

CONSTRUCTION NOTES:

A. GENERAL

- ALL WORK SHALL CONFORM TO THE ONTARIO BUILDING CODE AND ALL STANDARDS REFERENCED WITHIN. LOCAL REGULATIONS AND BYLAWS, AND THE OCCUPATIONAL HEALTH AND SAFETY ACT FOR CONSTRUCTION PROJECTS. THE LATEST VERSIONS OF STANDARDS SHALL APPLY.
- READ THESE DRAWINGS IN CONJUNCTION WITH ALL RELATED CONTRACT DOCUMENTS AND CONSULTANT DRAWINGS.
- THE CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE THEMSELVES WITH ALL CONDITIONS WHICH MAY ADVERSELY AFFECT THE PROPER COMPLETION OF THE PROJECT. THE CONTRACTOR SHALL CHECK ALL DIMENSIONS IN RELATION TO THE DRAWINGS AND NOTIFY THE ENGINEER TO ALL DISCREPANCIES PRIOR TO PROCEEDING WITH THE WORK.
- DRAWINGS ARE NOT TO BE SCALED.
- THE DESIGN DOCUMENTS ARE PREPARED SOLELY FOR THE USE WITH THE PARTY WHOM THE ENGINEER HAS ENTERED INTO CONTRACT. THERE ARE NO REPRESENTATIONS MADE TO ANY PARTY WITH WHOM THE ENGINEER HAS NOT ENTERED INTO CONTRACT.
- THE CONTRACTOR SHALL RETAIN AN INDEPENDENT TESTING AND INSPECTION COMPANY TO ENSURE THAT THE WORK IS DONE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS INCLUDING CONSTRUCTION TESTING, REINFORCING STEEL PLACEMENT, CONCRETE TESTING AND STRUCTURAL STEEL.
- THE ENGINEER SHALL BE GIVEN MINIMUM 24 HOURS NOTICE BY THE CONTRACTOR FOR ALL CONSTRUCTION REVIEWS, SITE VISITS AND REVIEWS BY THE ENGINEER OR THEIR REPRESENTATIVES ARE INTENDED FOR THE SOLE PURPOSE OF ASCERTAINING CONFORMANCE WITH THE GENERAL DESIGN CONCEPT. THE REVIEWS SHALL NOT MEAN THAT THE ENGINEER HAS SEEN ALL CONSTRUCTION PROCEDURES. REVIEW BY THE ENGINEER SHALL NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY FOR ERRORS AND OMISSIONS AND FOR MEETING ALL THE REQUIREMENTS OF THE CONSTRUCTION AND CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL MAKE ADEQUATE PROVISIONS FOR CONSTRUCTION LOADS AND TEMPORARY BRACING TO ENSURE SAFETY AND THE BUILDING IS PLUMB AND IN TRUE ALIGNMENT AT ALL PHASES OF CONSTRUCTION AS PER O REG 213/91. ALL BRACING MEMBERS SHOWN ON THE DRAWINGS ARE DESIGNED FOR THE FINISHED STRUCTURE AND MAY NOT BE SUFFICIENT FOR ERECTION PURPOSES. SHORING AND BRACING IS REQUIRED UNTIL PROPOSED STRUCTURE IS PROPERLY IN PLACE. SHORING AND BRACING SHALL BE DESIGNED, REVIEWED AND APPROVED BY A PROFESSIONAL ENGINEER. SHOP DRAWINGS SHALL BE SUBMITTED WITH P.ENG'S STAMP FOR OUR REVIEW PRIOR TO CONSTRUCTION. NO SUBSTITUTIONS FROM THE SPECIFIED PRODUCTS AND MATERIALS ARE PERMITTED WITHOUT THE APPROVAL OF THE ENGINEER.

TESTING REQUIREMENTS	
TEST	COMMENTS
REINFORCING STEEL PLACEMENT	FINAL PLACEMENT
CONCRETE COMPRESSIVE TESTS	MIN. 1 SETS PER 100 m ³
CONCRETE SLUMP	
STRUCTURAL STEEL CONNECTIONS	INSPECT ALL FIELD WELDS
MORTAR CUBES	
ALL TESTING TO BE COMPLETED BY A CERTIFIED INDEPENDENT TESTING AND INSPECTION COMPANY. COPIES OF ALL REPORTS ARE TO BE FORWARDED TO THE ENGINEER FOR REVIEW.	

B. FOUNDATIONS

- REMOVE ALL TOP SOIL, ORGANIC MATERIAL, LOOSE FILL AND OTHER DELETERIOUS MATERIAL FROM THE BUILDING AREA PRIOR TO CONSTRUCTION.
- PROOF ROLL EXISTING FILL MATERIALS, SOFT AREAS UNCOVERED DURING EXCAVATION SHALL BE SUB-EXCAVATED TO SOUND MATERIAL AND REPLACED WITH CLEAN, FREE DRAINING FILL COMPACTED TO 100% STANDARD PROCTOR MAXIMUM DRY DENSITY (GRADE UNCOVERED).
- COMPACTED FILL BENEATH FOOTINGS AND FLOOR SLABS SHALL BE COMPACTED IN MAXIMUM 6" (152mm) LAYERS.
- PLACE ALL FOOTINGS EXPOSED TO FREEZING WEATHER MINIMUM 4'-0" (1220mm) BELOW GRADE UNLESS OTHERWISE PROTECTED. PROTECT SOIL BELOW AND ADJACENT TO ALL FOOTINGS FROM FREEZING DURING CONSTRUCTION.
- NECESSARY PRECAUTIONS SHALL BE TAKEN TO ENSURE EXISTING FOOTINGS ARE NOT DISTURBED OR UNDERMINED DURING CONSTRUCTION.
- LOCATE ALL PIERS AND FOOTINGS CONCENTRIC UNDER COLUMNS AND WALLS UNLESS OTHERWISE NOTED.

C. CONCRETE

- CONCRETE WORK SHALL CONFORM TO THE LATEST VERSION OF CANCSA-A23.1, A23.2 AND A23.3
- CONCRETE PROPERTIES: (MINIMUM COMPRESSIVE STRENGTH MEASURED AT 28 DAYS UNLESS NOTED)
 - ALL CONCRETE UNLESS NOTED OTHERWISE - 20 MPa
 - SEE CHART FOR CONCRETE TYPES

LOCATION	CONCRETE CLASS	28 DAY COMP. STRENGTH (MPa)		MAX. W/C RATIO	AIR CONTENT %	MAX. AGGREGATE (mm)	SLUMP (mm)
		NA	NA				
FOOTINGS	N 20	NA	NA	20	80	±30	
INTERIOR PIERS AND WALLS	N 25	NA	NA	20	80	±30	
INTERIOR CONCRETE SLABS	N 25	0.50	NA	20	80	±30	

- CONCRETE DESIGN IS BASED ON COMPRESSIVE STRENGTH PHYSICAL PROPERTIES (SLUMP, AGGREGATE SIZE, ETC.) TO SUIT INSTALLATION (BY OTHERS) NOT TO AFFECT STRENGTH SPECIFIED.
- ALL CONCRETE SHALL BE TESTED BY A CSA CERTIFIED CONCRETE TESTING LABORATORY. CONTRACTOR TO PROVIDE COPIES OF TESTING REPORTS TO THE ENGINEER. NOT LESS THAN ONE TEST SHALL BE MADE FOR EACH 100m³ OF CONCRETE WITH AT LEAST ONE TEST FOR EACH CLASS OF CONCRETE USED. A MINIMUM OF THREE TESTS IS REQUIRED FOR EACH CLASS.
- SLUMP OF CONCRETE TO BE 80mm ±30mm PRIOR TO SUPER PLASTICIZERS BEING ADDED.
- ALL CONCRETE FORMS ARE TO BE WET THOROUGHLY PRIOR TO PLACING CONCRETE. WATER CURING OF CONCRETE IS RECOMMENDED.
- DO NOT ADD WATER TO THE CONCRETE.
- ALL CONCRETE EXCEPT FOR CONCRETE SLABS 6" (152mm) OR LESS SHALL BE MECHANICALLY VIBRATED.
- REINFORCING STEEL SHALL CONFORM TO THE LATEST VERSIONS OF CANCSA-G30.18. REINFORCING BARS SHALL BE DEFORMED, GRADE 400 MPa.
- MAINTAIN THE FOLLOWING CONCRETE CLEAR COVER TO REINFORCING:
 - 76mm (3") FOR CONCRETE CAST AGAINST EARTH
 - 38mm (1 1/2") FOR CONCRETE CAST AGAINST FORMWORK
 - 64mm (2 1/2") FOR CONCRETE EXPOSED TO DE-ICING CHEMICALS
- ALL REINFORCING STEEL, DOWELS AND ANCHOR BOLTS ARE TO BE CLEAN AND FREE OF RUST, DIRT, FORM RELEASE AGENT, ETC. PRIOR TO POURING CONCRETE.
- LAP ALL REINFORCING AS PER REINFORCING STEEL CHART BELOW (MIN). LAP ALL HORIZONTAL BARS AT CORNERS WITH BENT DOWELS MEETING THE MINIMUM LAP REQUIREMENTS IN BOTH DIRECTIONS. SHOP FABRICATE ALL REINFORCING STEEL TO INCLUDE HOOKS AND BENDS.
- REINFORCING STEEL, DOWELS AND ANCHOR BOLTS ARE TO BE SECURELY TIED PRIOR TO PLACING CONCRETE. REINFORCING STEEL CHAIRS AND SUPPORTS SHALL BE MADE OF CONCRETE BLOCKS, PLASTIC OR WIRE.
- DOWELS SHALL MATCH REINFORCING UNLESS NOTED OTHERWISE.
- INSTALLATION OF ALL PROPRIETARY ANCHORS IS TO BE COMPLETED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION REQUIREMENTS. SPECIALIZED TRAINING MAYBE REQUIRED DEPENDING ON THE PRODUCT. CONTRACTOR IS TO CONTACT THE MANUFACTURER/SUPPLIER TO ARRANGE THE REQUIRED TRAINING.

CONCRETE BAR SIZE	TENSION SPLICE			COMPRESSION EMBEDMENT	REINFORCED MASONRY
	25 MPa	30 MPa	35 MPa	20 MPa	20 MPa GROUT
10M	406 (16")	406 (16")	406 (16")	457 (18")	508 (20")
15M	610 (24")	610 (24")	610 (24")	660 (26")	762 (30")
20M	813 (32")	813 (32")	813 (32")	914 (36")	914 (36")
25M	1220 (48")	1118 (44")	1016 (40")	1372 (54")	1372 (54")
30M	1420 (56")	1320 (52")	1220 (48")	1625 (64")	N/A
35M	1670 (66")	1524 (60")	1420 (56")	1880 (74")	N/A

NOTE: INCREASE HORIZONTAL SPLICE LENGTHS IN 10% FOR EACH 10% INCREASE IN CONCRETE STRENGTH OR FRESH CONCRETE IS CAST BELOW THE SPLICE

D. MASONRY

- MASONRY TO CONFORM TO THE LATEST VERSION OF CANCSA-S304.1 AND CSA A371.
- STRENGTH OF LOAD-BEARING MASONRY UNITS TO BE MINIMUM 15 MPa FOR HOLLOW UNITS BASED ON NET AREA.
- TYPE 'S' MORTAR SHALL BE USED FOR CONCRETE BLOCK. TYPE 'N' MORTAR SHALL BE USED FOR BRICK AND DECORATIVE BLOCK. GROUT STRENGTH SHALL BE 20 MPa UNLESS NOTED OTHERWISE. MORTAR AND GROUT TO CONFORM TO THE LATEST VERSION OF CSA A179.
- ALL MASONRY WALLS SHALL BE CONSTRUCTED WITH FULL MORTAR JOINTS.
- VERTICAL CONTROL JOINTS SHALL BE INSTALLED AT 600mm (2'-0") SPACING. MAXIMUM REINFORCING SHALL NOT CROSS A CONTROL JOINT. PROVIDE FOAM BACKING ROD AND CAULKING AT CONTROL JOINTS AND ENSURE MORTAR DOES NOT FILL THE JOINT.
- REINFORCE ALL MASONRY WITH HOT DIP GALVANIZED NO. 9 TRUSS TYPE WIRE REINFORCING @ 16" (406mm). PROVIDE FULL OVERLAP AT ALL INTERSECTIONS AND CORNERS.
- INSTALLATION OF ALL PROPRIETARY ANCHORS IS TO BE COMPLETED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION REQUIREMENTS. SPECIALIZED TRAINING MAYBE REQUIRED DEPENDING ON THE PRODUCT.
- CONTRACTOR IS TO CONTACT THE MANUFACTURER/SUPPLIER TO ARRANGE THE REQUIRED TRAINING. ADHESIVE ANCHORS INTO HOLLOW CONCRETE BLOCK ARE TO BE INSTALLED WITH SCREEN TUBES.
- ALL STEEL BEAMS AND JOISTS SHALL BE SUPPORTED BY BEARING PLATES DESIGNED TO THE LATEST VERSION OF CANCSA S16. BEARING PLATES SHALL HAVE MINIMUM (2) 1/2" (13mm) DIAMETER x 18" (457mm) LONG ANCHORS WITH 2" (51mm) HOOK OR (1) 19M x 24" WELDLABLE REBAR ANCHOR.
- ALL MASONRY UNDER CONCENTRATED LOADS SHALL BE FILLED SOLID WITH GROUT FOR A WIDTH AND DEPTH EQUAL TO 3 TIMES THE LENGTH OF BEARING. WHERE OPEN WEB STEEL JOISTS OR BEAMS BEAR ON UNREINFORCED MASONRY WALLS PROVIDE (1) 19M VERTICAL x48" (1220mm) LONG UNDER BEARING PLATE. ALL MASONRY WALLS ARE TO BE ADEQUATELY BRACED DURING CONSTRUCTION UNTIL THE FLOOR AND ROOF STRUCTURES ARE IN PLACE. BRACING SHALL BE DESIGNED, REVIEWED AND APPROVED BY CONTRACTOR'S ENGINEER. SHOP DRAWINGS SHALL BE SUBMITTED WITH ENGINEERING'S STAMP FOR OUR REVIEW PRIOR TO CONSTRUCTION.
- ALL MASONRY INSTALLED BELOW GRADE ARE TO BE FULLY GROUTED.
- FOR MASONRY OPENINGS NOT SHOWN ON THE FRAMING PLANS UP TO 48" (1220mm) WIDE, PROVIDE ONE (1) 3/4" x 5/8" x 20" (L89x89x6.4) FOR EACH 3' (914mm) THICKNESS OF MASONRY.
- PROVIDE DOWELS FROM THE FOUNDATION WALL TO MASONRY WALLS TO MATCH VERTICAL REINFORCING SPACING AND SIZE.
- PROVIDE 15M BAR GROUTED INTO EACH EMPTY CORE 8" (203mm) O.C., CONTINUOUS BEHIND EACH ELEVATOR INSERT.
- REINFORCED MASONRY
 - GROUT ALL REINFORCED CELLS SOLID AS PER NOTE 3. REINFORCED CELLS TO BE KEPT CLEAR OF MORTAR.
 - PROVIDE (1) FULL HEIGHT VERTICAL BAR EACH SIDE OF CONTROL JOINTS, OPENINGS, INTERSECTIONS AND ENDS OF WALLS.
 - LAP ALL REINFORCING AS PER REINFORCING STEEL CHART ABOVE (MIN).

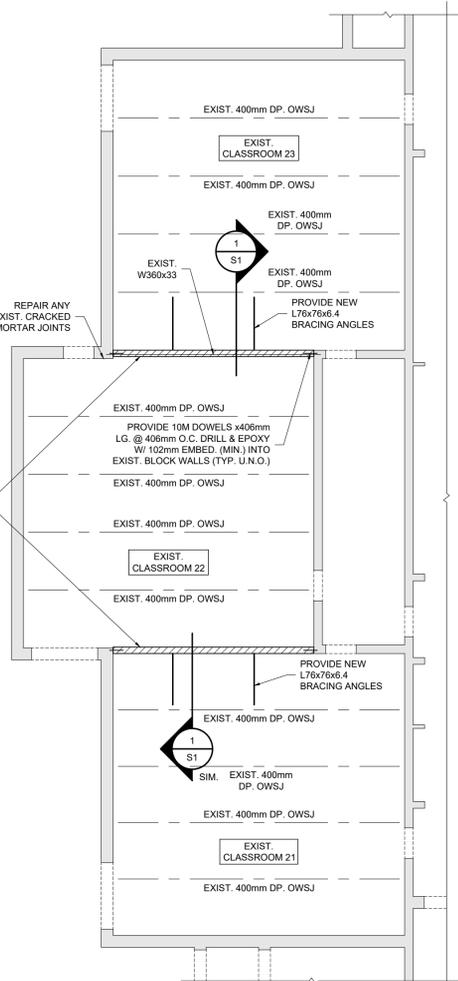
E. STRUCTURAL STEEL

- STRUCTURAL STEEL SHALL CONFORM TO THE LATEST VERSION OF CANCSA-S16 AND THE DISC CODE OF STANDARD PRACTICE.
- STRUCTURAL STEEL SHALL CONFORM TO THE LATEST VERSION OF CANCSA G40.20, G40.21 GRADE 350W CLASS C FOR H.S.S., G40.21 GRADE 350W FOR W SHAPE SECTIONS AND G40.21 GRADE 300W FOR CHANNELS, ANGLES AND MISCELLANEOUS METAL.
- BOLTED CONNECTIONS SHALL USE GRADE A325 BOLTS.
- ANCHOR BOLTS SHALL BE FABRICATED USING STEEL ROD CONFORMING TO THE LATEST VERSION OF CSA G40.21 GRADE 300W.
- WELDING SHALL CONFORM TO CSA W59 AND CSA W47 DIVISION 1 OR DIVISION 2.1 BY THE CANADIAN WELDING BUREAU. WELDING SHALL BE COMPLETED BY CWB CERTIFIED FABRICATOR AND ERECTOR TO THE CSA STANDARDS W178.1 AND W178.2.
- STRUCTURAL STEEL MEMBERS SHALL NOT BE SPLICED WITHOUT THE APPROVAL OF THE ENGINEER.
- STEEL LINTELS SHALL HAVE MINIMUM 8" (203mm) BEARING ON MASONRY UNLESS OTHERWISE NOTED. WELD LINTELS TO BEARING PLATES WHERE PROVIDED WITH MINIMUM 3/16"x2" (4.8mmx51mm) FILLET WELD EACH SIDE.
- ALL ROOF OPENINGS IN METAL DECK AND SUPPORT OF ALL ROOF UNIT CURBS ON METAL DECK ARE TO BE REINFORCED WITH CSA 5.7 (C130x10) CHANNEL FRAMES UNLESS NOTED OTHERWISE.
- ALL STRUCTURAL STEEL IS TO BE SHOP PRIME PAINTED UNLESS NOTED OTHERWISE. STRUCTURAL STEEL WHICH IS TO BE PROTECTED WITH SPRAY APPLIED FIREPROOFING IS TO BE KEPT CLEAN AND UNCOATED. STRUCTURAL STEEL EXPOSED TO WEATHER IS TO BE HOT DIP GALVANIZED CONFORMING TO THE LATEST VERSION OF CANCSA-S16A. ALL COATINGS ARE TO BE TOUCHED UP ON SITE WITH APPROVED PAINT FOR PRIMED STEEL AND ZINC RICH PAINT FOR GALVANIZED STEEL.

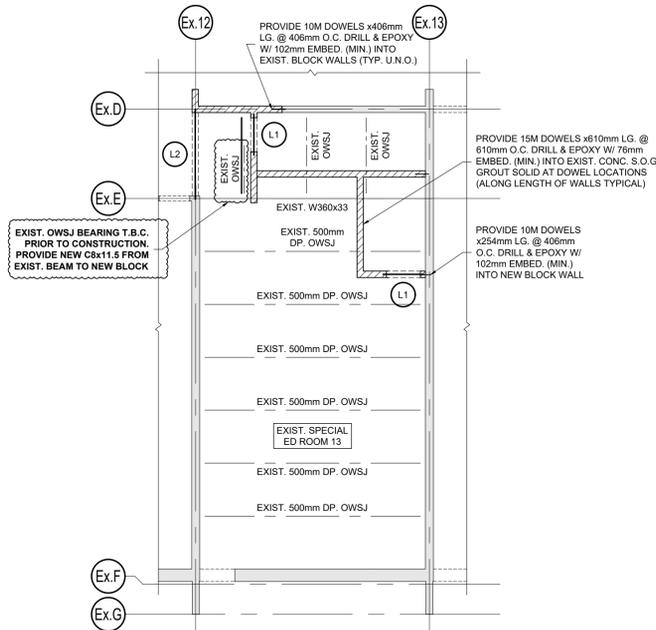
SHOP DRAWINGS REQUIREMENTS

NAME	REQD.	P.ENG. STAMP	MIN. CERTIFICATION REQ'S.
CONCRETE MIX DESIGN	YES	NO	
REBAR	YES	NO	
STRUCTURAL STEEL	YES	YES	CONNECTIONS ONLY
MASONRY WALL BRACING	YES	YES	LAYOUT, AND ANCHORAGE

SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION. SHOP DRAWINGS MUST BE REVIEWED AND STAMPED BY THE GENERAL CONTRACTOR PRIOR TO ISSUING TO THE ENGINEER FOR REVIEW.



PARTIAL FRAMING PLAN
CLASSROOMS 21, 22, & 23
1:100

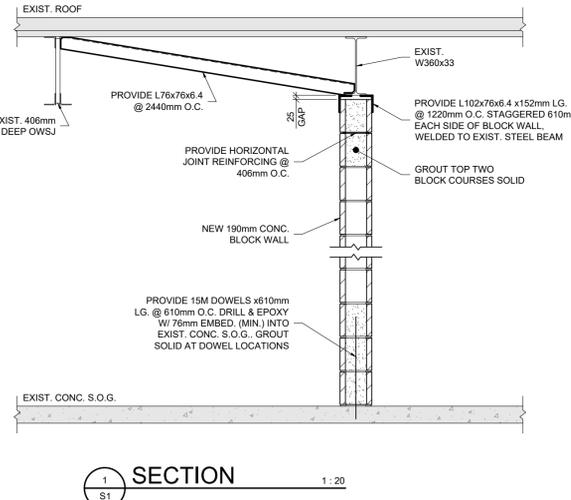
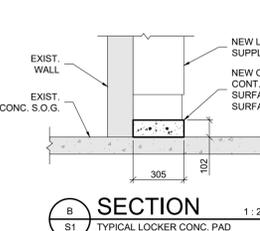
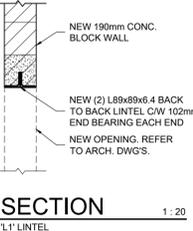


PARTIAL FRAMING PLAN
CLASSROOM 13 - SPECIAL ED.
1:100

LINTEL SCHEDULE		
LINTEL	SIZE	END BEARING
L1	(2) L189x89x6.4	102mm EACH END
L2	(2) L152x89x6.8	102mm EACH END

BRICK LINTELS
UP TO 1220mm WIDE - L89x89x6.4
UP TO 1830mm WIDE - L102x89x7.9 L.L.V.
UP TO 2440mm WIDE - L127x89x7.9 L.L.V.

ALL BRICK LINTELS & EXTERIOR LINTELS EXPOSED TO WEATHER TO BE H.D.G.



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NO.	DATE	REVISION
3	2026.02.13	ISSUED FOR TENDER
2	2026.01.23	ISSUED FOR BUILDING PERMIT
1	2025.11.26	ISSUED FOR PRELIMINARY REVIEW

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Feb 11, 2026
PROVINCE OF ONTARIO

PROJECT
AVENUE ROAD P.S. RENOVATIONS
40 GAIL STREET CAMBRIDGE, ON.

DRAWING
PARTIAL FRAMING PLANS & DETAILS

DESIGNER TGEC / DLN	PROJECT NO. 17945-100
DRAWN RAM	DRAWING NO. S1
DATE FEBRUARY 2026	
SCALE AS NOTED	