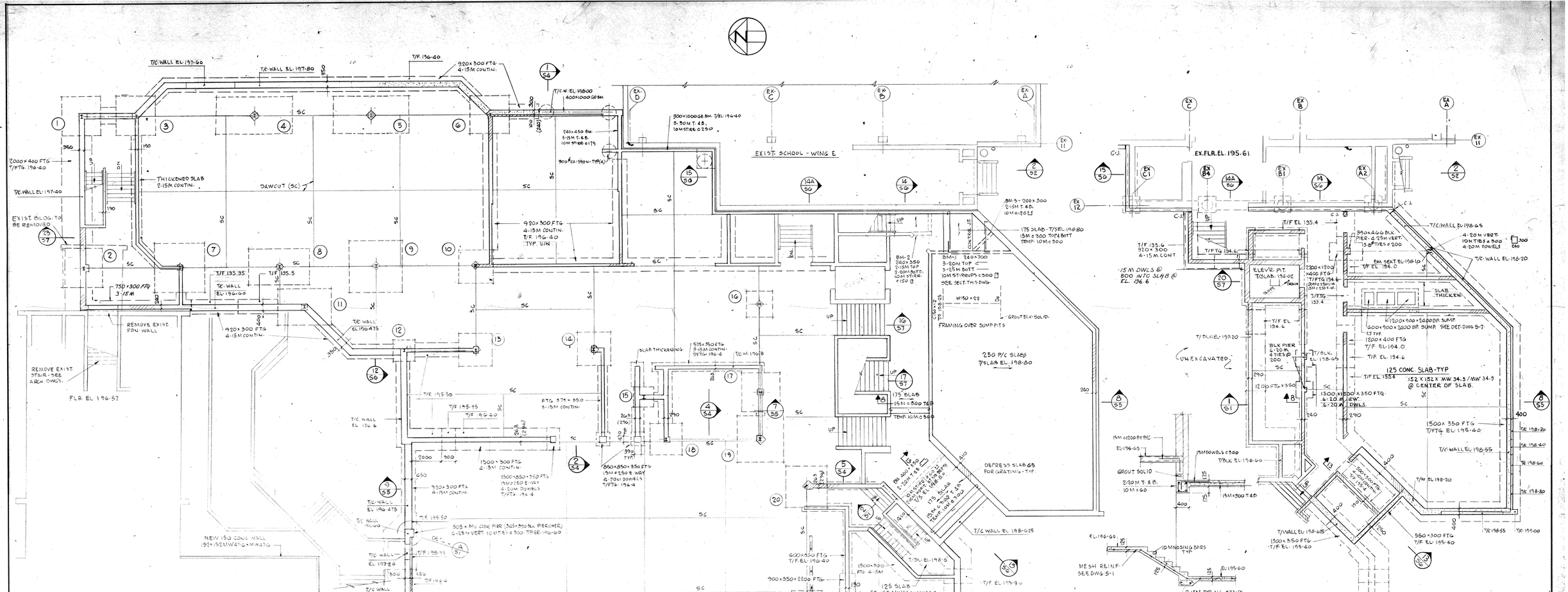

GENERAL NOTES

FOUNDATIONS

Soil investigation prepared by Trow Ltd. Project. #4891-G

All footings (except as noted) are designed for a maximum soil bearing capacity of 100 kpa.

All footing excavations are to be inspected by the Architect or Engineer prior to placing of concrete.

Excavate first for those footings shown at the deepest elevations, working up to the highest elevations.

Protect existing foundations from loss of support during construction of new footings.

All footings subject to frost action shall be carried down a minimum of 1200 below finished grade.

Stepped footings are to be constructed at the locations shown on the drawings. Slope of step shall have a maximum rise to run ratio of 1 to 2 unless noted.

If soil conditions on site or special job conditions require lowering of footings advise the Architect or Engineer before proceeding.

Soil supporting footings and slabs shall be protected from freezing before and after concrete is poured.

Exterior basement walls are not to be back-filled and compacted until basement and main floor slabs are poured and set.

Backfill and compact walls below grade in such a way that the level on one side is never more than 450 above the other side.

FORMWORK

The Contractor shall submit to the Architect or Engineer complete structural slab formwork and reshoring drawings for review prior to commencement of construction.

CONCRETE

All concrete work has been designed in accordance with C.S.A. Standard A23.3 - 1973.
Concrete requirements are as follows:

Mix Location	Min. Strength at 28 days Mpa
Typical	20
Beams adjacent to Block E	30

Reinforcing Steel requirements are as follows:

Location or Size	Min. Yield Strength	Lap Length	Remarks
Deformed Bars	400 Mpa	36 ø	Unless noted
W. W. Mesh	400 Mpa	300	

Detailing and placing of all reinforcing steel shall be in accordance with the Reinforcing Steel Institute of Ontario "Manual of Standard Practice".

All concrete materials and methods of concrete construction shall be in accordance with C.S.A. Standard A23.1 - 1973. unless noted.

Testing of concrete shall comply with the requirements of C.S.A. Standard A23.2 - 1973.

Lap all temperature reinforcing 36 bar diameters for yield strengths of 400.

Concrete protection for reinforcement unless noted:

Concrete deposited against earth	75
Formed concrete exposed to weather or in contact with earth	
— bars larger than 15	50
— 15 bars or smaller	40
Formed concrete not exposed to weather nor in contact with earth	
— slabs and walls	25
— beams and girders	13
— column ties and spirals	13

Provide sufficient support bars on high chairs, slab bolsters, and other accessories to maintain the reinforcing steel in the required positions with proper clearances before and during placing of concrete. Tie bars at all intersections.

All openings for mechanical and electrical trades shall be approved by the Architect or Engineer for size and location before placement of concrete.

Add 2 - 15 bars top and bottom at perimeter of all openings in concrete slabs, and extend bars 600 past opening each side.

Add 2 - 15 bars each face at perimeter of all openings in concrete walls, and extend bars 600 past opening each side.

No sleeves are to be placed through concrete beams without approval by the Architect or Engineer.

Embedment of conduits and pipes shall be in accordance with the requirements of C.S.A. Standard A23.3 - 1973.

Provide dovetail anchor slots for masonry anchors in all concrete walls and columns faced with block or brick masonry as detailed on the drawings. Masonry anchors shall be galvanized after fabrication.

TYPICAL BLOCK WALL REINFORCING

SPLIT RIB (G) THICKNESS	BLOCK THICKNESS	VERTICAL REINF.	HORIZONTAL REINF.	NON-BRG BLK. PART'S REINFORCING
	140	15M @ 800	HEAVY DUTY LADDER TYPE @ 400.	HEAVY DUTY LADDER TYPE @ 400.
190	190	15M @ 800	EXTRA HEAVY DUTY TRUSS TYPE @ 400.	HEAVY DUTY LADDER TYPE @ 400.
240 & 296	240	20M @ 800	HEAVY DUTY LADDER TYPE @ 200.	EXTRA HEAVY DUTY TRUSS @ 400.
	290	25M @ 1200	HEAVY DUTY LADDER TYPE @ 200.	HEAVY DUTY LADDER @ 200.
140		10M @ 600 - H/D LADDER TYPE @ 400 80 OC TO CROSS WIRES		

PARKER CONSULTANTS
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PROJECT NO 3242
P. C. ROSCOE
REGISTERED PROFESSIONAL ENGINEER PROVINCE OF ONTARIO
MICHAEL J. TORSNEY ASSOCIATION OF PROFESSIONAL ENGINEERS OF ONTARIO MEMBER ARCHITECT

NO	DATE	REVISION
	APR 25/84	AS BUILT

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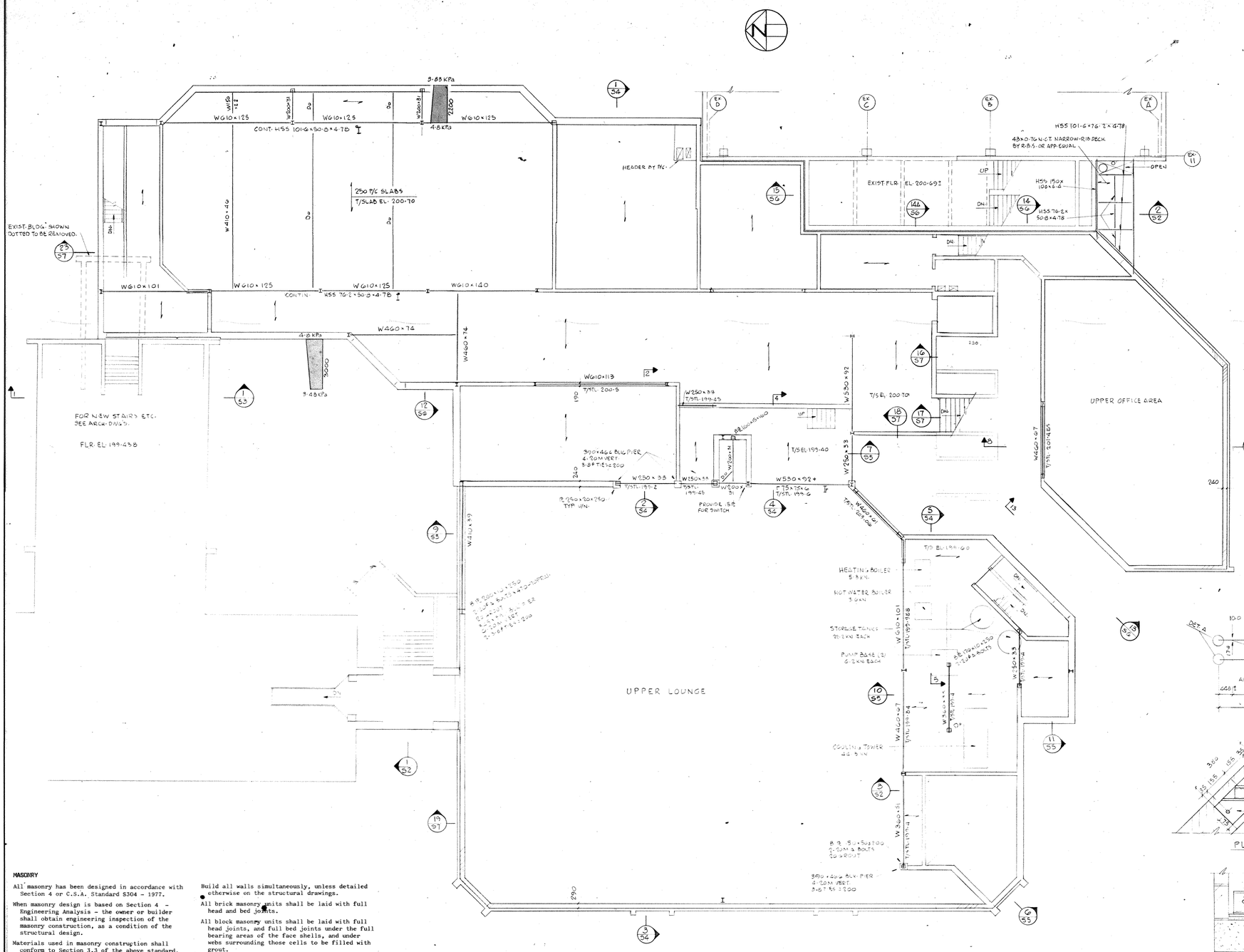
SCALE AS NOTED	DRN. W.N.	JOB NO. 8403
		DATE OCT. 1984
		DWG. NO. S1

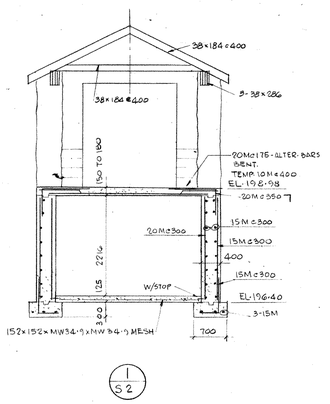
MOHAWK COLLEGE
STUDENT CENTRE
HAMILTON, ONTARIO

BASEMENT, FOUNDATION & FIRST FLOOR PLANS PHASE-1



SECOND FLOOR FRAMING PLAN

SCALE = 1:100



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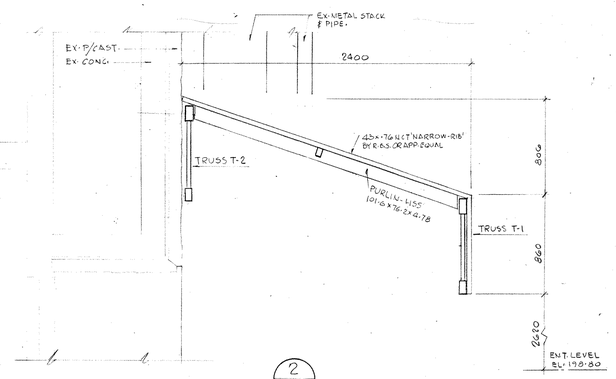

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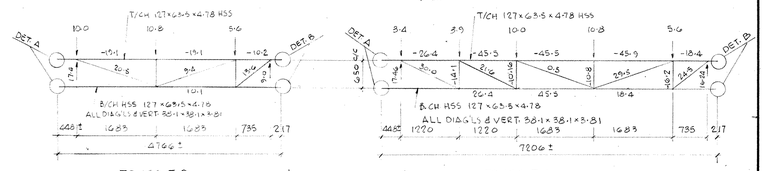

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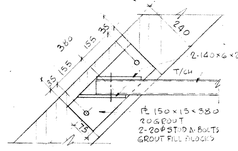
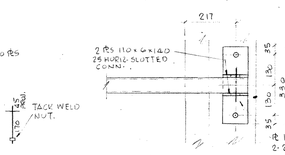
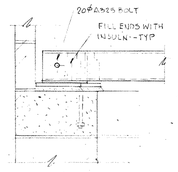


PLAN

TRUSS T-1



PLAN



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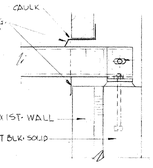

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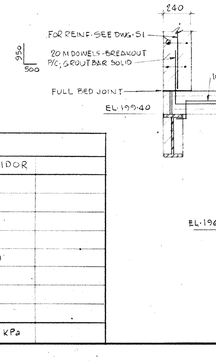

3/S2 1:20

MASONRY

All masonry has been designed in accordance with Section 4 or C.S.A. Standard S304 - 1977.

When masonry design is based on Section 4 - Engineering Analysis - the owner or builder shall obtain engineering inspection of the masonry construction, as a condition of the structural design.

Materials used in masonry construction shall conform to Section 3.3 of the above standard.

Construction of masonry shall conform to the appropriate requirements of the above standard.

All clay brick masonry units shall comply with the requirements of C.S.A. Standard A82.1 - 1965. For compressive strength refer to specifications.

All concrete block masonry units shall comply with the requirements of C.S.A. Standard A165.1 - 1972. Refer to the drawings for block classifications.

A "hollow" block unit means a structural masonry unit with a net cross-sectional area less than 75 percent of its gross area in any plane parallel to its bearing surface. (Symbol "H")

A "solid" block unit means a structural masonry unit with a net cross-sectional area of at least 75 percent of its gross area in any plans parallel to its bearing surface. (Symbol "S")

The Contractor shall supply the Architect or Engineer with certification from the brick and block suppliers indicating conformance to the drawings and/or specifications.

Mortar types as referred to on the structural drawings shall be as follows:

Type of Mortar	Min. Avg. Comp. Strength @ 28 days MPa	Composition Portland Cement	Masonry Cement	In parts by Vol. Sand Aggregate
M	17.5	1	1 (Type H)	6
S	12.5	½	1 (Type H)	4½

Build all walls simultaneously, unless detailed otherwise on the structural drawings.

All brick masonry units shall be laid with full head and bed joints.

All block masonry units shall be laid with full head joints, and full bed joints under the full bearing areas of the face shells, and under webs surrounding those cells to be filled with grout.

The maximum thickness of a mortar joint in load-bearing masonry shall be 12.

The intersection of all masonry walls shall be bonded. See structural drawings for bonding details.

Block masonry supporting steel beams or joists shall have their voids filled with 'M' type mortar or equivalent strength concrete. Fill voids of two supporting courses by a minimum of two block widths.

To ensure proper drainage, the cavity in a cavity wall or a veneer wall shall be kept free of mortar droppings.

Frozen materials or materials containing ice shall not be used in masonry.

Masonry shall not be laid when the temperature of the outside air is below 4°C, unless means approved by the Architect or Engineer are provided to heat the masonry materials, and protect the completed work.

Uncompleted masonry exposed to the weather shall be covered on the top surface with a water-proof material, except when construction is in progress.

This Contractor shall be responsible to provide adequate temporary bracing for all loads to which the masonry work may be subjected. Until such time as the permanent supports are in place and the masonry work can safely support the design loads.

SECOND FLOOR DESIGN LOADS - PHASE 1

ITEM / AREA	TYPICAL	TYPICAL	MECH. ROOM	CORRIDOR
FLOORING	0·1	0·1	1·02	0·1
200 P/C SLAB	2·66	——	2·66	2·66
250 P/C SLAB	——	3·66	——	——
CEILING	·12	·12	·12	·12
MECH. & ELECT.	·239	·239	·239	·239
PARTNS./EQUIPT.	·957	·957	·957	——
LIVE LOAD	2·4	2·4	3·6 FOR EQUIPT LOADS SEE PLAN	4·8
TOTAL	6·48 KPa	7·48 KPa	8·60 KPa	7·92 KPa

NO.	DATE	REVISION
	APR. 25/86	AS BUILT.

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SCALE AS NOTED	DRN. W.N.	JOB NO. 8403

MOHAWK COLLEGE
STUDENT CENTRE
HAMILTON, ONTARIO

DATE: OCT. 1984
DWG. NO: S2

SECOND FLOOR FRAMING PLAN
PHASE-1

PARKER CONSULTANTS
Consulting Professional Engineers
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London Ottawa
PROJECT NO 3242

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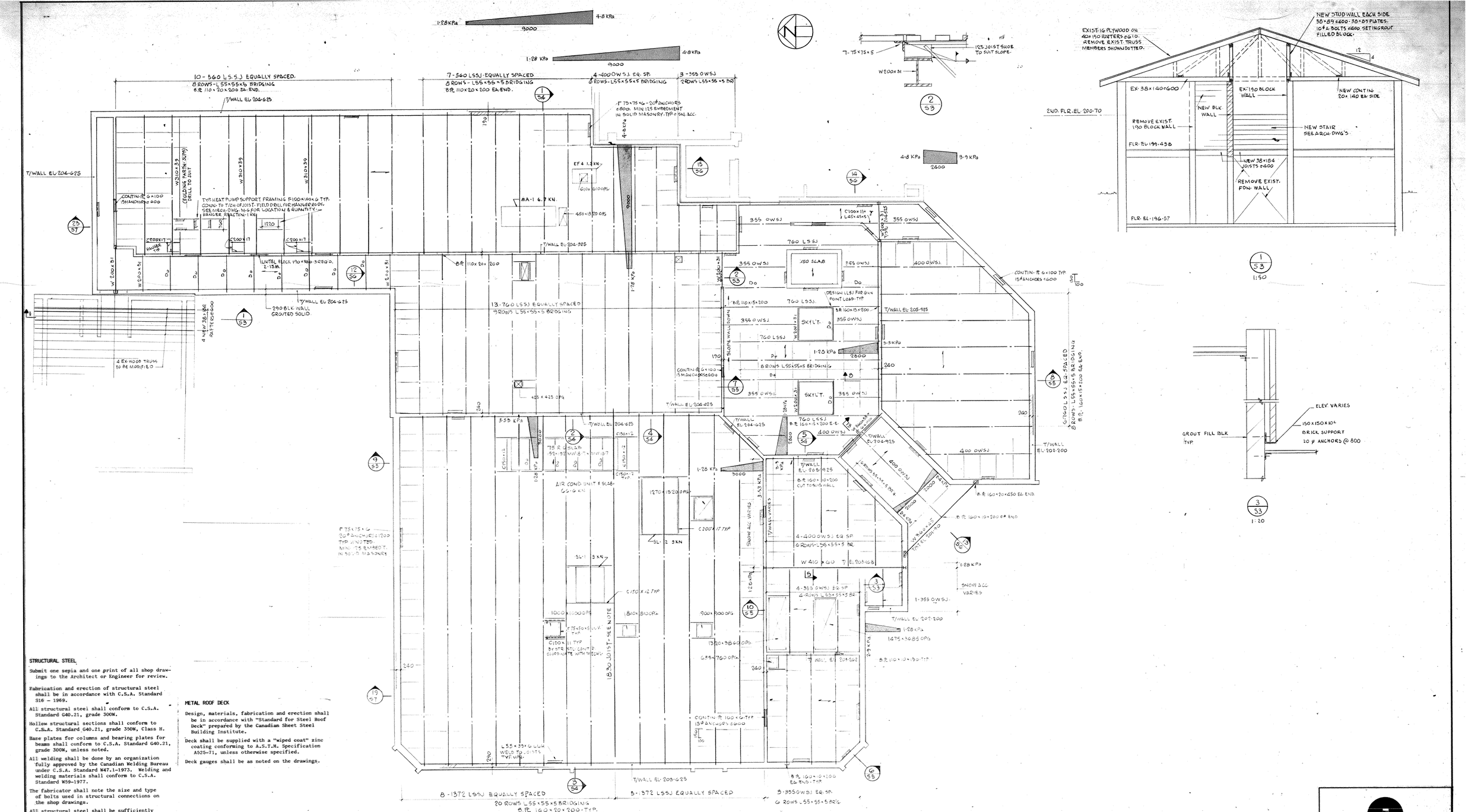
ONTARIO ASSOCIATION OF ARCHITECTS MEMBER MICHAEL J. TORSNEY ARCHITECT



STRUCTURAL STEEL

Submit one sepia and one print of all shop drawings to the Architect or Engineer for review.

Fabrication and erection of structural steel shall be in accordance with C.S.A. Standard S16 – 1969.

All structural steel shall conform to C.S.A. Standard G40.21, grade 300W.

Hollow structural sections shall conform to C.S.A. Standard G40.21, grade 350W, Class H.

Base plates for columns and bearing plates for beams shall conform to C.S.A. Standard G40.21, grade 300W, unless noted.

All welding shall be done by an organization fully approved by the Canadian Welding Bureau under C.S.A. Standard W47.1-1973. Welding and welding materials shall conform to C.S.A. Standard W59-1977.

The fabricator shall note the size and type of bolts used in structural connections on the shop drawings.

All structural steel shall be sufficiently straight that variations cannot be determined with the unaided eye. All structural steel shall be thoroughly cleaned of all loose mill scale, dirt, oil, or other foreign matter before shop painting. Shop paint shall conform to C.G.S.B. Specification 1 – GP – 40d – 1968.

Structural steel to be encased in concrete or adjacent to areas to be field welded shall not be painted.

Where it is necessary to provide holes for pipes, conduits, etc. in the webs of beams or columns in the field, the Contractor whose trade requires the openings shall be responsible for reinforcing these members to the approval of the Architect or Engineer. Flanges of steel beams or columns shall not be cut unless approved by the Architect or Engineer.

Steel lintels shall have a minimum bearing length of 300 lintels made up of two angles shall be welded together with a minimum 5 x 50 @ 600 weld top and bottom.

Where the edges of suspended concrete slabs bear on steel beams, anchors shall be welded to the beams at 600 intervals and embedded in the concrete. Anchor size shall be 38 x 5 x 300.

Where block or brick masonry passes a steel beam provide galvanized masonry anchors as detailed on the drawings.

Where block or brick masonry abuts or passes a steel column, provide galvanized masonry anchors as detailed on the drawings.

METAL ROOF DECK

Design, materials, fabrication and erection shall be in accordance with "Standard for Steel Roof Deck" prepared by the Canadian Sheet Steel Building Institute.

Deck shall be supplied with a "wiped coat" zinc coating conforming to A.S.T.M. Specification A525-71, unless otherwise specified.

Deck gauges shall be as noted on the drawings.

ROOF FRAMING PLAN

SCALE = 1:100

NOTE - ALL STEEL ROOF DECK = 0·76 x 43 R.B.S. NARROW RIB OR APPROVED EQUAL.
ALL JOISTS TO HAVE BOTTOM CHORD EXTENSIONS.

ALL ROOF CONSTRUCTION SHALL MEET ULC-R208, OR R709
ROOF DECK SHALL BE CONNECTED WITH 20 ϕ PLUG WELDS AT 300 O.C. TO SUPPORTS.
ALL BEARING I'S SHALL HAVE 2-20 ϕ x 200 LG. BOLTS WELDED TO PL. BLOCK UNDER I'S SHALL BE GROUT FILLED.

18 30 JOIST TO CARRY ROOF LOADS PLUS 4500 HIGH MOVEABLE PARTITION AT 0·574 KPa. CO-ORDINATE WITH PARTITION MANUFACTURER.
MAX. ALLOW. SNOW LOAD DEFLECTION - 1/3.

ROOF DESIGN LOADS

ITEM	TYPICAL	LOUNGE
BUILT-UP ROOF	·290	·290
75 INSULATION	·210	·210
0·76 DECK	·091	·091
13 DRYWALL	·110	·110
CEILING	·120	·478
STEEL JOISTS	·140	·20
MECH'L & ELECT'L.	·239	·239
LIVE LOAD	1·28	1·28
SNOW ACC. - SEE PLAN	—	—
TOTAL	2·48 KPa	2·89 KPa

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MOHAWK COLLEGE
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HAMILTON, ONTARIO

ROOF FRAMING PLAN
PHASE-I

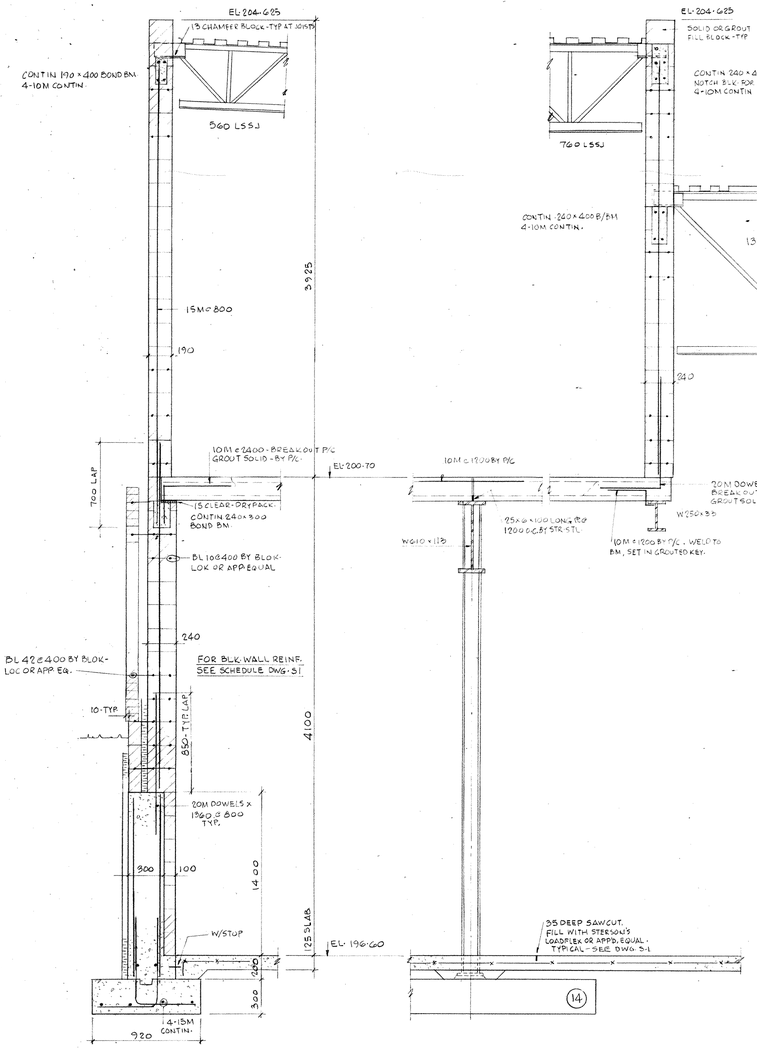
DATE OCT. 1984
DWG. NO. S3

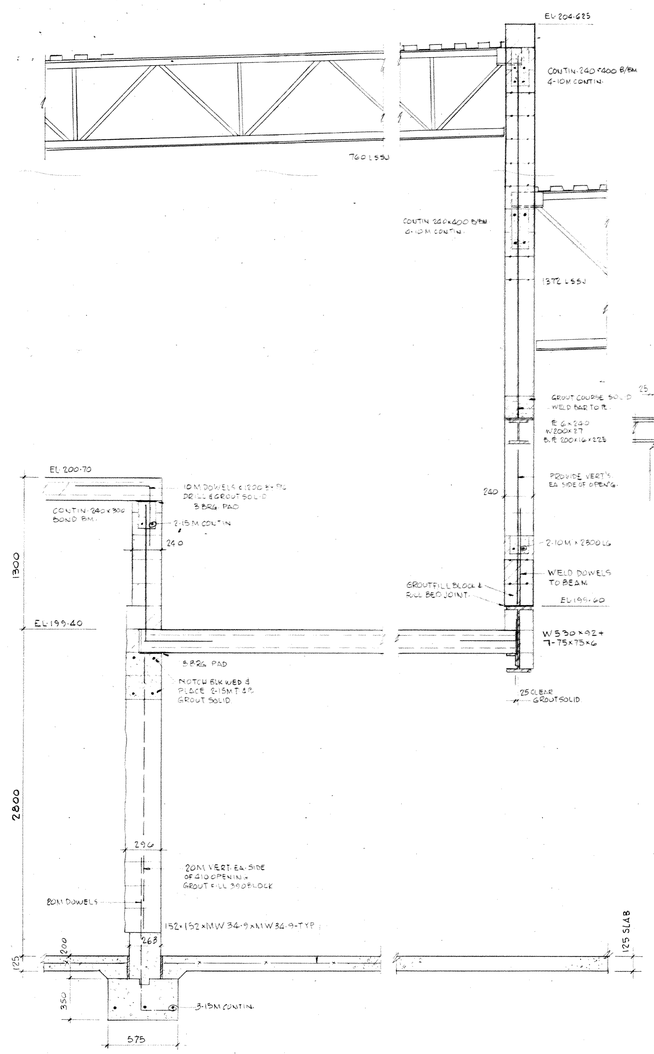
PARKER CONSULTANTS
Consulting Professional Engineers
Hamilton
London Ottawa

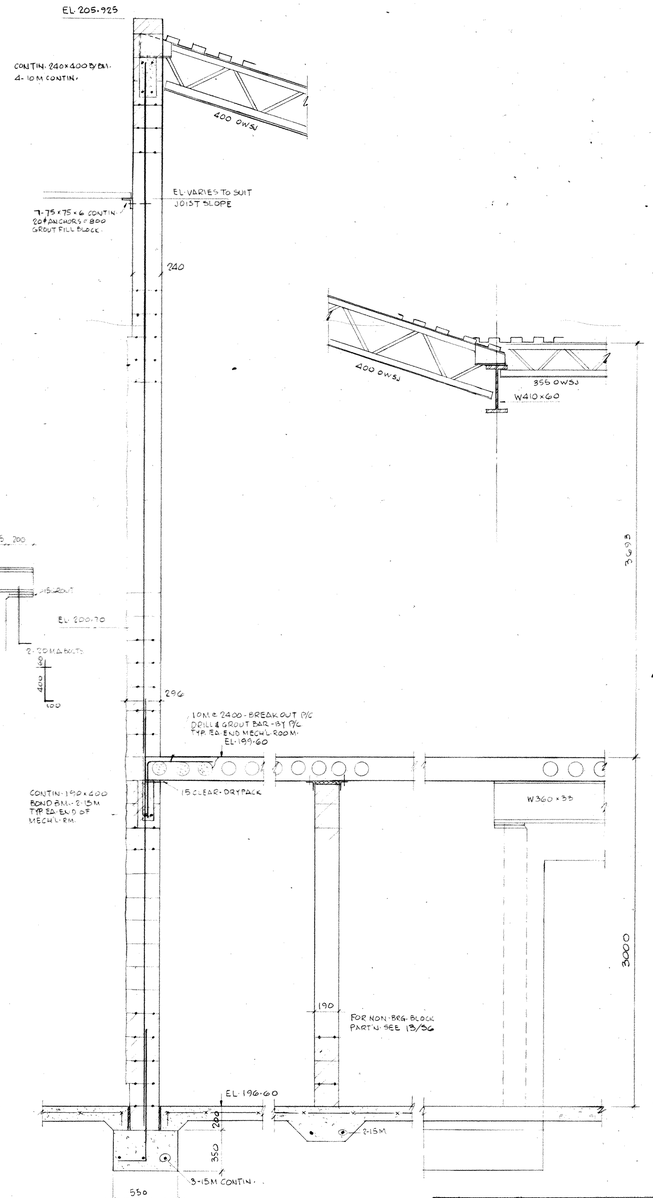
PROJECT NO 3242

REGISTERED PROFESSIONAL ENGINEER P. C. ROSCOE PROVINCE OF ONTARIO

MICHAEL J. TORSNEY MEMBER ONTARIO ASSOCIATION OF ARCHITECTS ARCHITECT







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SCALE 1:20	DRN. W.N.
JOB NO.	8403
DATE	OCT. 1984
DWG. NO.	S4

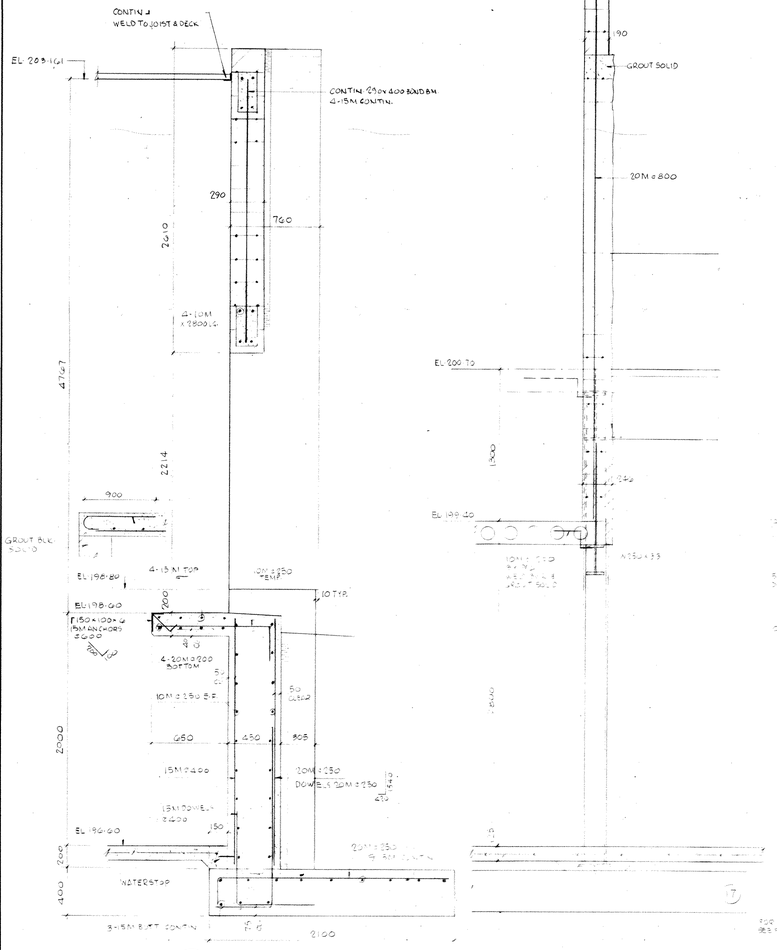
MOHAWK COLLEGE
STUDENT CENTRE
HAMILTON, ONTARIO

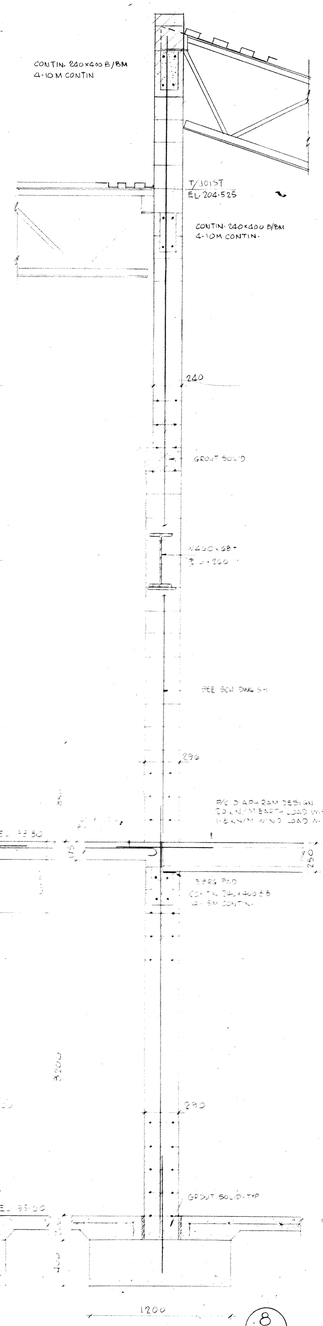
WALL SECTIONS
PHASE-I

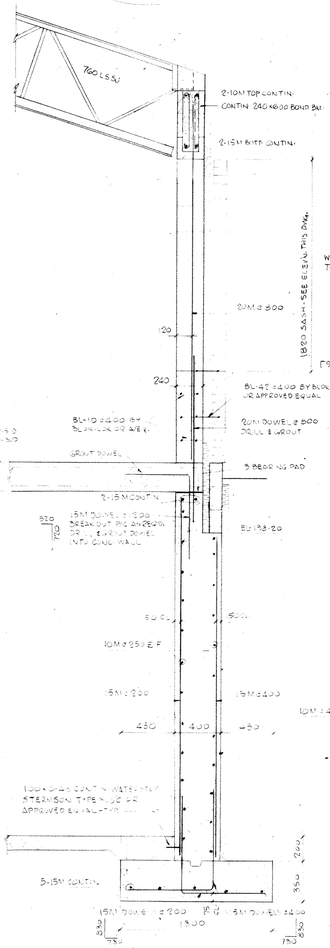
PARKER CONSULTANTS
Corsulting Professional Engineers
Hamilton
London Ottawa
PROJECT NO 3242

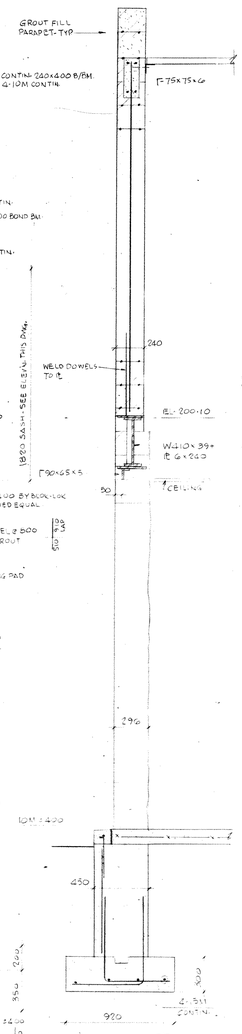
REGISTERED PROFESSIONAL ENGINEER P. C. ROSCOE PROVINCE OF ONTARIO

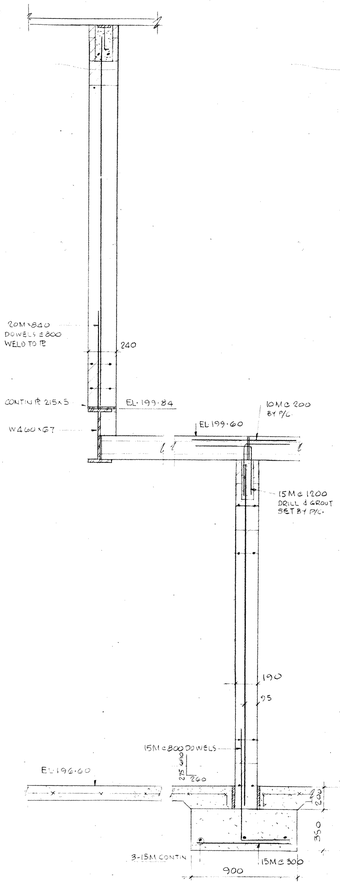
ONTARIO ASSOCIATION OF ARCHITECTS MICHAEL J. TORSNEY MEMBER ARCHITECT

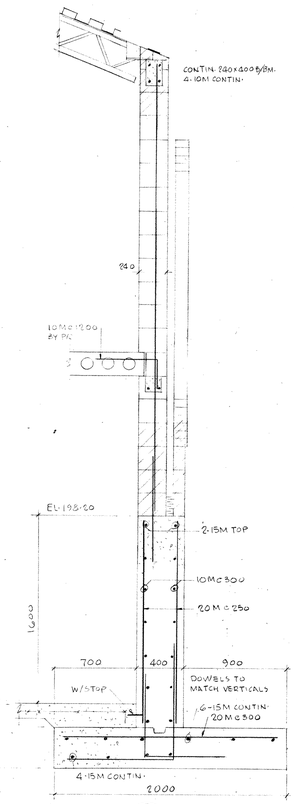


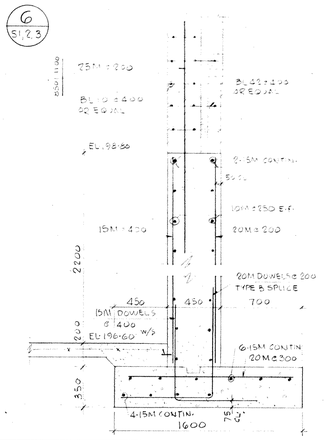


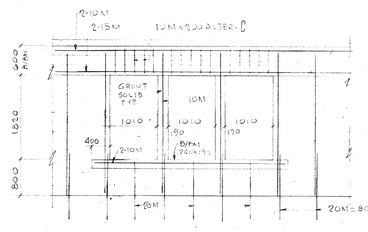












TYP. SASH ELEVATION
1:50

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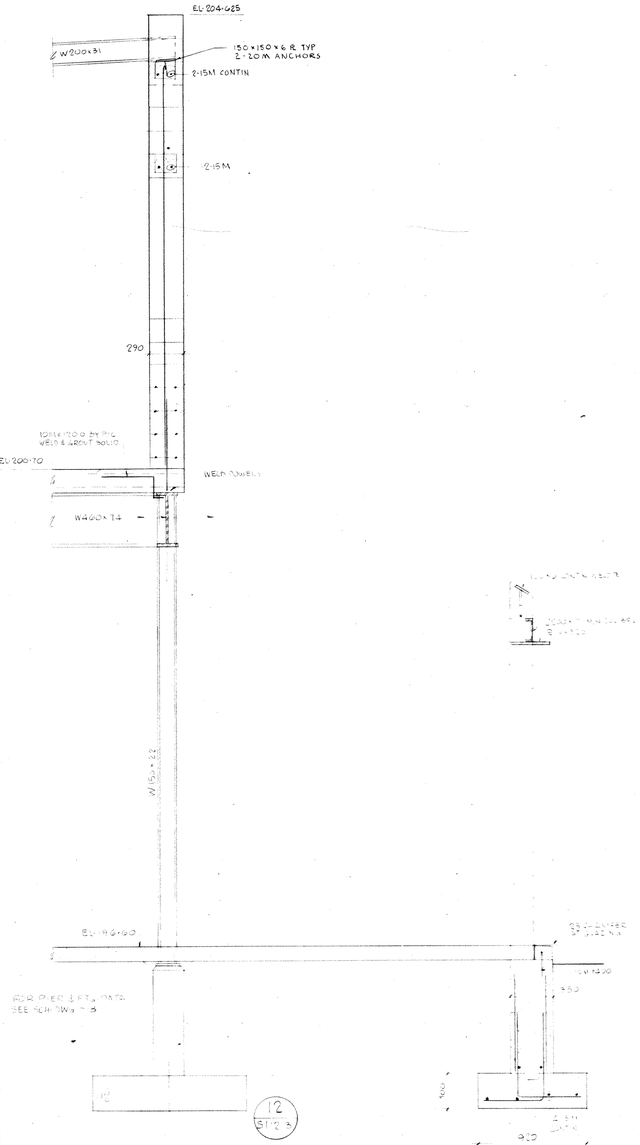
MOHAWK COLLEGE
STUDENT CENTRE
HAMILTON, ONTARIO

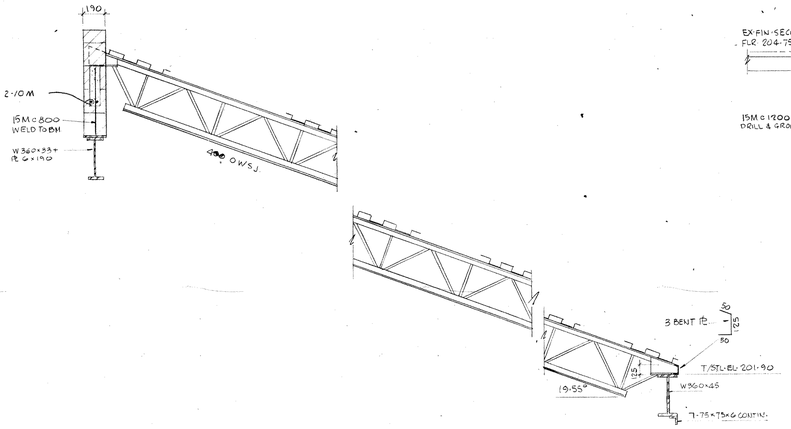
WALL SECTIONS
PHASE-I

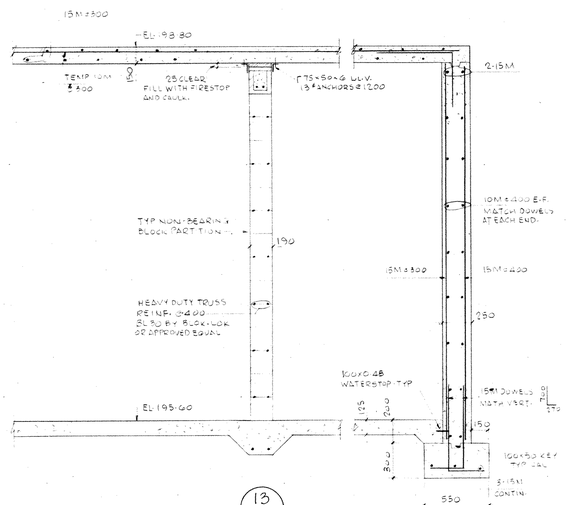
PARKER CONSULTANTS
Consulting Professional Engineers
Hamilton
London Ottawa
PROJECT NO 3242

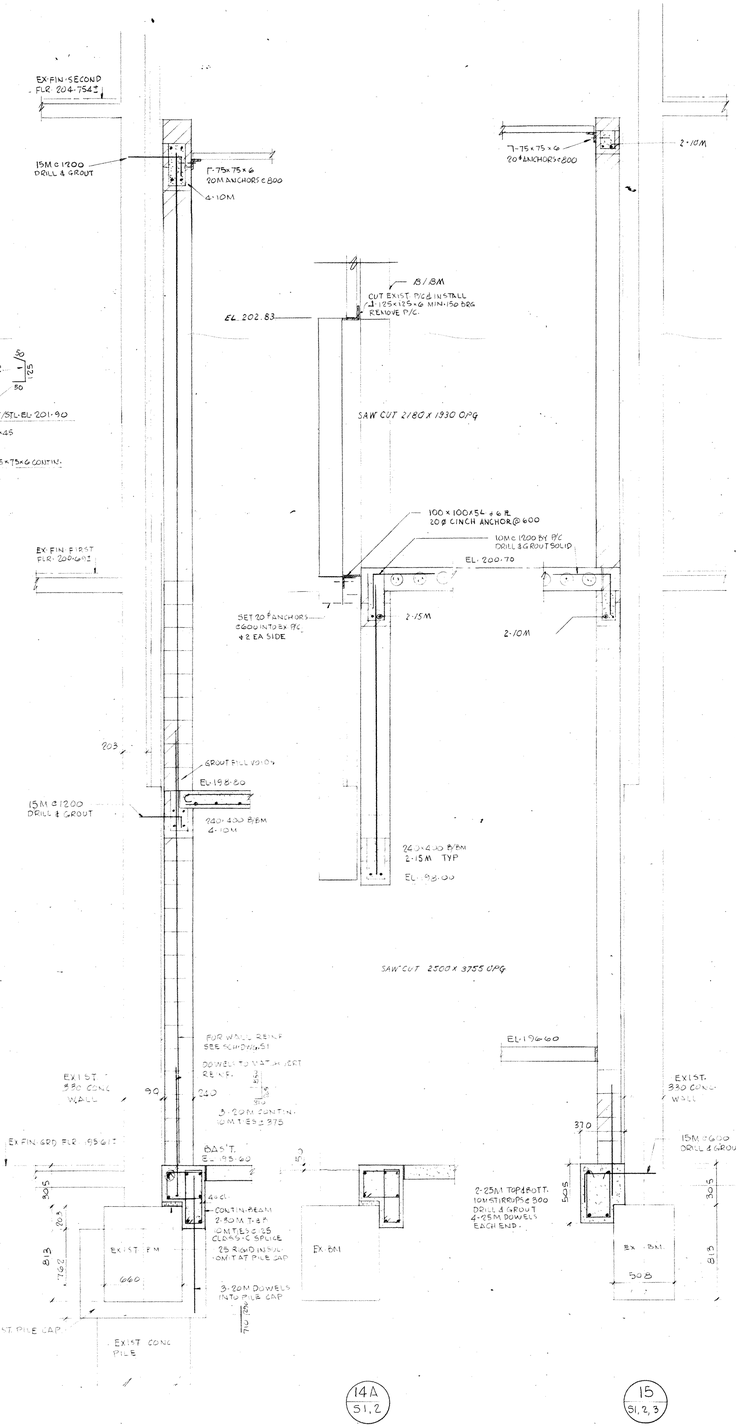
P. C. ROSCOE
REGISTERED PROFESSIONAL ENGINEER
PROVINCE OF ONTARIO

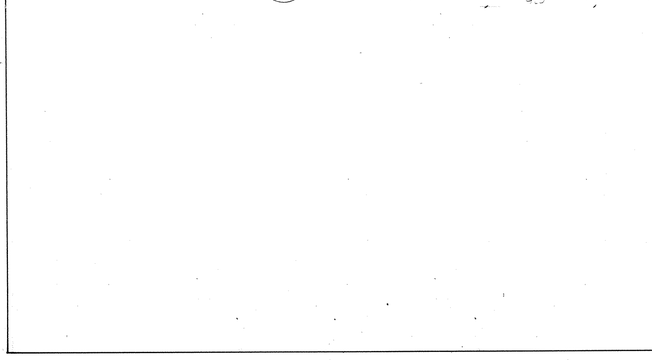
MICHAEL J. TORSNEY
ONTARIO ASSOCIATION OF ARCHITECTS
MEMBER
ARCHITECT

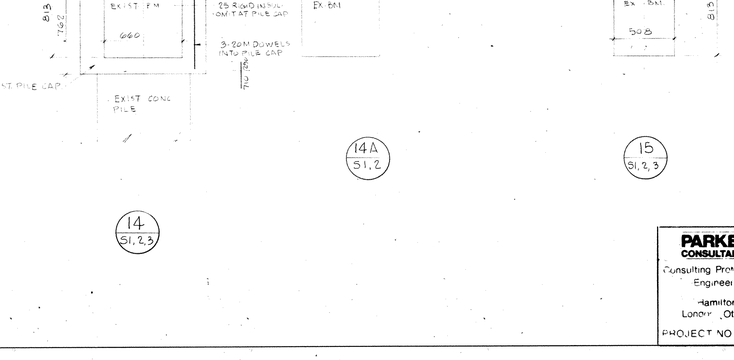












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SCALE 1:20	DRN. W.N.	JOB NO.
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		S6

MOHAWK COLLEGE
STUDENT CENTRE
HAMILTON, ONTARIO

WALL SECTIONS
PHASE-I

PARKER CONSULTANTS
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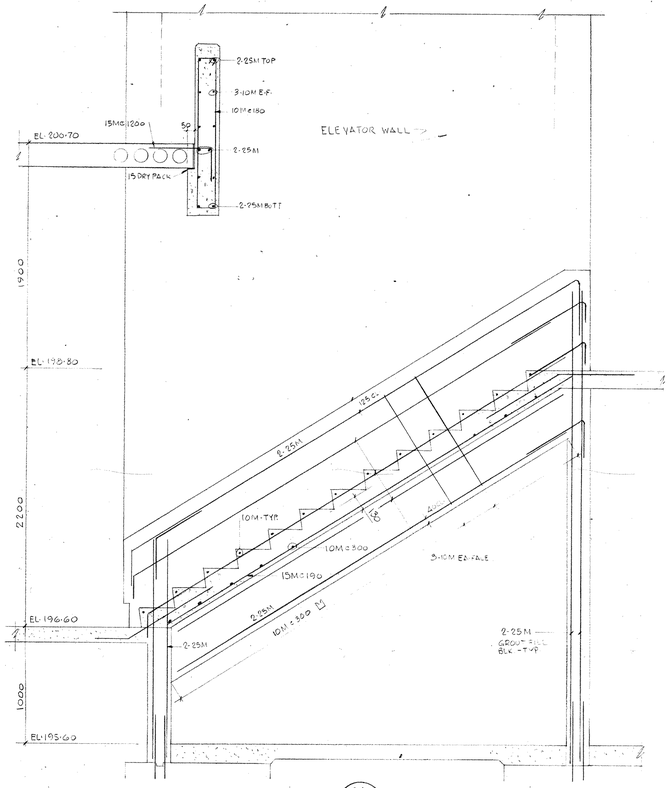
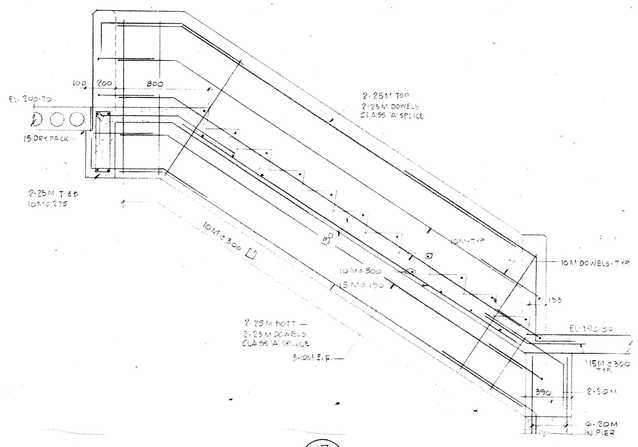
London, Ottawa
PROJECT NO 3242

REGISTERED PROFESSIONAL ENGINEER P. C. ROSCOE PROVINCE OF ONTARIO

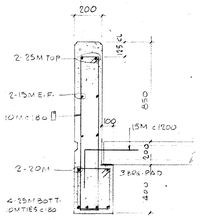
MICHAEL J. TORSNEY ASSOCIATION OF ARCHITECTS MEMBER ONTARIO ARCHITECT



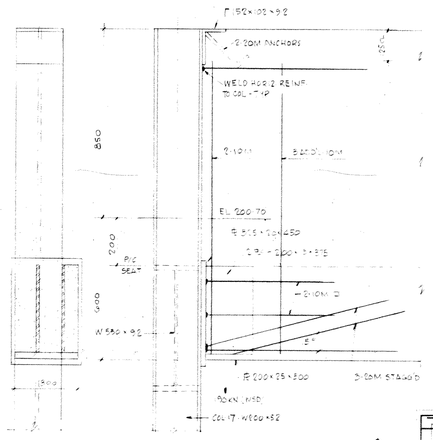
16
S1, 2



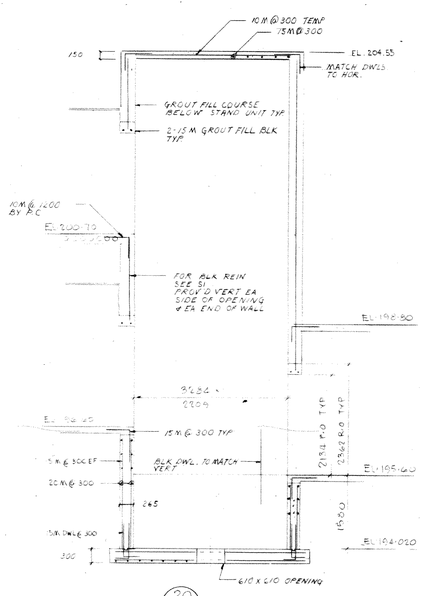
17
S1, 2



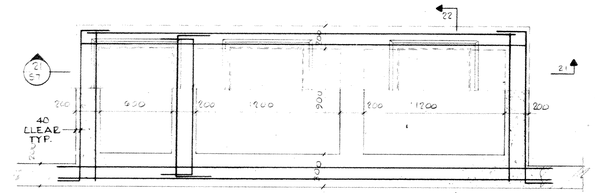
18
S2



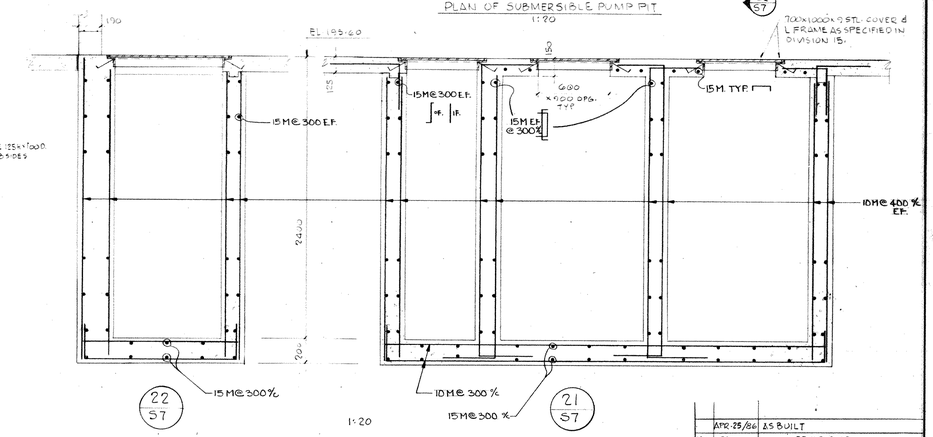
CONC. RAIL SEAT AT COL. 17
1:10



20
S7
1:50



PLAN OF SUBMERSIBLE PUMP PIT
1:20



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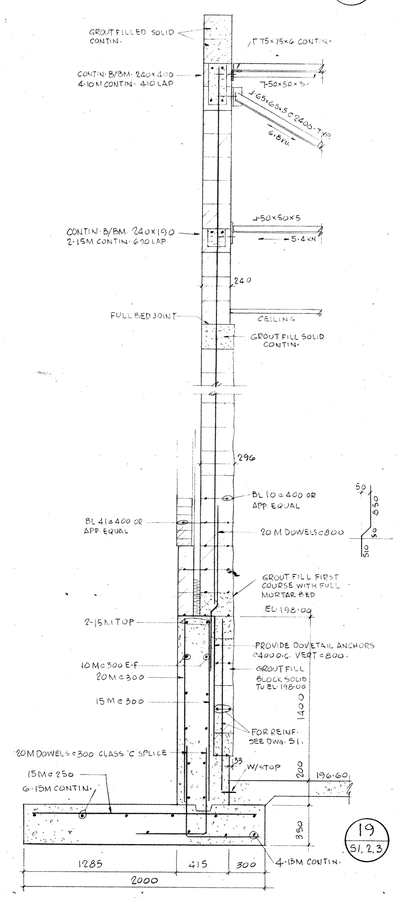
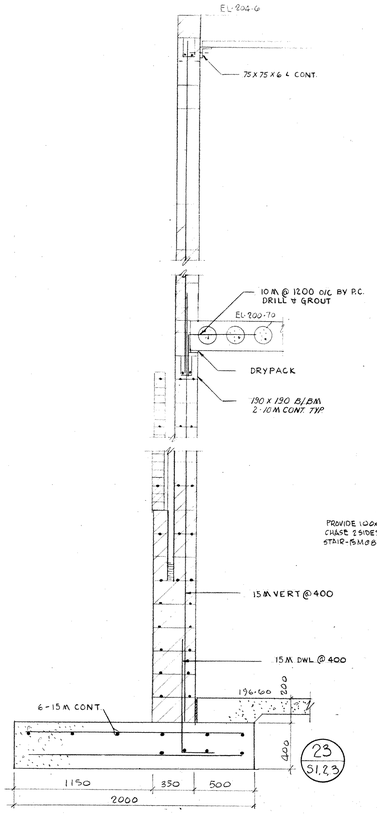
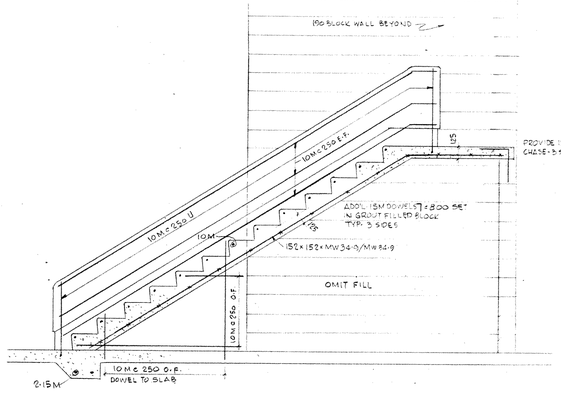


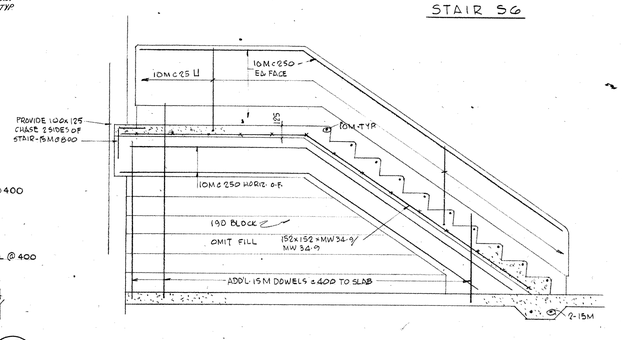
19
S1, 2, 3



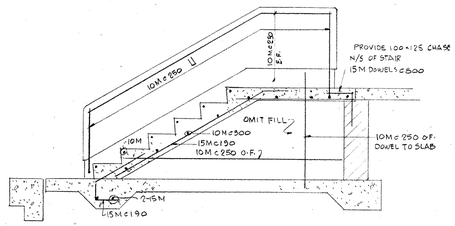
23
S1, 2, 3



STAIR S6



STAIR S5



STAIR S2

	APR-25/86	AS BUILT
NO	DATE	REVISIONS

michael torsney architects
suite 202 131 john street s. hamilton, ontario
L8N 2C3 416 522-2494

SCALE AS NOTED	DRN. W.N	JOB NO.
		8403
		DATE
		OCT. 1984
		DWG. NO.
		S7

MOHAWK COLLEGE
STUDENT CENTRE
HAMILTON, ONTARIO

SECTIONS AND DETAILS
PHASE - 1

PARKER CONSULTANTS
Consulting Professional Engineers
Hamilton
London Ottawa
P. C. ROSCOE

PROJECT NO 3242

REGISTERED PROFESSIONAL ENGINEER PROVINCE OF ONTARIO

MICHAEL J. TORSNEY ONTARIO ASSOCIATION OF ARCHITECTS MEMBER ARCHITECT

COLUMN AND FOOTING SCHEDULE

COLUMN DATA	1.	2.	3, 6.	4, 5.	7.	8.	9.	10.	11.	12	13, 14.	15.	16.	17.	18.	19.	20.	21	22	23
2ND. FLR. EL. 200.70												203.164						203.168		
EL. 199.80 / EL. 199.60 / EL. 199.40	W150×30	W200×46	W200×31 / W150×22	W200×42	W200×46	W200×42	W200×52	W200×36	W200×46	W150×22	W150×30	W200×42	W200×27	W200×36	W150×30	W200×36	W200×27	W200×36	W200×42	W150×22
1ST. FLR. EL. 196.60																				
BAST. FLR. 193.60																				
BASE PLATES	255×20×255	385×30×385	255×20×255	335×25×335	385×30×385	385×30×385	410×35×410	280×16×280	385×30×385	210×13×210	205×16×205	275×16×275	230×13×230	255×16×255	205×19×205	305×25×305	280×16×280	250×20×250		175×175×10
ANCHOR BOLTS	2-20M	2-20M	2-20M	2-20M	2-20M	2-20M	2-20M	2-20M	2-20M	2-20M	2-20M	2-20M	2-20M	2-20M	2-20M	2-20M	2-20M	2-20M	2-20M	2-20M
GROUT	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
EL. TOP OF PIER	196.4	196.4	196.4	196.40	196.40	196.40	——	——	196.40	196.4	——	196.4	——	——	——	——	——	——		——
PIER SIZE	305×305	435×435	305×305	385×385			——	——		260×260	——	325×325	——	——	——	——	——	——		——
PIER VERTICALS	4-20M	8-20M	4-20M	8-15M			——	——		4-15M	——	4-20M	——	——	——	——	——	——		——
PIER TIES	10M@300	3-10M	10M@300	10M@300	3-10M		——	——		10M@250	——	3-10M □	——	——	——	——	——	——		——
EL. TOP OF FOOTING	194.80	196.40	2-195.6 6-196.4	4-195.6 5-196.4			196.40			195.5	196.40	195.8	196.40	196.40	196.40	196.40	196.40	196.40		
FTG SIZE	2600×2600×335	2600×2600×385	2600×2600×335	2500×2500×310	3300×3300×385	2400×2400×460	3500×3500×485	2750×2750×385	2400×3500×460	1375×1375×300	2150×2150×300	1300×1300×350	1680×1680×300	2590×2590×355	2100×2100×300	3050×3050×410	2750×2750×380	2000×2000×350		1200×1200×350
FTG REINFORCING	5-30M E.W.	5-30M E.W.	5-30M E.W.	4-30M LONG WAY 5-30M SHORT WAY	7-30M E.W.	6-30M LONG WAY 8-30M SHORT WAY	8-35M E.W.	5-35M E.W.	7-35M LONG WAY 8-35M SHORT WAY	3-15M E.W.	6-25M E.W.	6-15M EW.	4-25M E.W.	5-30M E.W.	5-25M E.W.	7-30M E.W.	5-35M E.W.	10-15M E.W.		6-15M EW.
LOAD ON FOOTING	270	602	270	560	602	680	725	365	130	60	200	145 KN.	130 KN.	288	240	460	343	310 KN.		121 KN.

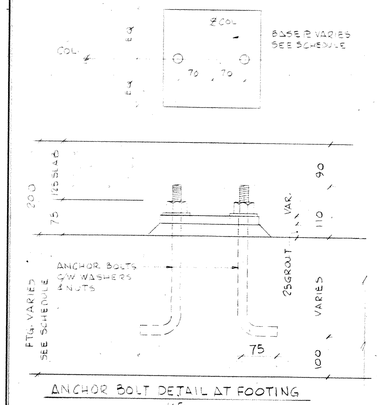
EL. TOP OF FTG	
FTG SIZE	
FTG REINF.	
LOAD ON FTG.	

COLUMN AND FOOTING SCHEDULE CONT'D

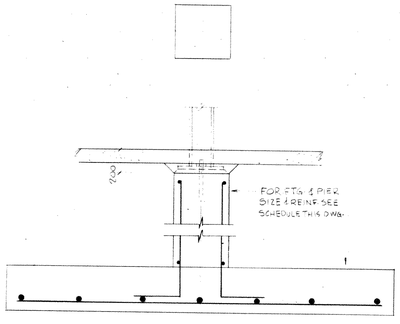
COLUMN DATA	
2ND. FLR. EL. 200.70	
EL. 199.80 / EL. 199.60 / EL. 199.40	
1ST. FLR. EL. 196.60	
BAST. FLR. EL. 193.60	
BASE PLATES	
ANCHOR BOLTS	
GROUT	
EL. TOP OF PIER	
PIER SIZE	
PIER VERTICALS	
PIER TIES	
EL. TOP OF FOOTING	
FTG SIZE	
FTG REINFORCING	
LOAD ON FOOTING	

40 CLEAR TYP.

TYPICAL TIE ARRANGEMENTS
N.T.S.



ANCHOR BOLT DETAIL AT FOOTING
1:5



TYPICAL FOOTING & PIER DETAIL
1:20

NO	DATE	REVISION
	APR. 25/86	AS BUILT (COLS. 1, 3, 4, 6)

michael torsney architects
suite 202 131 john street s. hamilton, ontario L8N 2C3
416 522-2494

SCALE AS NOTED	DRN. W.N.
JOB NO	8403
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COLUMN & FOOTING SCHEDULE
PHASE - I

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ONTARIO ASSOCIATION OF ARCHITECTS MICHAEL J. TORSNEY MEMBER ARCHITECT