 DEEP BOND BEAMS AT BASE AND TOP OF WALL r/w (2) 15M			

PROVIDE FIVE (5) REINFORCED SOLID GROUTED CORES AT EACH CORNER, FIVE (5) CORES AT TEE INTERSECTIONS AND AT LEAST TWO (2) CORES AT FREE STANDING WALL. 2. PROVIDE DOUBLE BOND BEAM COURSE AT THE TOP OF ALL WALLS AND SINGLE BOND BEAM AT THE

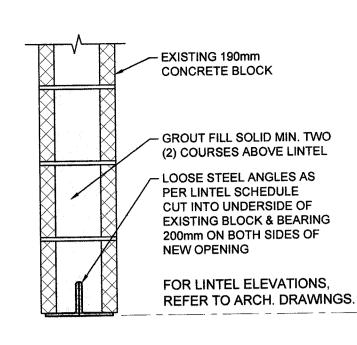
BOTTOM OF ALL WALLS MINIMUM. PROVIDE TRIPLE BOND BEAM AT THE TOP OF THE ELEVATOR SHAFT

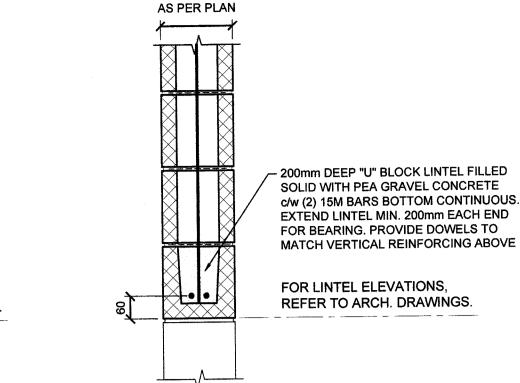
3. SPLICES IN CORES WITH MORE THAN ONE BAR TO BE STAGGERED. 4. CORES CONTAINING NELSON STUDS / ANCHORED ELEMENTS ARE TO BE GROUTED SOLID.

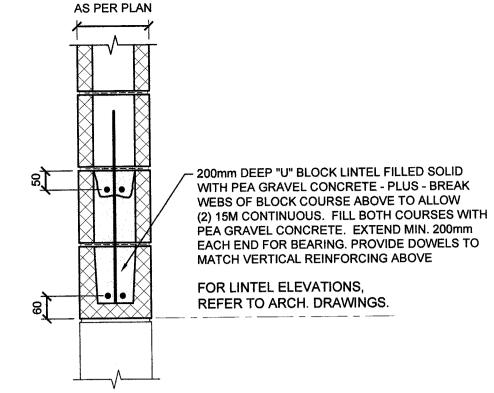




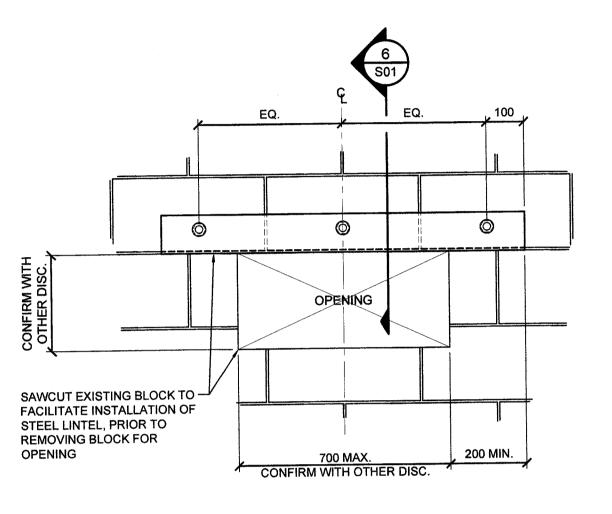
S01







LINTEL 'L4' DETAIL



LINTEL 'L5' ELEVATION

MECHANICAL, AND ELECTRICAL DRAWINGS FOR LOCATIONS & CONFIRM ON SITE.

- ORIENTATION OF

DRAWING

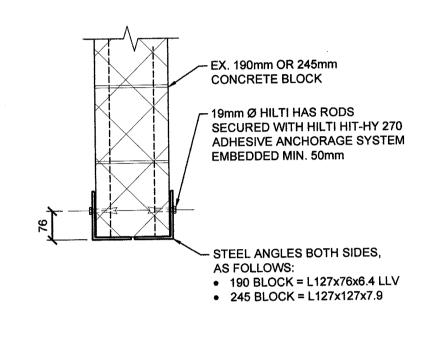
REINFORCING VARIES. REFER TO SECTIONS

TYPICAL CONCRETE

WALL-END REINFORCING

NOTE: REFER TO ARCHITECTURAL,

LINTEL 'L1' DETAIL



LINTEL 'L5' DETAIL

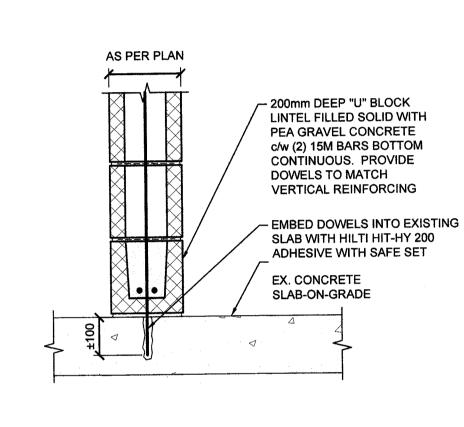
REINFORCE AND GROUT CORES

AS SHOWN AT ALL CORNERS.

MATCH SIZE OF VERTICAL

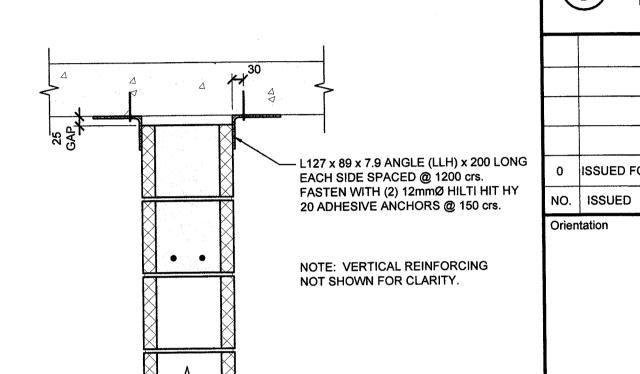
LINTEL 'L2' DETAIL

SCALE: 1:10

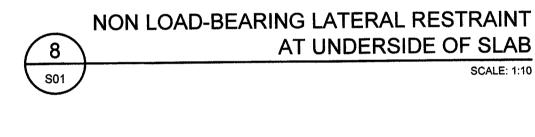


LINTEL 'L3' DETAIL

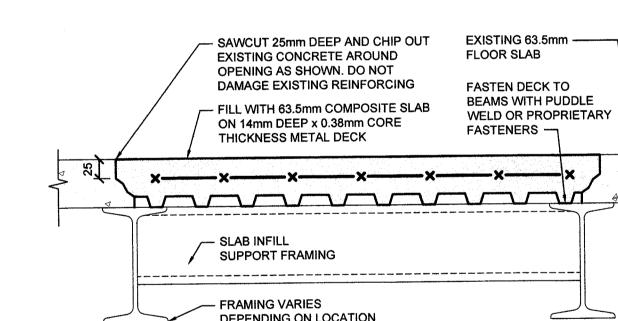
SCALE: 1:10

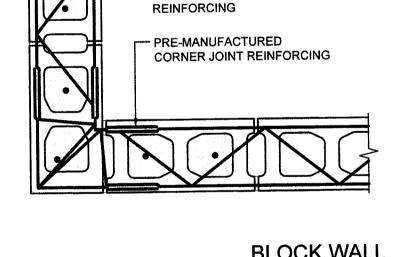


BLOCK WALL AT EX. SLAB DETAIL

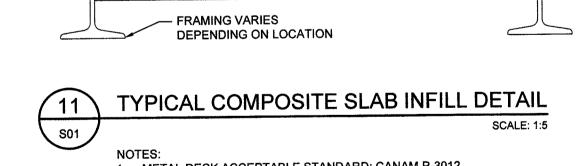


- SAWCUT 25mm DEEP AND CHIP OUT





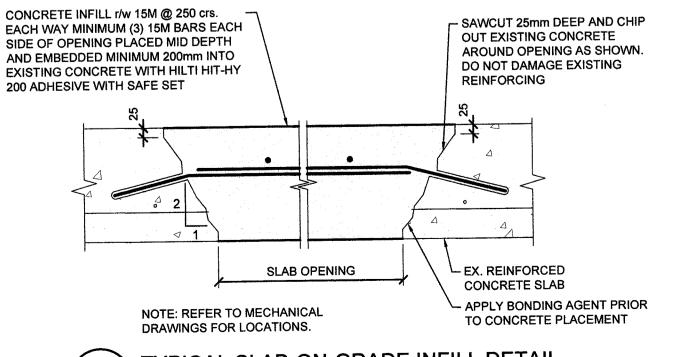


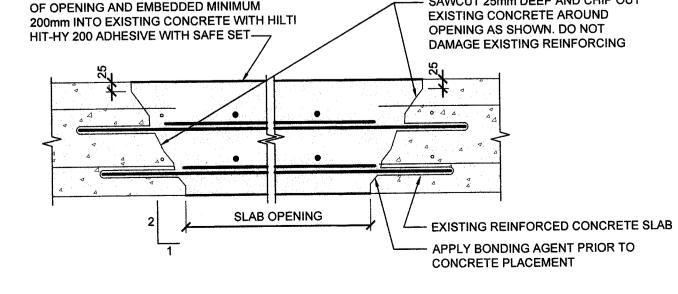


METAL DECK ACCEPTABLE STANDARD: CANAM P-3012. REINFORCE WITH WELDED WIRE FABRIC 152x152 MW13.3 MW13.3. MESH TO BE CHAIRED ABOVE TOP FLUTE OF COMPOSITE DECK TO MAINTAIN AT MID-DEPTH OF CONCRETE THICKNESS ABOVE DECK.

CONCRETE INFILL r/w 15M @ 250 crs. EACH WAY,

EACH FACE. MINIMUM (6) 15M BARS EACH SIDE





TYPICAL SUSPENDED SLAB INFILL DETAIL



DO NOT SCALE DRAWINGS:

Contractors must check and verify all site conditions. Notify the Owner's Representative in writing before proceeding with the

work if discrepancies are evident between the drawings and the

site condition. No extras to the contract will be allowed if

Where a friable material is discovered during construction,

renovations and/or demolition, and it is suspected to contain

asbestos, the Contractor must stop all work that may disturb the

material. The Contractor shall advise the Owner of the discovery

B = Drawing number where detailed

ISSUED FOR PERMIT & TENDER TA NOV 2, 2018

BY DATE

discrepancies were evident prior to start of work. UNEXPECTED DISCOVERY OF ASBESTOS:

A = Detail number

and await instructions from the owner.

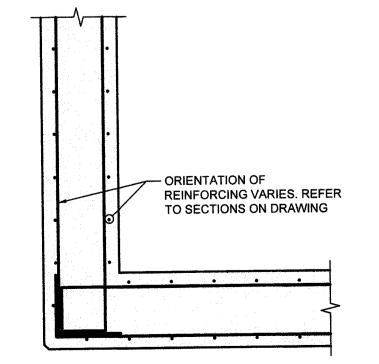


STRUCTURAL SCHEDULES AND STANDARD DETAILS 504034

Location
UNIVERSITY OF GUELPH
BUILDING #046

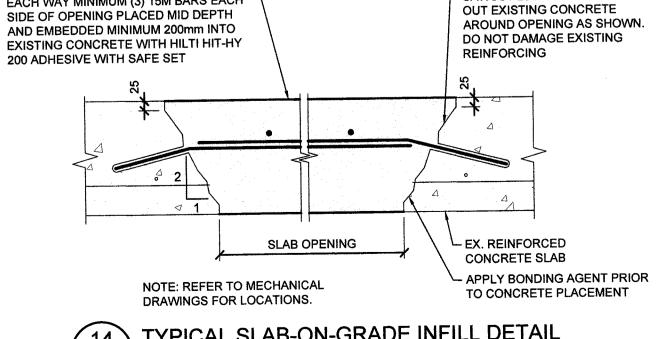
AS NOTED	NOV 2, 2018
Drawn by	Drawing No.
BCW	
Checked By	
LS	$\square$ $C \cap 1$
Approved By	
DAY/JRE	
JLR#	
27915	of 170

Date

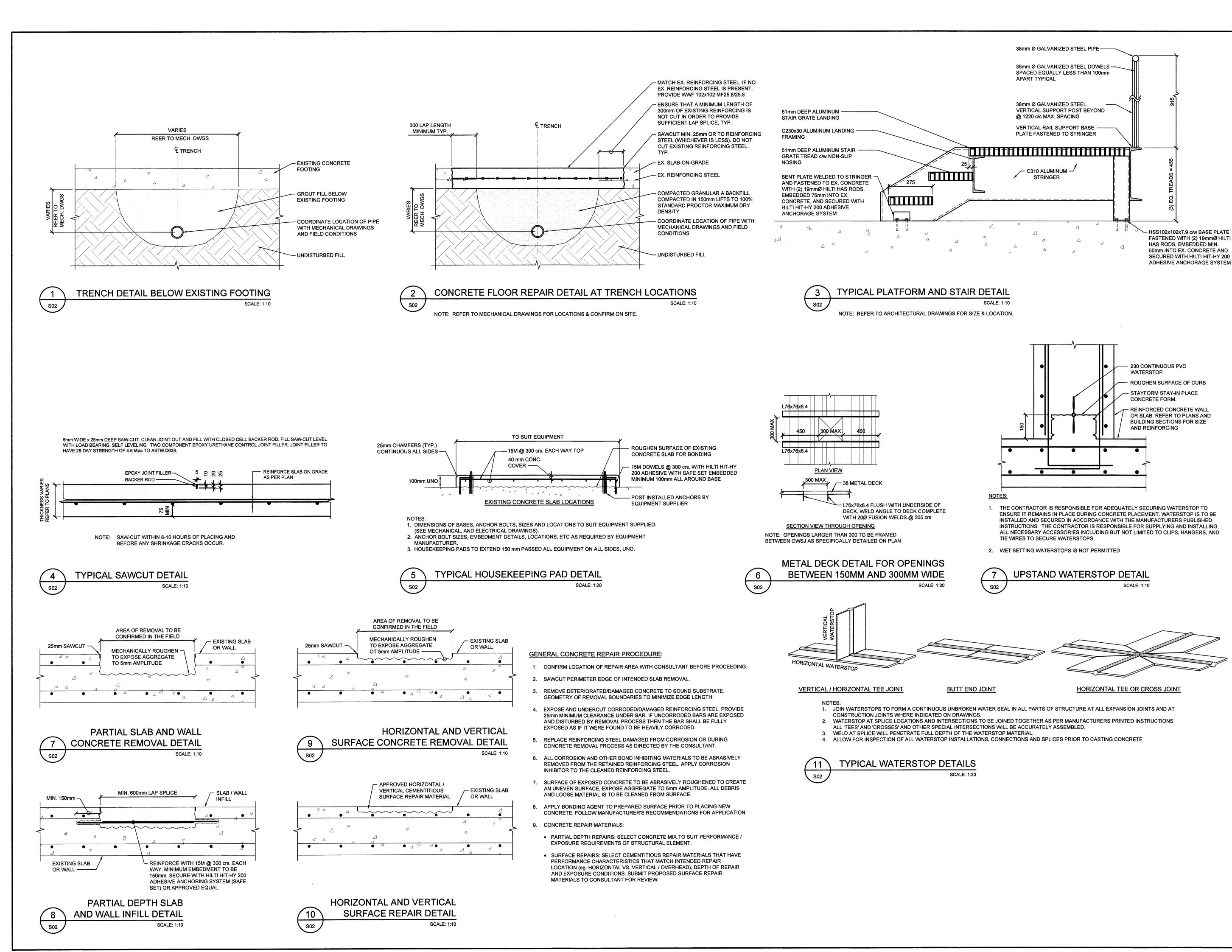








14 TYPICAL SLAB-ON-GRADE INFILL DETAIL



DO NOT SCALE DRAWINGS

Contractors must check and verify all site conditions. Notify the Owner's Representative in writing before proceeding with the work if discrepancies are evident between the drawings and the site condition. No extras to the contract will be allowed if discrepancies were evident prior to start of work.

Where a friable material is discovered during construction, renovations and/or demolition, and it is suspected to contain asbestos, the Contractor must stop all work that may disturb the material. The Contractor shall advise the Owner of the discovery

A B

Orientation

A = Detail number

**UNEXPECTED DISCOVERY OF ASBESTOS:** 

and await instructions from the owner.

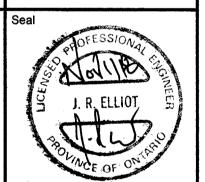
B = Drawing number where detailed

ISSUED FOR PERMIT & TENDER TA NOV 2, 2018

Seal

D. A. YOUNG FINE 100135881

Car. 31 51 0018



UNIVERSITY

GUELPH

Design, Engineering & Construction Physical Resources Guelph, Ontario. N1G 2W1

www.jlrichards.c



BUILDING #046 RENOVATIONS

STRUCTURAL
STANDARD DETAILS

Project No. 504034

Cad File No. ----

UNIVERSITY OF GUELPH BUILDING #046

Scale
AS NOTED

Drawn by
BCW

Checked By
LS
Approved By
DAY/JRE

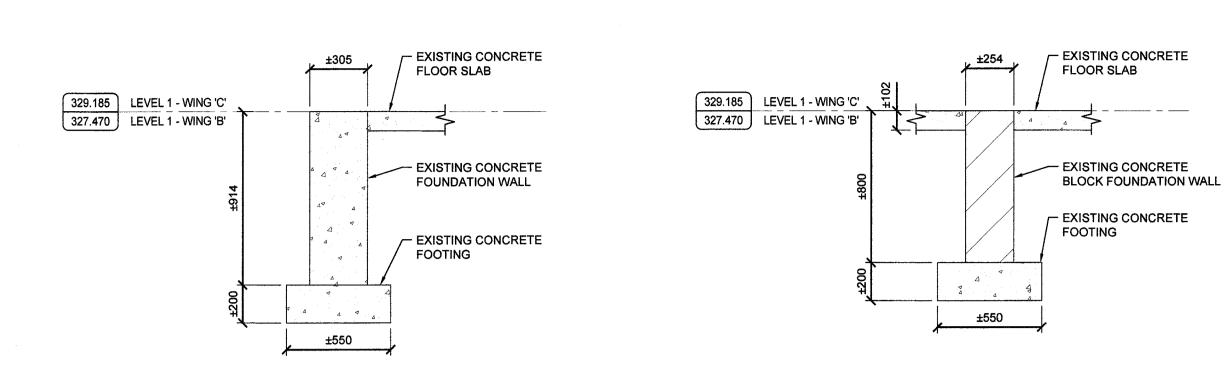
JLR #
27915

Date
NOV 2, 2018

Drawing No.

SO

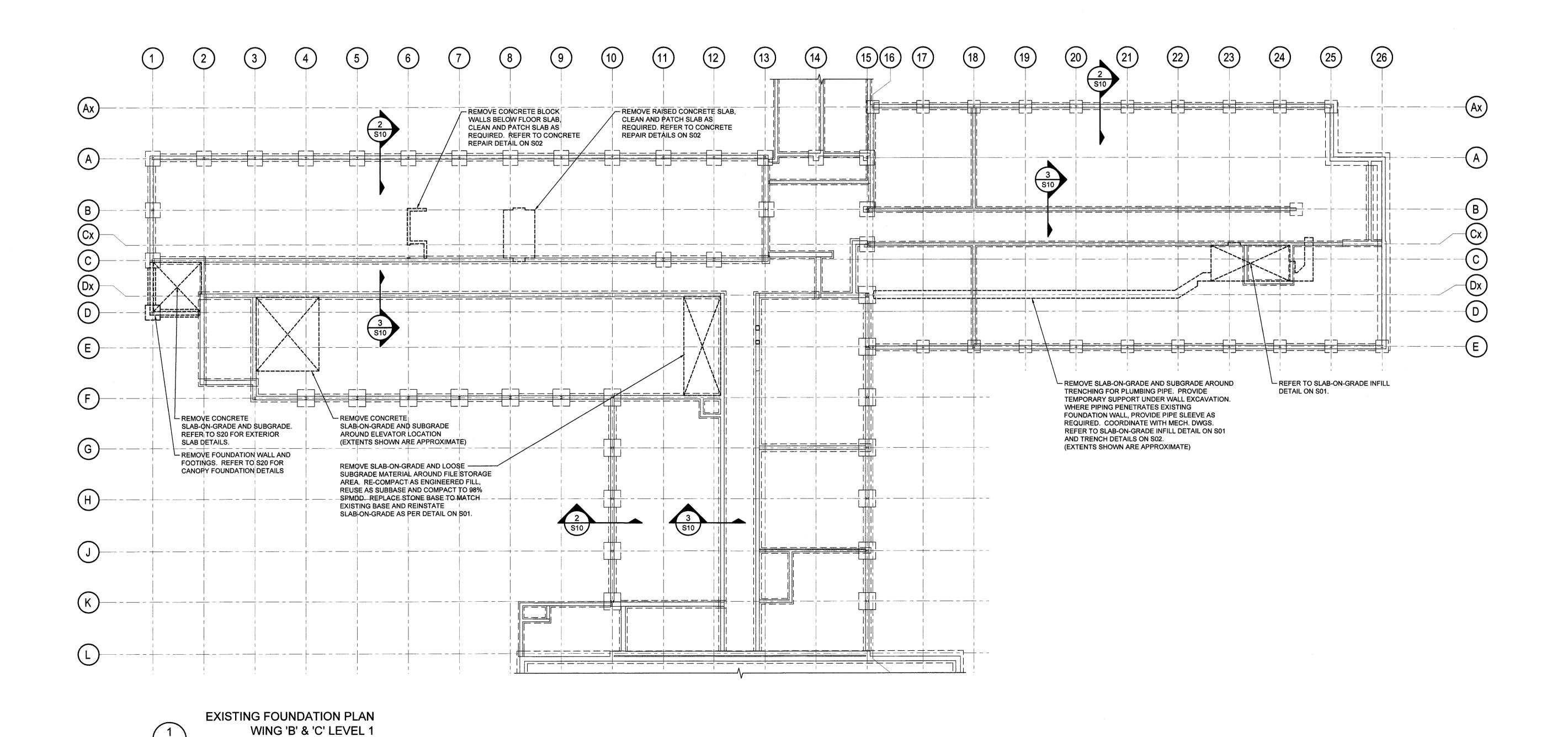
Of 170



S10

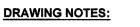
**EXISTING EXTERIOR FOUNDATION SECTION** 

SCALE: 1:150



SCALE: 1:20

**EXISTING INTERIOR FOUNDATION SECTION** 



SEE DRAWING S00 FOR GENERAL NOTES.

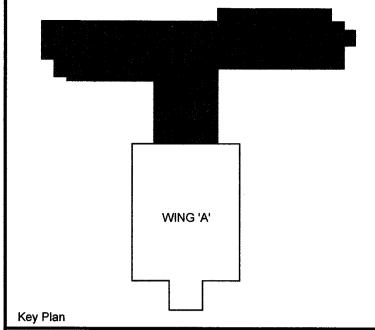
LEGEND

x\_\_ EXISTING

EXISTING

DENOTES EXTENT OF FOUNDATION WALL REMOVAL

DENOTES AREA OF FLOOR SLAB REMOVAL



DO NOT SCALE DRAWINGS:

Contractors must check and verify all site conditions. Notify the Owner's Representative in writing before proceeding with the work if discrepancies are evident between the drawings and the site condition. No extras to the contract will be allowed if discrepancies were evident prior to start of work.

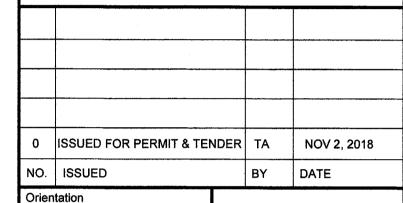
UNEXPECTED DISCOVERY OF ASBESTOS:

Where a friable material is discovered during construction, renovations and/or demolition, and it is suspected to contain asbestos, the Contractor must stop all work that may disturb the material. The Contractor shall advise the Owner of the discovery

A B A = Detail number

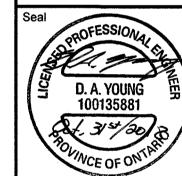
and await instructions from the owner.

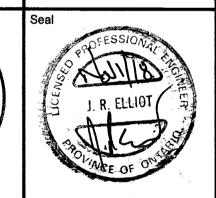
B = Drawing number where detailed



Onemation







UNIVERSITY

GUELPH

Design, Engineering & Construction

onsultant

J.L.Richards

ENGINEERS - ARCHITECTS - PLANNE

Physical Resources

Guelph, Ontario. N1G 2W1

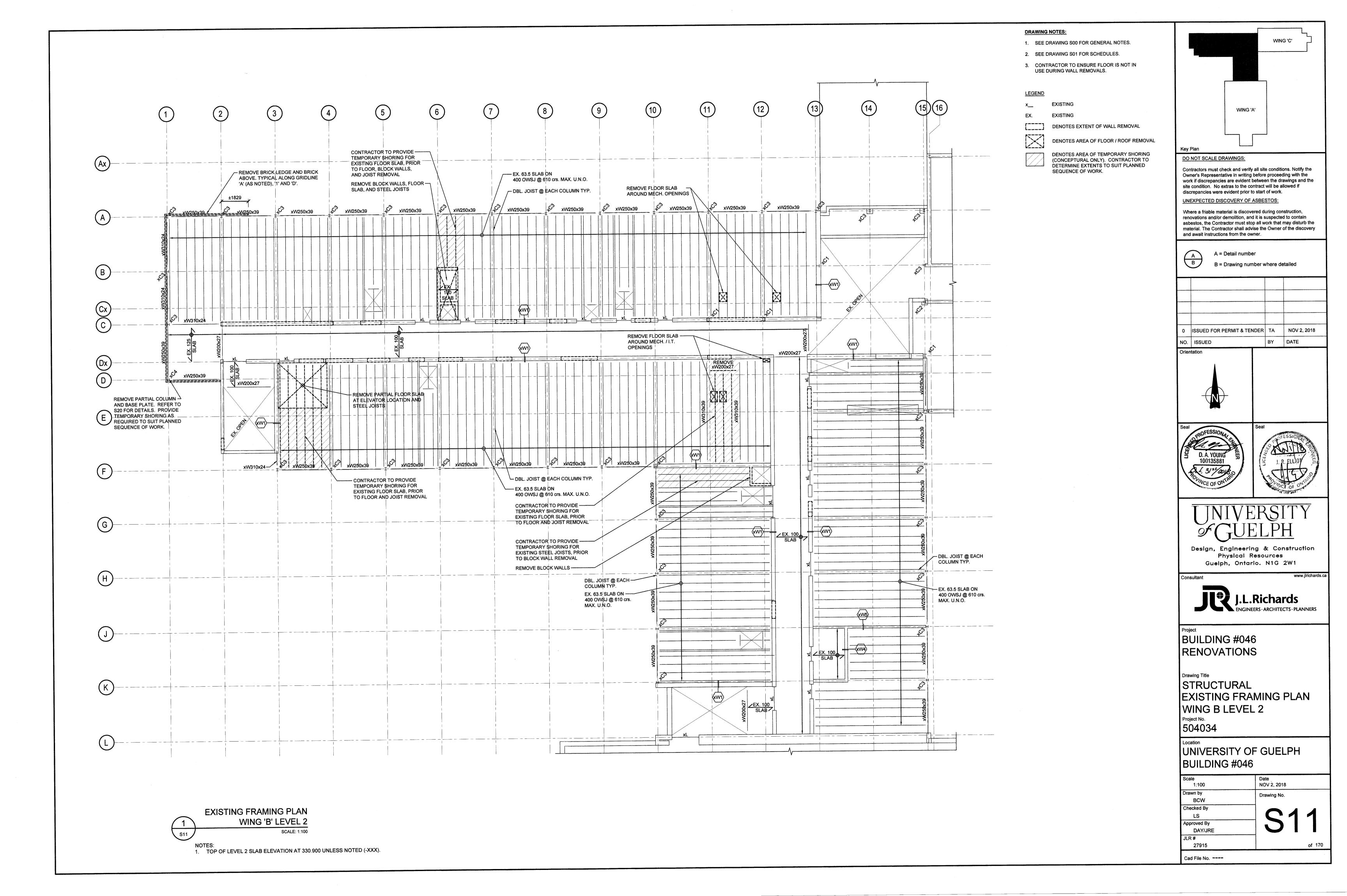
BUILDING #046 RENOVATIONS

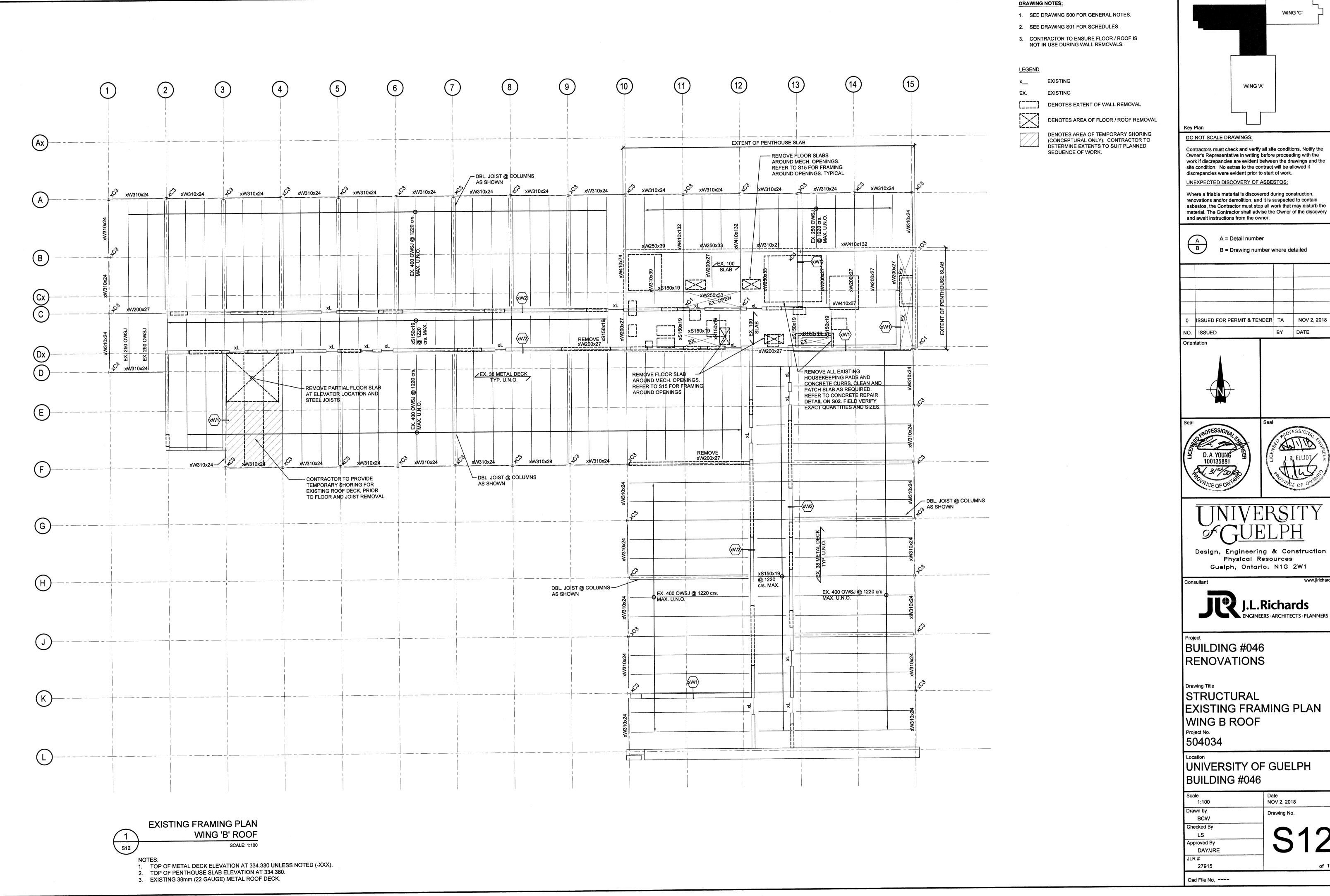
STRUCTURAL
EXISTING FOUNDATION
PLAN WING B AND C LEVEL 1
Project No.
504034

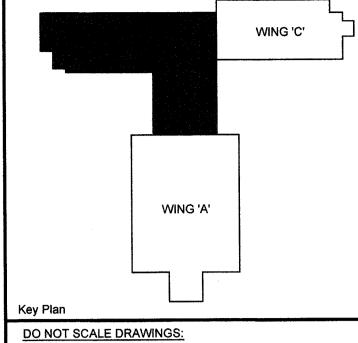
UNIVERSITY OF GUELPH BUILDING #046

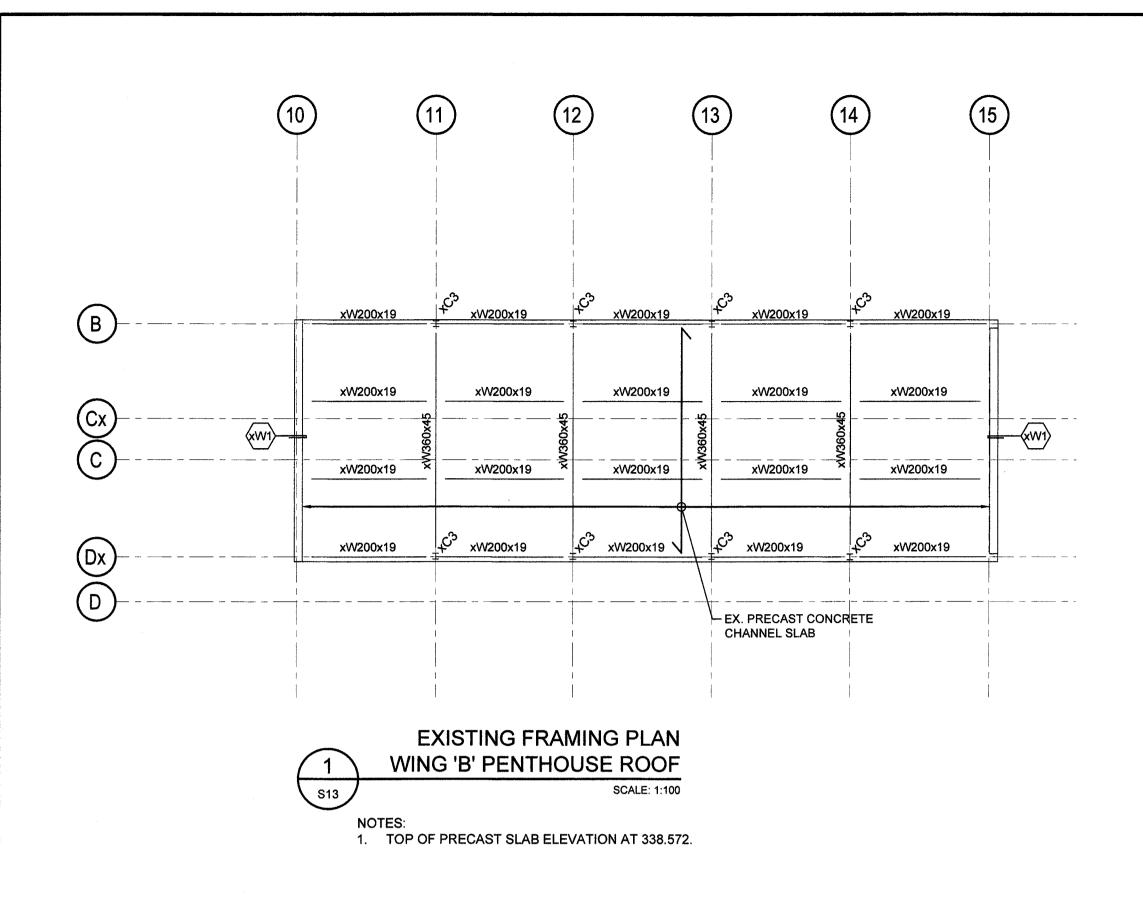
Scale	Date
1:150	NOV 2, 2018
Drawn by	Drawing No.
BCW	
Checked By	
LS	-1C1O
Approved By	
DAY/JRE	
JLR#	
07045	

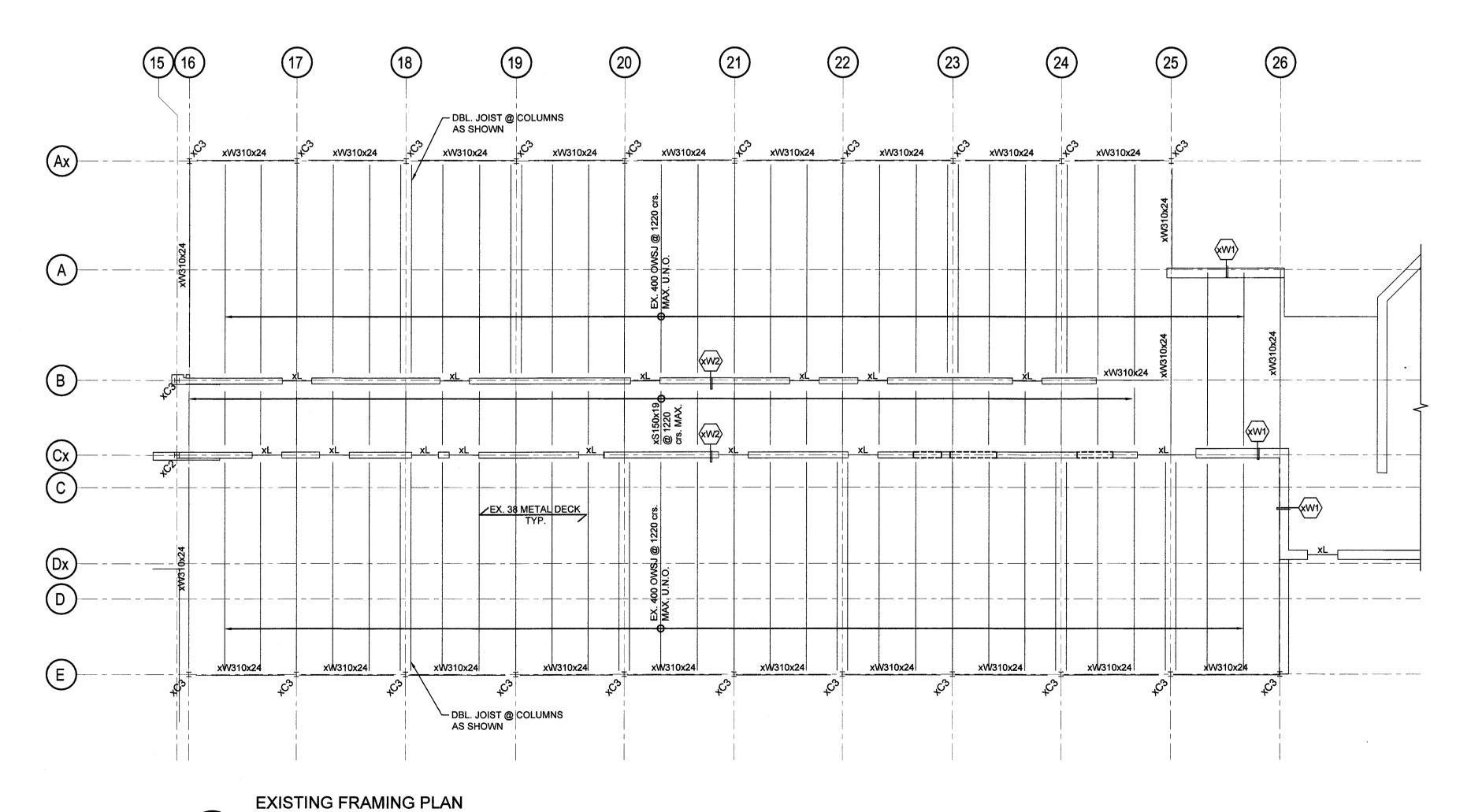
Cad File No. ----











#### **DRAWING NOTES:**

- 1. SEE DRAWING S00 FOR GENERAL NOTES.
- SEE DRAWING S01 FOR SCHEDULES.

#### LEGEND

x\_\_ EXISTING

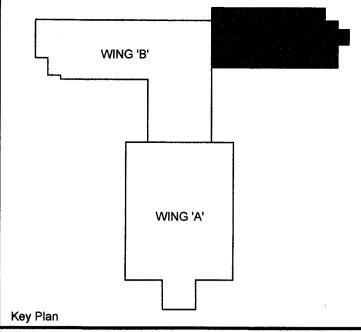
EX. EXISTING

DENOTES EXTENT OF WALL REMOVAL

 $\geq$ 

DENOTES AREA OF FLOOR / ROOF REMOVAL

DENOTES AREA OF TEMPORARY SHORING (CONCEPTURAL ONLY). CONTRACTOR TO DETERMINE EXTENTS TO SUIT PLANNED SEQUENCE OF WORK.



DO NOT SCALE DRAWINGS:

Contractors must check and verify all site conditions. Notify the Owner's Representative in writing before proceeding with the work if discrepancies are evident between the drawings and the site condition. No extras to the contract will be allowed if discrepancies were evident prior to start of work.

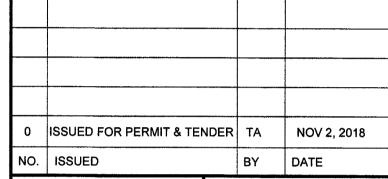
## UNEXPECTED DISCOVERY OF ASBESTOS:

Where a friable material is discovered during construction, renovations and/or demolition, and it is suspected to contain asbestos, the Contractor must stop all work that may disturb the material. The Contractor shall advise the Owner of the discovery and await instructions from the owner.



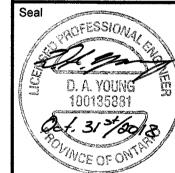
A = Detail number

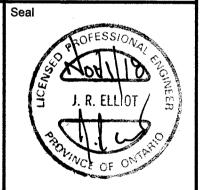
B = Drawing number where detailed













Design, Engineering & Construction Physical Resources Guelph, Ontario. N1G 2W1

Consultant



BUILDING #046 RENOVATIONS

STRUCTURAL
EXISTING FRAMING PLANS
WING B AND C ROOF
Project No.
504034

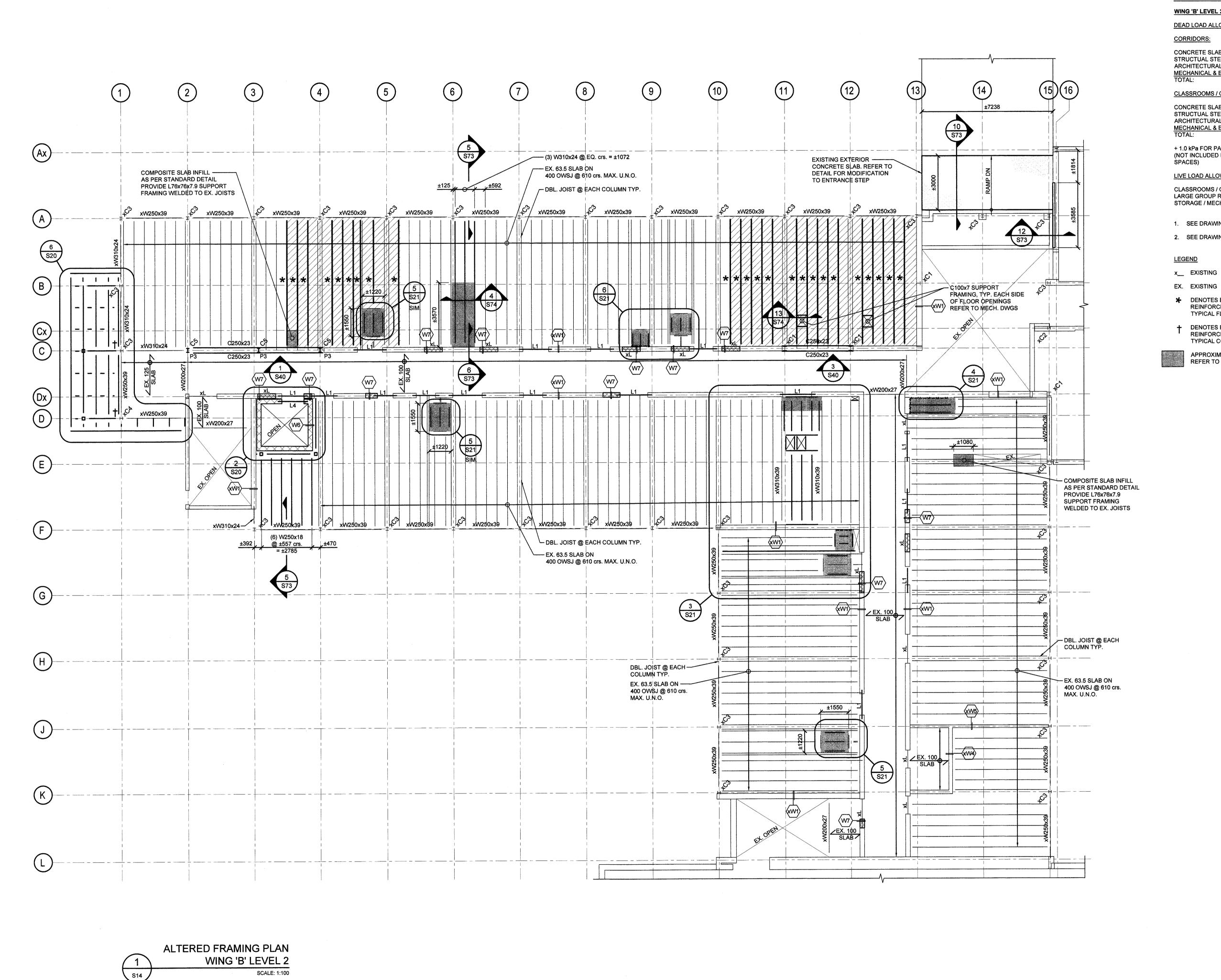
UNIVERSITY OF GUELPH BUILDING #046

Cad File No. ----

Scale 1:100	Date NOV 2, 2018
Drawn by BCW	Drawing No.
Checked By	
LS	Q12
Approved By	
DAY/JRE	
JLR#	
27915	of 170

WING 'C' ROOF
SCALE: 1:100

NOTES:
1. TOP OF METAL DECK ELEVATION AT 332.615 UNLESS NOTED (-XXX).
2. EXISTING 38mm (22 GAUGE) METAL ROOF DECK.



1. TOP OF LEVEL 2 SLAB ELEVATION AT 330.900 UNLESS NOTED (-XXX).

#### **DRAWING NOTES:**

WING 'B' LEVEL 2 - DESIGN LOADS:

DEAD LOAD ALLOWANCES:

CONCRETE SLAB: 2.40 kPa (100 SLAB) STRUCTUAL STEEL FRAMING: 0.25 kPa ARCHITECTURAL FINISHES: 0.50 kPa MECHANICAL & ELECTRICAL: TOTAL: 0.25 kPa

#### CLASSROOMS / OFFICES:

CONCRETE SLAB: 1.50 kPa (63.5 SLAB) STRUCTUAL STEEL FRAMING: 0.25 kPa ` ARCHITECTURAL FINISHES: 0.50 kPa MECHANICAL & ELECTRICAL:
TOTAL: 0.25 kPa

+ 1.0 kPa FOR PARTITIONS 3.50 kPa (NOT INCLUDED IN LARGE / ASSEMBLY OCCUPANCY SPACES)

LIVE LOAD ALLOWANCES:

CLASSROOMS / OFFICES: LARGE GROUP ROOMS: 7.20 kPa STORAGE / MECH. ROOMS:

1. SEE DRAWING S00 FOR GENERAL NOTES.

2.40 kPa

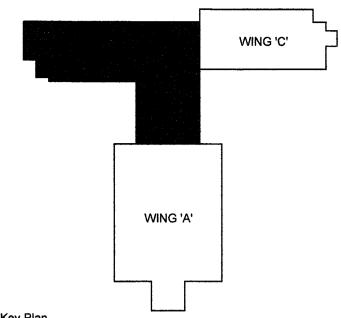
4.80 kPa -

2. SEE DRAWING S01 FOR TYPICAL DETAILS.

★ DENOTES EXISTING OWSJ REQUIRED TO BE REINFORCED. REFER TO ELEVATION 1/S41 FOR TYPICAL FLOOR JOIST REINFORCING INFORMATION.

DENOTES EXISTING COLUMN REQUIRED TO BE REINFORCED. REFER TO DETAIL 7/S72 FOR TYPICAL COLUMN REINFORCING INFORMATION.

APPROXIMATE EXTENT OF CONCRETE SLAB INFILL. REFER TO DETAILS AS INDICATED ON PLAN.



DO NOT SCALE DRAWINGS:

Contractors must check and verify all site conditions. Notify the Owner's Representative in writing before proceeding with the work if discrepancies are evident between the drawings and the site condition. No extras to the contract will be allowed if discrepancies were evident prior to start of work. UNEXPECTED DISCOVERY OF ASBESTOS:

Where a friable material is discovered during construction, renovations and/or demolition, and it is suspected to contain asbestos, the Contractor must stop all work that may disturb the material. The Contractor shall advise the Owner of the discovery and await instructions from the owner.



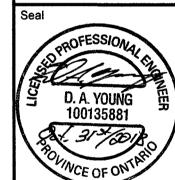
Orientation

A = Detail number

B = Drawing number where detailed

0	ISSUED FOR PERMIT & TENDER	TA	NOV 2, 2018
10.	ISSUED	BY	DATE









Design, Engineering & Construction Physical Resources Guelph, Ontario. N1G 2W1

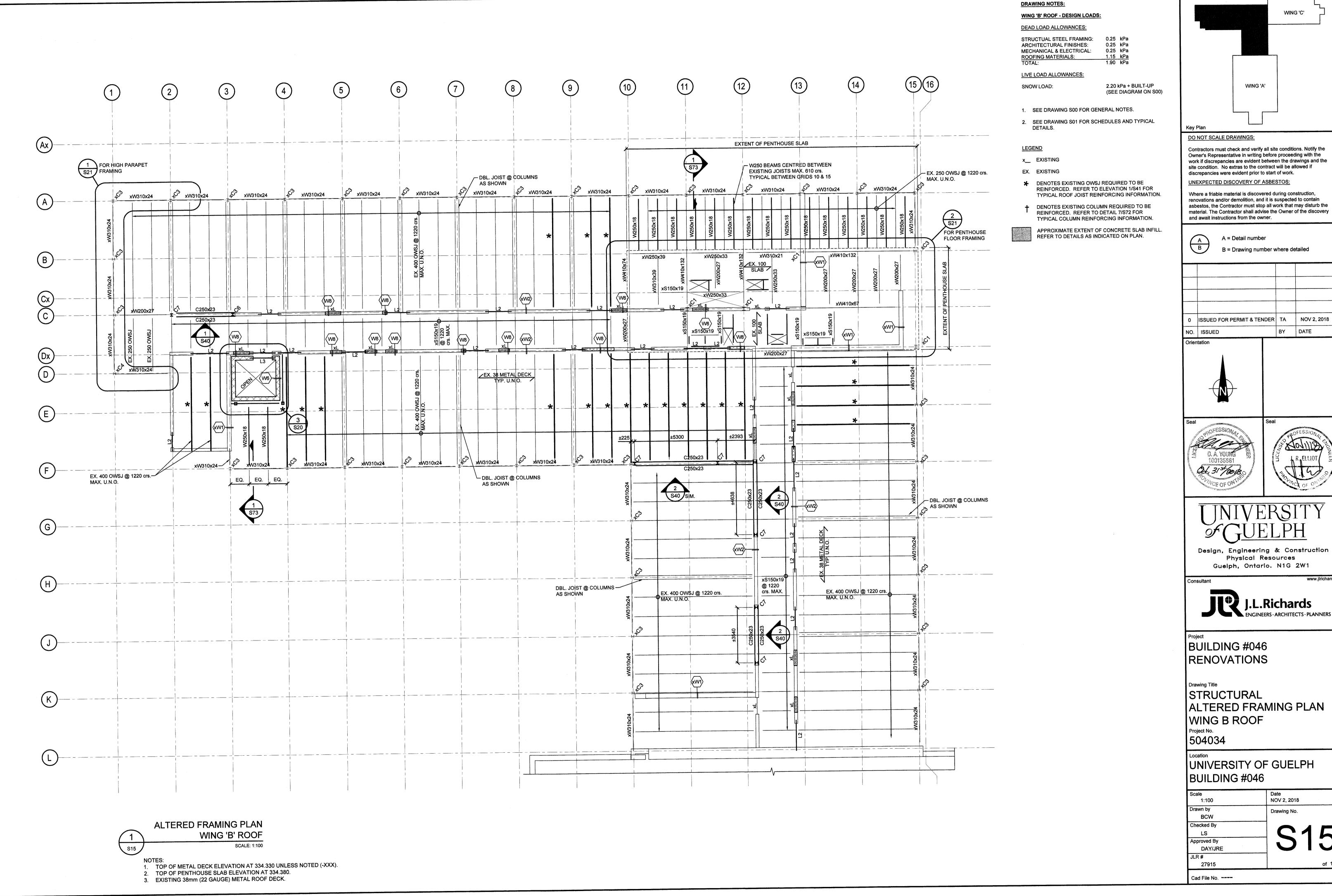


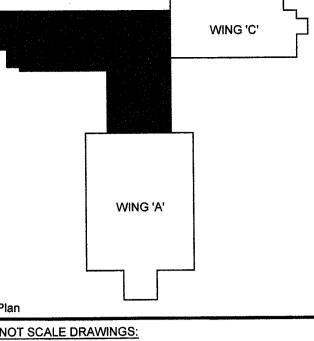
**BUILDING #046** RENOVATIONS

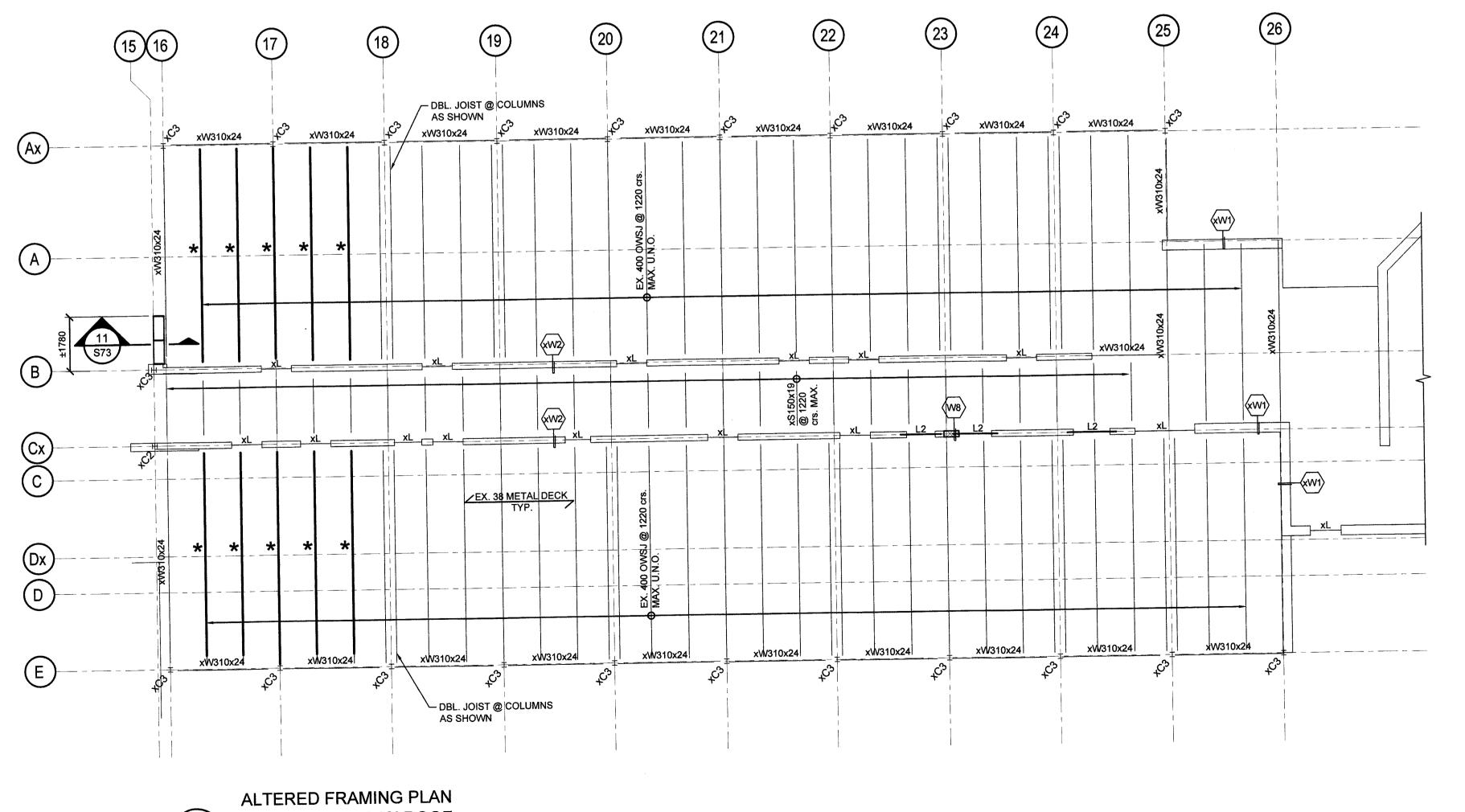
STRUCTURAL ALTERED FRAMING PLAN WING B LEVEL 2

504034

Scale 1:100	Date NOV 2, 2018
Drawn by BCW	Drawing No.
Checked By	
LS	$\Box$
Approved By	-514
DAY/JRE	
JLR#	
27915	of 170







**DRAWING NOTES:** 

#### WING 'B' ROOF - DESIGN LOADS:

DEAD LOAD ALLOWANCES:

STRUCTUAL STEEL FRAMING: 0.25 kPa 0.25 kPa ARCHITECTURAL FINISHES: MECHANICAL & ELECTRICAL: 0.25 kPa ROOFING MATERIALS: TOTAL:

LIVE LOAD ALLOWANCES:

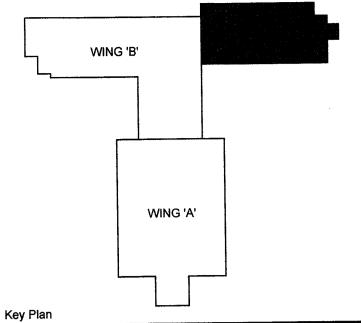
SNOW LOAD:

2.20 kPa + BUILT-UP (SEE DIAGRAM ON S00)

- 1. SEE DRAWING S00 FOR GENERAL NOTES.
- 2. SEE DRAWING S01 FOR SCHEDULES AND TYPICAL DETAILS.

### LEGEND

- x\_\_ EXISTING
- EX. EXISTING
- ★ DENOTES EXISTING OWSJ REQUIRED TO BE REINFORCED. REFER TO ELEVATION 1/S41 FOR TYPICAL ROOF JOIST REINFORCING INFORMATION.



DO NOT SCALE DRAWINGS:

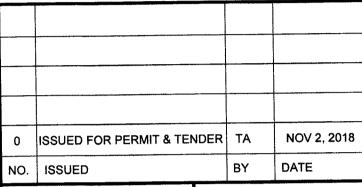
Contractors must check and verify all site conditions. Notify the Owner's Representative in writing before proceeding with the work if discrepancies are evident between the drawings and the site condition. No extras to the contract will be allowed if discrepancies were evident prior to start of work. UNEXPECTED DISCOVERY OF ASBESTOS:

Where a friable material is discovered during construction, renovations and/or demolition, and it is suspected to contain asbestos, the Contractor must stop all work that may disturb the material. The Contractor shall advise the Owner of the discovery and await instructions from the owner.

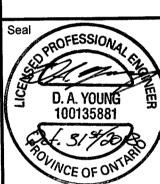


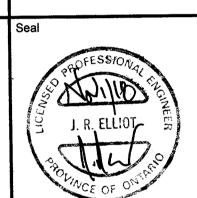
A = Detail number

B = Drawing number where detailed









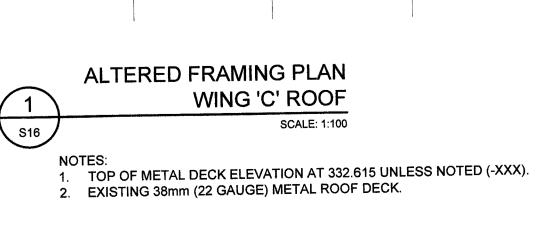
Design, Engineering & Construction Physical Resources Guelph, Ontario. N1G 2W1

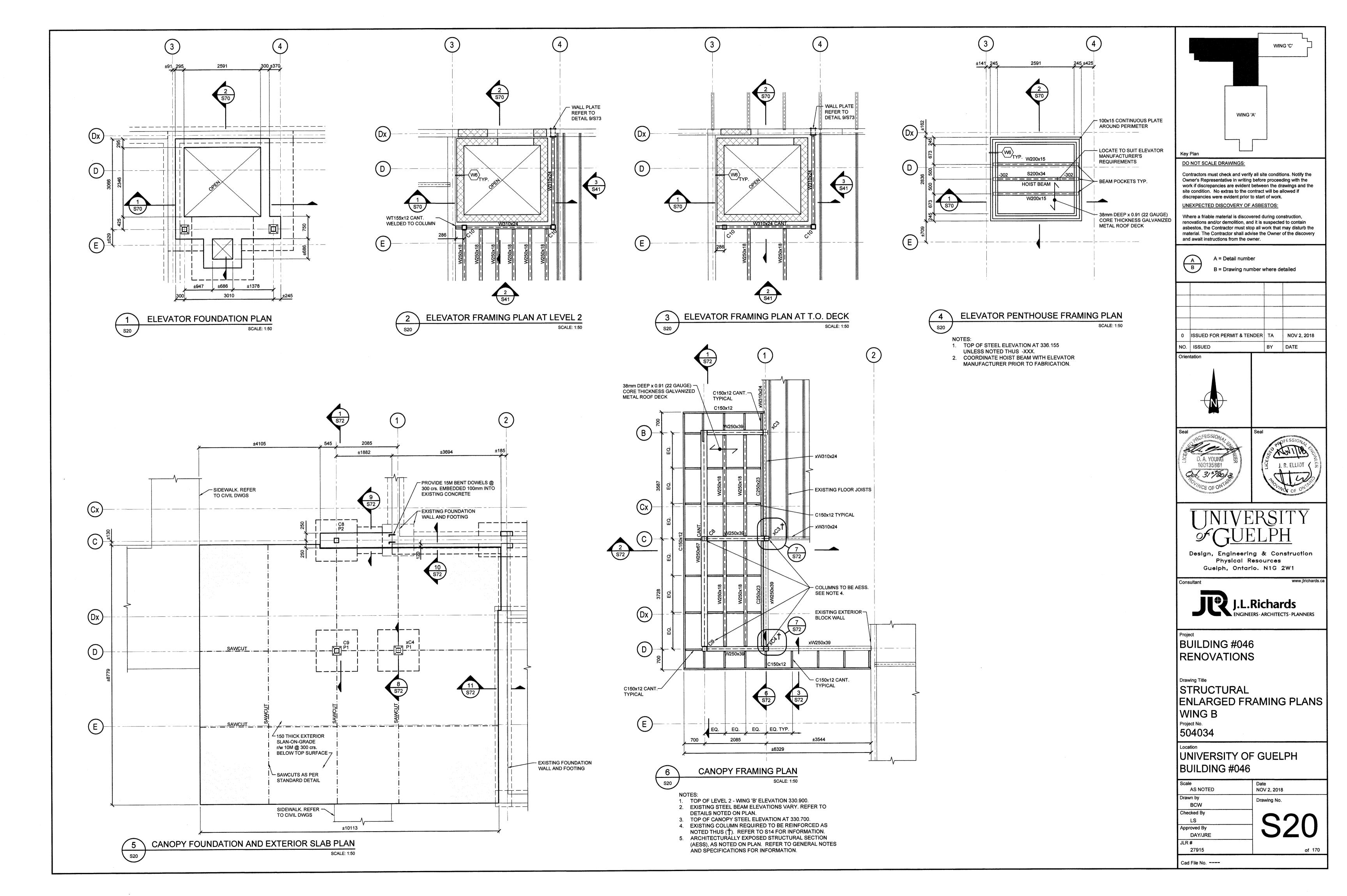


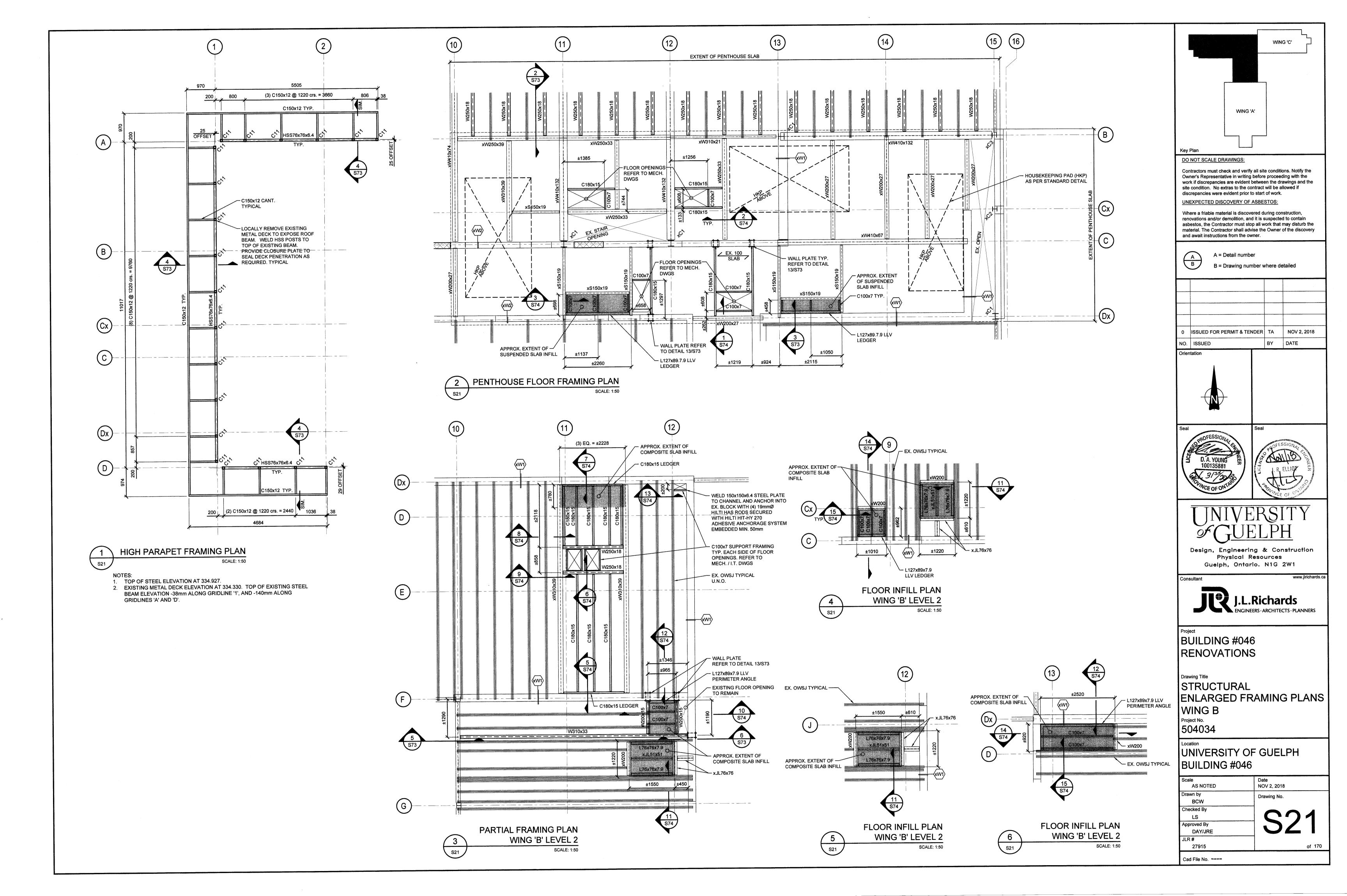
BUILDING #046 RENOVATIONS

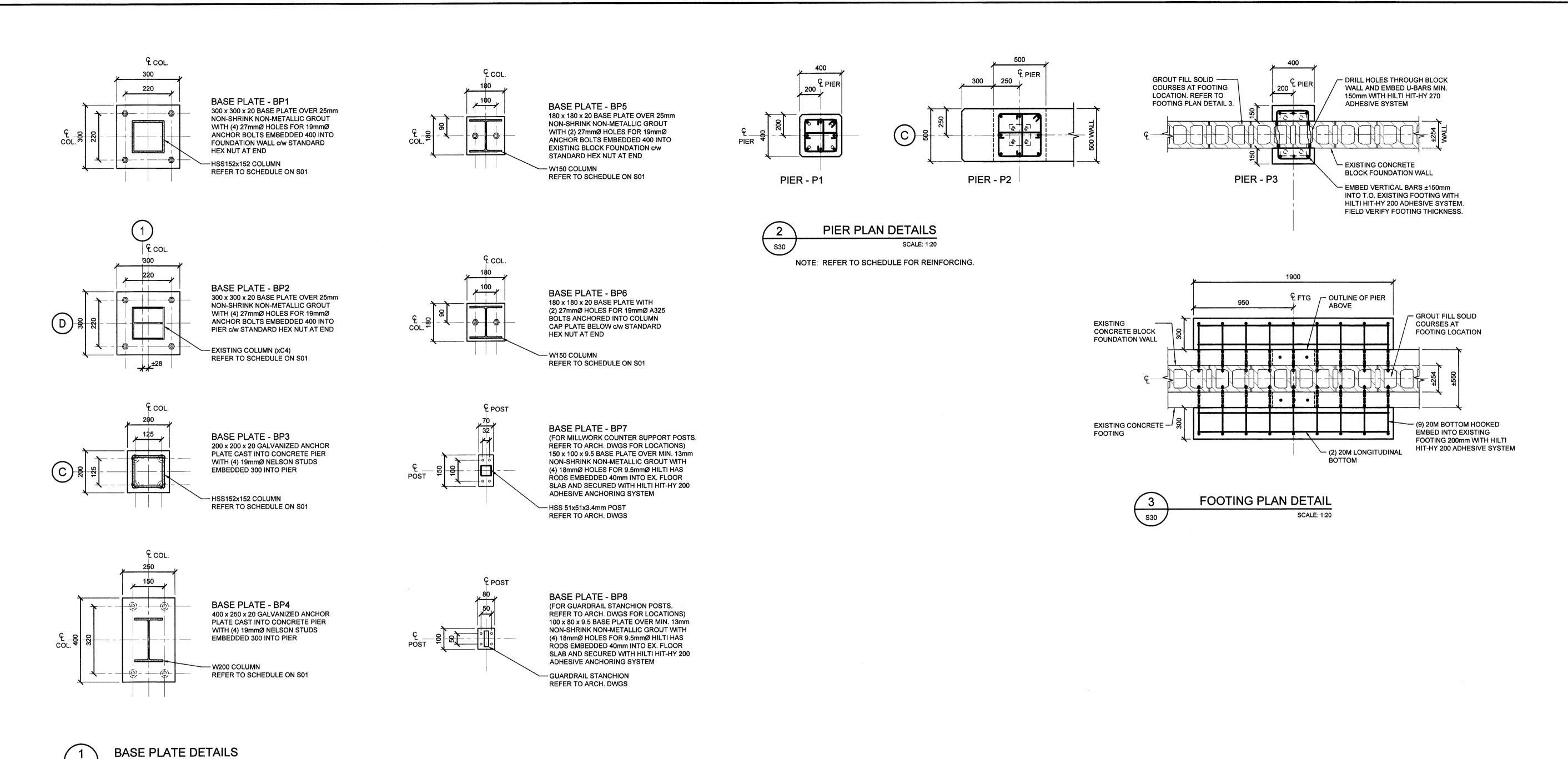
STRUCTURAL ALTERED FRAMING PLAN WING C ROOF 504034

Scale 1:100	Date NOV 2, 2018
Drawn by BCW	Drawing No.
Checked By	
LS	-S16
Approved By	
DAY/JRE	
JLR#	
27915	of 1









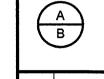
SCALE: 1:10

DO NOT SCALE DRAWINGS:

Contractors must check and verify all site conditions. Notify the Owner's Representative in writing before proceeding with the work if discrepancies are evident between the drawings and the site condition. No extras to the contract will be allowed if discrepancies were evident prior to start of work.

UNEXPECTED DISCOVERY OF ASBESTOS:

Where a friable material is discovered during construction, renovations and/or demolition, and it is suspected to contain asbestos, the Contractor must stop all work that may disturb the material. The Contractor shall advise the Owner of the discovery and await instructions from the owner.



A = Detail number

B = Drawing number where detailed

0 ISSUED FOR PERMIT & TENDER TA NOV 2, 2018
NO. ISSUED BY DATE

Orientation

D. A. YOUNG TO TOO TO THE TOO TO TO THE TOO TO TO THE TOO TO TO THE TOO THE TOO TO THE TOO THE TOO TO THE TOO THE TOO THE TOO TO THE TOO T



Design, Engineering & Construction
Physical Resources
Guelph, Ontario. N1G 2W1

Consultant

J.L.Richards

ENGINEERS · ARCHITECTS · PLANNERS

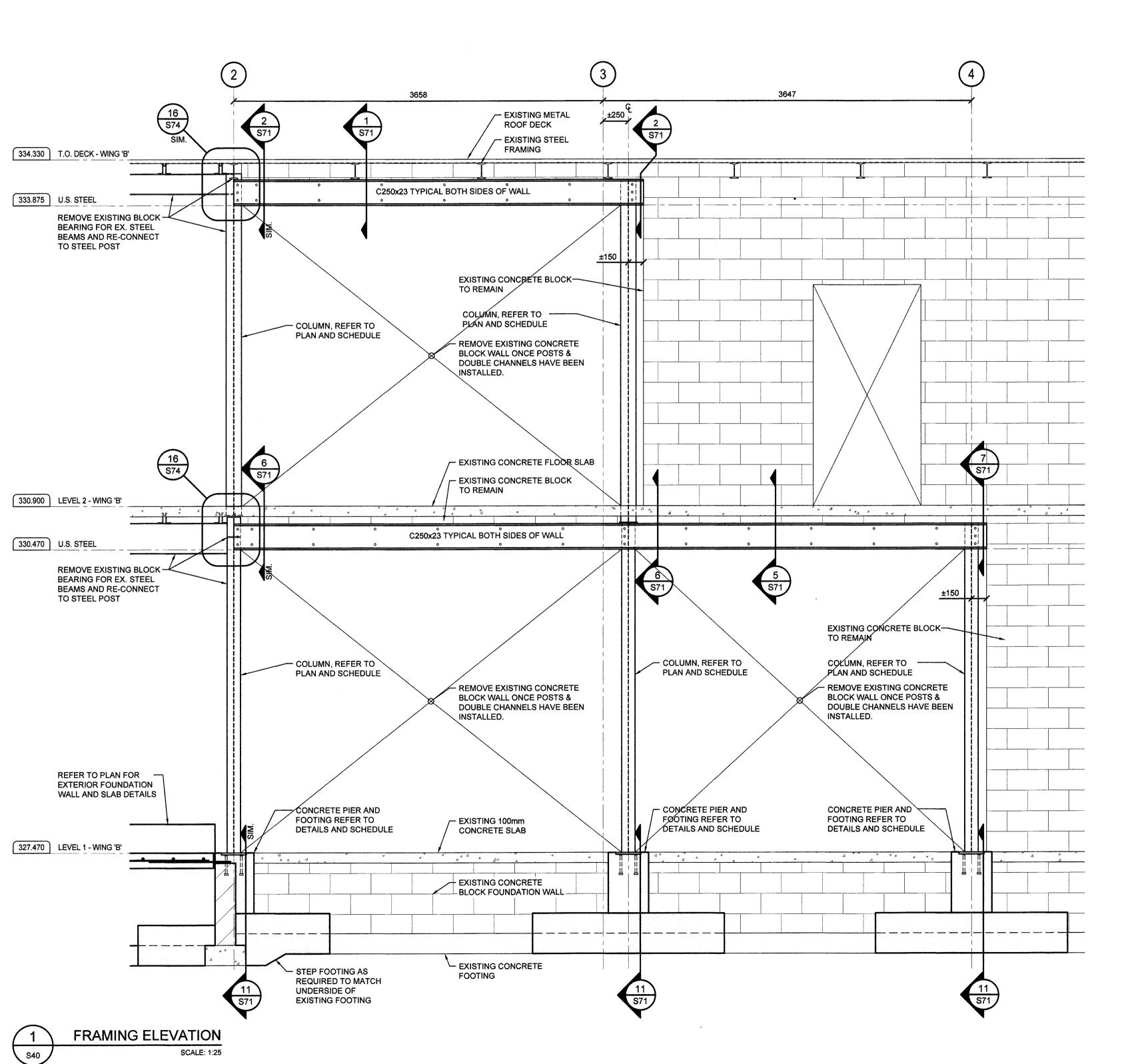
BUILDING #046 RENOVATIONS

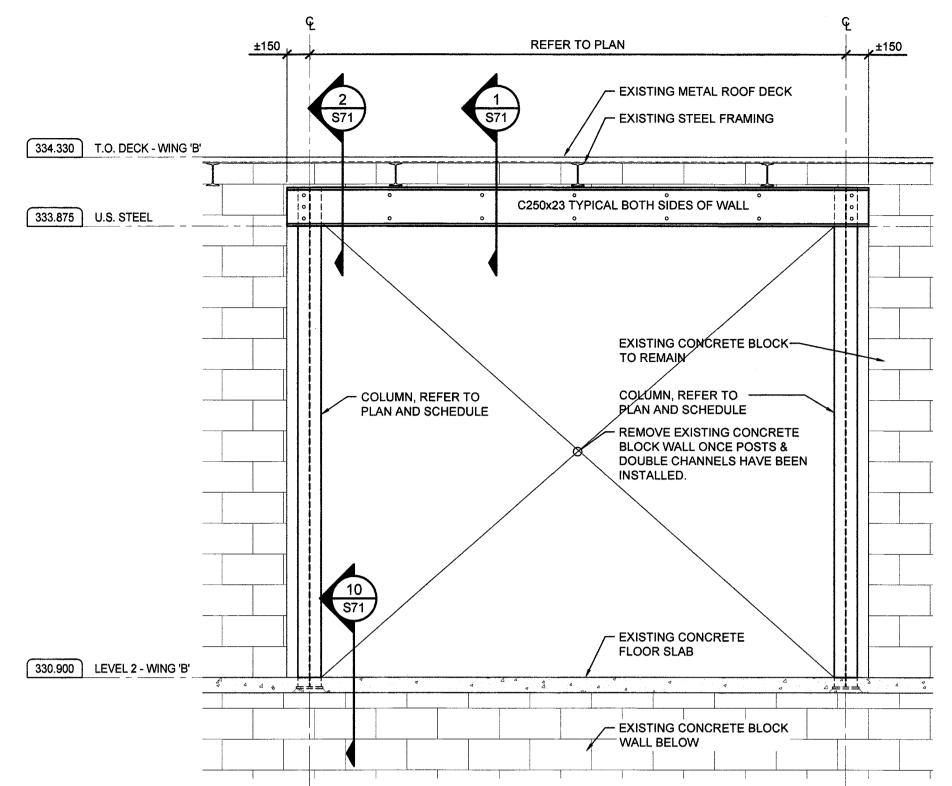
STRUCTURAL PLAN DETAILS

Project No. 504034

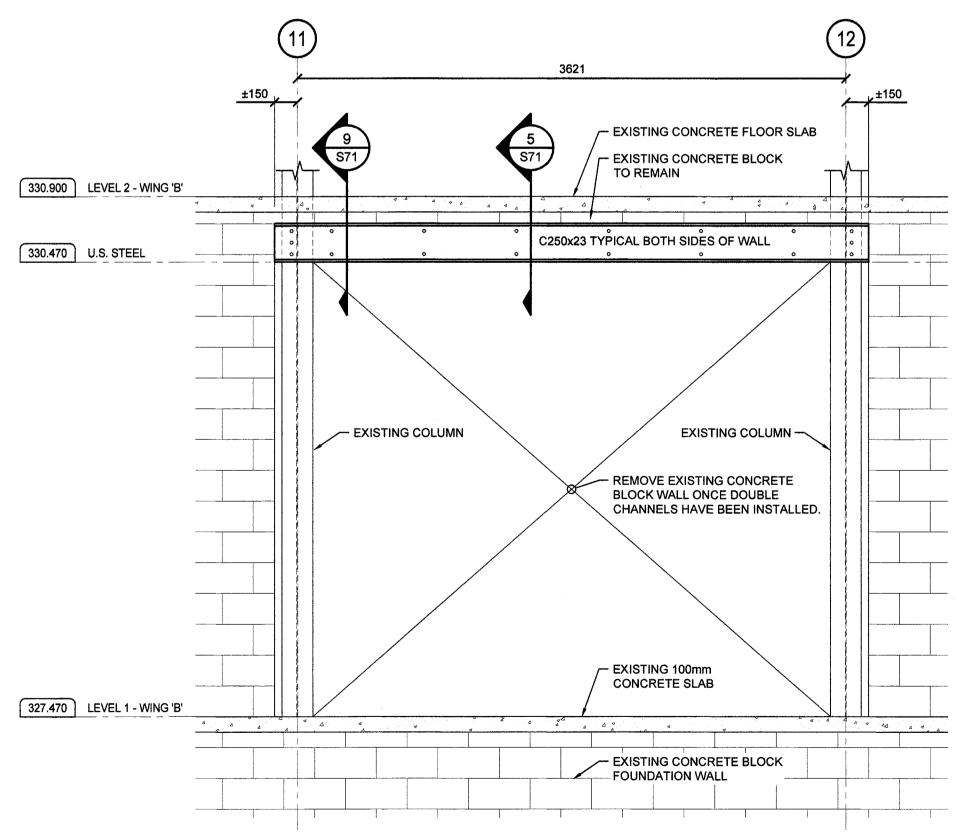
Cad File No. ----

le AS NOTED	Date
	NOV 2, 2018
wn by	Drawing No.
BCW	
cked By	
LS	COU
roved By	
DAY/JRE	
#	
27915	of 170





# FRAMING ELEVATION SCALE: 1:25



3 FRAMING ELEVATION
SCALE: 1:25

#### DO NOT SCALE DRAWINGS:

Contractors must check and verify all site conditions. Notify the Owner's Representative in writing before proceeding with the work if discrepancies are evident between the drawings and the site condition. No extras to the contract will be allowed if discrepancies were evident prior to start of work.

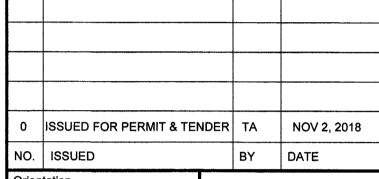
UNEXPECTED DISCOVERY OF ASBESTOS:

Where a friable material is discovered during construction, renovations and/or demolition, and it is suspected to contain asbestos, the Contractor must stop all work that may disturb the material. The Contractor shall advise the Owner of the discovery and await instructions from the owner.

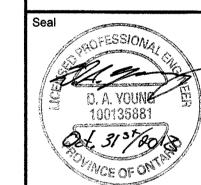


A = Detail number

B = Drawing number where detailed



Orientation





www.jlrichards.ca

## UNIVERSITY &GUELPH

Design, Engineering & Construction Physical Resources Guelph, Ontario. N1G 2W1

Consultant



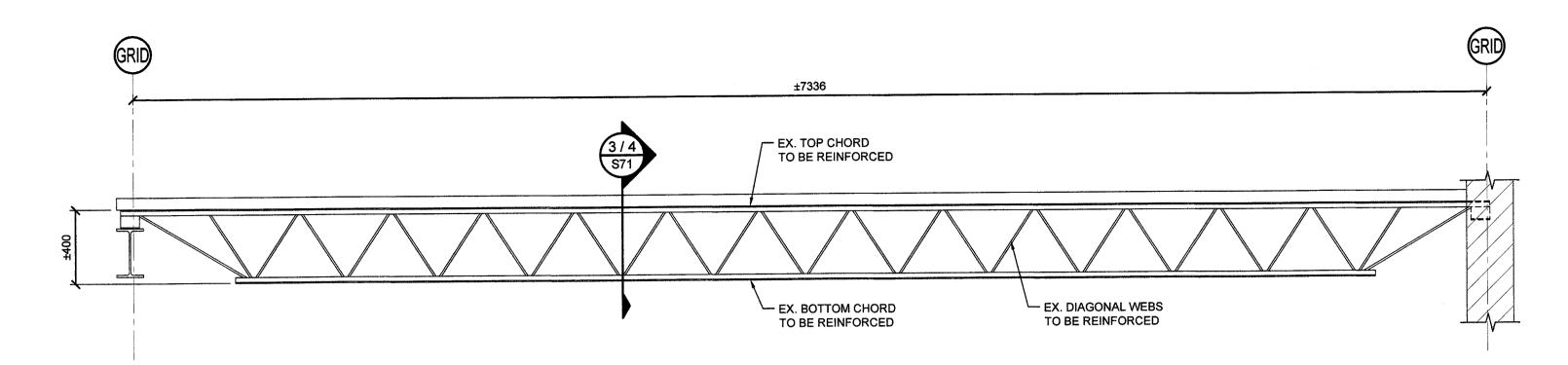
BUILDING #046 RENOVATIONS

STRUCTURAL FRAMING ELEVATIONS

Project No. 504034

Cad File No. ----

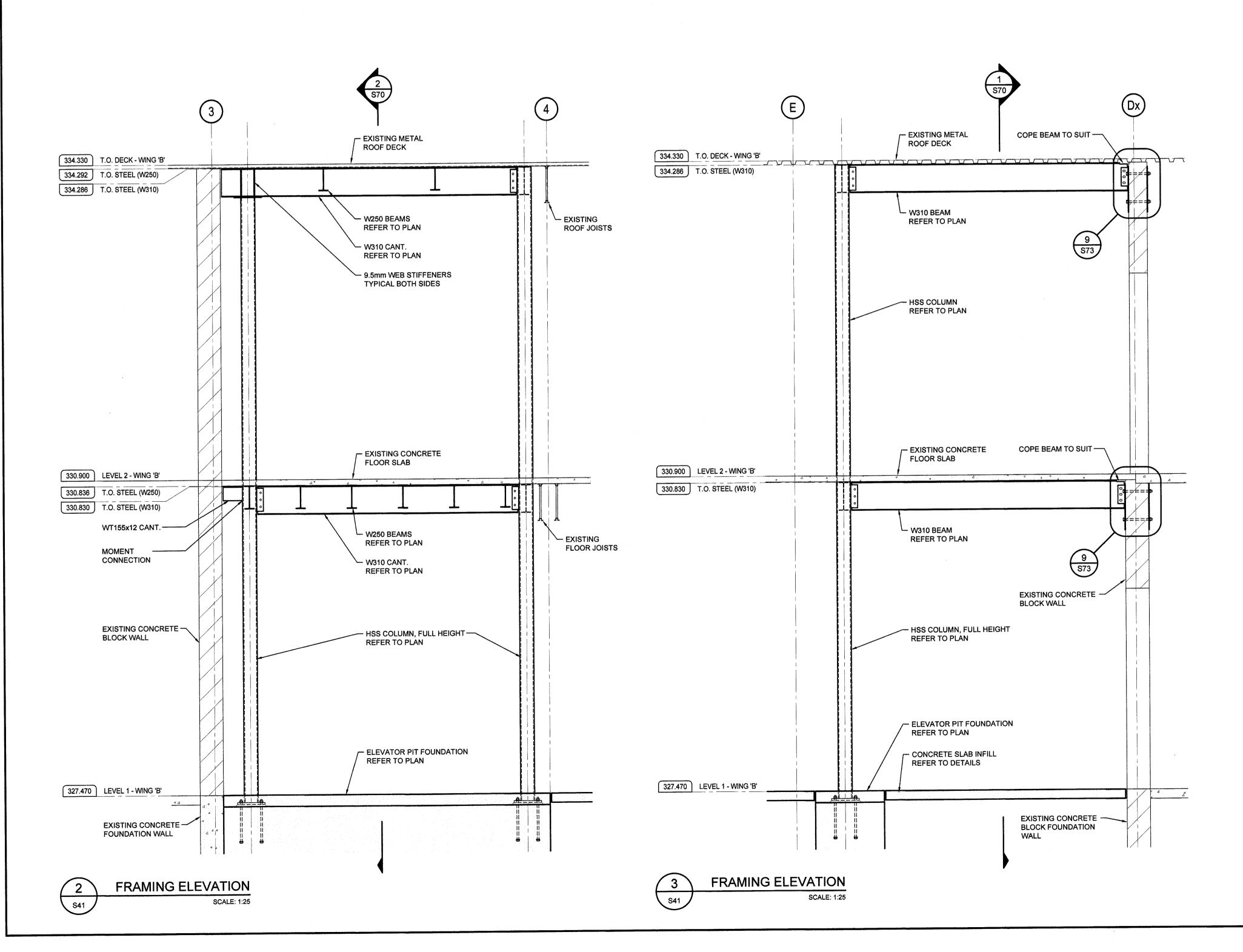
Scale AS NOTED	Date
	NOV 2, 2018
Drawn by	Drawing No.
BCW	
Checked By	
LS	- S4()
Approved By	
DAY/JRE	
JLR#	
27915	of 17



TYPICAL EXISTING 400 DEEP OWSJ ELEVATION

SCALE: 1:20

NOTE: REFER TO FLOOR AND ROOF JOIST REINFORCING DETAILS ON S71.



#### DO NOT SCALE DRAWINGS:

Contractors must check and verify all site conditions. Notify the Owner's Representative in writing before proceeding with the work if discrepancies are evident between the drawings and the site condition. No extras to the contract will be allowed if discrepancies were evident prior to start of work.

UNEXPECTED DISCOVERY OF ASBESTOS:

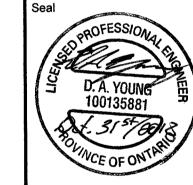
Where a friable material is discovered during construction, renovations and/or demolition, and it is suspected to contain asbestos, the Contractor must stop all work that may disturb the material. The Contractor shall advise the Owner of the discovery and await instructions from the owner.

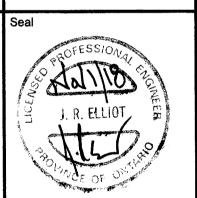


A = Detail number

B = Drawing number where detailed

0	ISSUED FOR PERMIT & TENDE	R TA	NOV 2, 2018
NO.	ISSUED	BY	DATE





## UNIVERSITY &GUELPH

Design, Engineering & Construction Physical Resources Guelph, Ontario. N1G 2W1

onsultant



BUILDING #046 RENOVATIONS

STRUCTURAL FRAMING ELEVATIONS

Project No. 504034

Cad File No. ----

Scale AS NOTED	Date NOV 2, 2018
Drawn by BCW	Drawing No.
Checked By LS	<b>Q11</b>
Approved By DAY/JRE	<b>341</b>
JLR # 27915	of 170

