S3100 SECTIONS & DETAILS S2101 PART PLAN - LEVEL 1 - NORTH -S3200 SECTIONS & DETAILS S3300 SECTIONS & DETAILS **BUILDING M-6** S2102 PART PLAN - LEVEL 1 -S4000 SCHEDULES BUILDING M-5/M-5A

S2201 PART PLAN - LEVEL 2 - NORTH -S5001 PHOTOS #1-12 S5002 PHOTOS #13-24 BUILDING M-6 S5003 PHOTO #25 S2202 PART PLAN - LEVEL 2 - SOUTH -

BUILDING M-6 S2203 PART PLAN - LEVEL 2 -BUILDING M-5/M-5A

GENERAL

THE GENERAL NOTES AND TYPICAL DETAILS ARE APPLICABLE TO ALL STRUCTURAL CONDITIONS NOT SPECIFICALLY DETAILED OR REFERENCED ON STRUCTURAL DRAWINGS.

THESE NOTES. DETAILS AND DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE PROJECT SPECIFICATIONS.

THESE DRAWINGS ARE FOR THE USE OF THE CONSULTANT'S CLIENT ONLY. ALL INFORMATION SHOWN APPLIES TO THIS PROJECT ONLY AND REFLECTS THE BEST JUDGEMENT OF THE CONSULTANT IN LIGHT OF THE AVAILABLE INFORMATION AT THE TIME OF PREPARATION. DECISIONS OR ACTIONS MADE BY THIRD PARTIES BASED ON THE DRAWINGS ARE THE SOLE RESPONSIBILITY OF SUCH PARTIES.

CODES AND STANDARDS

DESIGN AND CONSTRUCTION TO BE IN ACCORDANCE WITH THE NATIONAL BUILDING CODE OF CANADA, 2015, AND THE TERM "BUILDING CODE" THROUGHOUT THESE DRAWINGS MEANS THAT CODE.

THE FOLLOWING STANDARDS MAY BE REFERRED TO BY SHORT FORM ON THESE DRAWINGS:

STANDARD	TITLE/DESCRIPTION	SHORT FORM
ASTM A307-07	CARBON STEEL BOLTS AND STUDS, 60000 PSI TENSILE STRENGTH	ASTM A307
ASTM A325M-09	-09 STRUCTURAL BOLTS, STEEL, HEAT TREATED 830MPa TENSILE STRENGTH	
ASTM A500M-13	COLD-FORMED WELDED AND SEAMLESS CARBON STEEL STRUCTURAL TUBING IN ROUNDS AND SHAPES	ASTM A500
ASTM F1554-07	4-07 ANCHOR BOLTS, STEEL, 36, 55, AND 105-KSI YIELD STRENGTH	
CSA S136-07	A S136-07 CSA S136-07 MEMBERS (WITH APPENDIX B)	
CSA S16-09	CSA S16-09 DESIGN OF STEEL STRUCTURES	
CAN/CSA-B167-96 SAFETY STANDARD FOR MAINTENANCE AND INSPECTION OF OVERHEAD CRANES, GANTRY CRANES, MONORAILS, HOISTS, AND TROLLEYS		CSA B167

REFERENCES ARE TO METRIC VERSIONS OF STANDARDS, UNLESS CONTEXT DICTATES OTHERWISE. SHORT FORM REFERENCES TO CSA STANDARDS MAY SOMETIMES OMIT "CSA".

REFERENCES INCLUDE ALL PUBLISHED ERRATA AND SUPPLEMENTS, UNLESS NOTED OTHERWISE.

ABBREVIATIONS AND SYMBOLS

IN ADDITION TO NORMAL ABBREVIATIONS AND SYMBOLS FOR UNITS OF MEASUREMENT (SI UNITS AND US CUSTOMARY UNITS) OR DEFINED IN THE BUILDING CODE AND VARIABLES DESCRIBED ON THE DRAWINGS, THE FOLLOWING ABBREVIATIONS MAY HAVE BEEN USED ON THESE DRAWINGS, WITH OR WITHOUT PERIODS AND SOMETIMES IN COMBINATION:

AFF	ABOVE FINISHED FLOOR	N.I.C.	NOT IN CONTRACT
В	BOTTOM*	N.T.S.	NOT TO SCALE
BP	BASE PLATE	o/c	ON CENTRE
С	CHANNEL OR	O.F.	OUTSIDE FACE
	COMPRESSION	P.C.	PILECAP; PRECAST CONCRETE
c/c	CENTRE TO CENTRE	PCO	PILE CUT-OFF
CJ	CONTRACTION JOINT	PF.	PLATFORM
D	DOWN	PL	PLATE
DIM.	DIMENSION	REINF.	REINFORCING
DO	DITTO	REQ'D	REQUIRED
E.E	EACH END	RM.	ROOM
E.F.	EACH FACE	R.O.	ROUGH OPENING
E.J.	EXPANSION JOINT	SEC.	SECTION
E.S.	EACH SIDE	S.O.G.	SLAB ON GRADE
EL.	ELEVATION	SIM.	SIMILAR
EQ	EQUAL	SLS	SERVICE LIMIT STATE
EXIST.	EXISTING	STD	STANDARD
EXP. JT	EXPANSION JOINT	SYM	SYMMETRIC
EXT.	EXTERIOR	Т	TOP*; TENSION FORCE
f	FACTORED	TJ	TIE JOIST
F.D.	FLOOR DRAIN	T.O.	TOP OF
F.F	FAR FACE	T.O.S.	TOP OF STEEL
FDN	FOUNDATION	T.O.W.	TOP OF WALL
FL	FLOOR; FLANGE	TYP.	TYPICAL
FTG	FOOTING	U	UP
GALV.	GALVANIZED	U.L.	UPPER LAYER
Н	HORIZONTAL*	ULS	ULTIMATE LIMIT STATE
HOR.	HORIZONTAL	U/N	UNLESS NOTED
I.F.	INSIDE FACE	U/S	UNDERSIDE
INCL.	INCLUDING	V	VERTICAL*; SHEAR
INT.	INTERIOR	VERT.	VERTICAL VERTICAL
L	LENGTH; STEEL ANGLE	V.O.S.	VERIFY ON SITE
Ld	REINF. DEVELOPMENT LENGTH (TENSION U/N)	WWM	WELDED WIRE MESH
L.L.	LOWER LAYER; LIVE LOAD		
LLH	LONG LEG HORIZONTAL	Ø	DIAMETER
LLV	LONG LEG VERTICAL	@	AT (c/c SPACING)
N.F.	NEAR FACE		

* THIS MEANING IS USUALLY USED IN COMBINATION WITH OTHER ABBREVIATIONS

OTHER ABBREVIATIONS MAY BE USED IN CONTEXT - REQUEST CLARIFICATION IF UNSURE

SHOP DRAWINGS, SUBMITTALS AND DESIGN DETAILING CRITERIA FOR SUPPLIERS

REPRODUCTIONS OF THE STRUCTURAL DRAWINGS SHALL NOT BE ACCEPTED AS SHOP DRAWINGS.

"PROFESSIONAL ENGINEER" IN THE FOLLOWING PARAGRAPHS AND THROUGHOUT THESE DRAWINGS MEANS A PROFESSIONAL ENGINEER REGISTERED IN AND LICENSED TO PRACTICE IN THE PROVINCE OF ONTARIO AND THE ENGINEER'S "SEAL" SHALL INCLUDE THEIR STAMP, THEIR SIGNATURE AND THE DATE OF SEALING.

REVIEW OF DRAWINGS APPLIES TO GENERAL ARRANGEMENT ONLY FOR THE PURPOSE OF ASCERTAINING CONFORMANCE WITH THE GENERAL DESIGN CONCEPT. THIS REVIEW DOES NOT IMPLY APPROVAL OF DETAIL DESIGN OR QUANTITIES IN SUBMITTED DRAWINGS, NOR DOES IT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY FOR MAKING THE WORK COMPLETE, ACCURATE AND IN ACCORDANCE WITH THE STRUCTURAL DRAWINGS. ALLOW 15 WORKING DAYS FOR SHOP DRAWING REVIEW.

DO NOT FABRICATE MATERIALS BASED ON REJECTED OR DISAPPROVED SHOP DRAWINGS.

DOCUMENT SUBMISSIONS SHALL INCLUDE FOR EACH DOCUMENT ELECTRONIC FILES IN PDF FORMAT DELIVERED BY EMAIL TO THE NRC DEPARTMENTAL REPRESENTATIVE FOR REVIEW, UNLESS OTHER FORMATS AND/OR METHODS OF DELIVERY ARE AGREED IN WRITING IN ADVANCE OF SUBMISSION.

DESIGN TIEBACK OR RAKER SYSTEM AND METHOD OF INSTALLATION AND SUBMIT FOR REVIEW. PROVIDE DETAILS OF DESIGN AND CONSTRUCTION OF TEMPORARY EARTH RETAINING SYSTEMS AND UNDERPINNING. ALL DRAWINGS TO BE STAMPED BY A PROFESSIONAL ENGINEER.

CONTRACTOR TO MONITOR AT REGULAR INTERVALS NOT EXCEEDING 2 WEEKS DEFORMATIONS OF SHORING AGAINST ADJACENT BUILDINGS AND TO SUBMIT REPORTS TO THE CONSULTANTS.

REFER TO SPECIFICATION AND GEOTECHNICAL CONSULTANT FOR ADDITIONAL REQUIREMENTS.

SUBMIT WITH SHOP DRAWINGS: DECKING PLAN, PROFILE, DIMENSIONS, CORE THICKNESS, CONNECTIONS TO SUPPORTS, REQUIRED BEARINGS, CLOSURES AND ACCESSORIES.

SUBMIT FOR REVIEW ERECTION DRAWINGS WITH ALL FIELD WORK DETAILS FOR ALL STRUCTURAL STEEL ELEMENTS. ALL STEEL-TO-STEEL CONNECTIONS SHALL BE DESIGNED BY AND THE DRAWINGS SEALED BY A PROFESSIONAL ENGINEER.

SHOP DRAWING SUBMITTALS SHALL INCLUDE STEEL BEAM AND COLUMN CONNECTIONS AND STEEL JOIST DETAILS ALONG WITH DESIGN CALCULATIONS. JOIST CALCULATIONS SHALL BE SEALED BY A PROFESSIONAL ENGINEER.

STRUCTURAL STEEL CONNECTIONS SHALL BE DESIGNED TO RESIST THE INDICATED FACTORED MEMBER REACTIONS BY A PROFESSIONAL ENGINEER WHO WILL ALSO SEAL AND SIGN THE SHOP DRAWINGS.

WELDING SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH CSA S16 AND CSA W59. WORK SHALL BE PERFORMED BY CONTRACTORS CERTIFIED AS PER CSA W47.1 AND MEMBERS OF THE CANADIAN WELDING BUREAU.

WHERE DESIGN REACTIONS ARE NOT INDICATED USE THE MAXIMUM REACTION FOR SPAN FROM CISC BEAM LOAD TABLES. FOR COMPOSITE BEAMS INCREASE MAXIMUM REACTION BY 30% (1.3 TIMES).

STEEL STRUCTURES DESIGNED TO RESIST SEISMIC FORCES; STEEL CONNECTIONS SHALL BE DESIGNED TO CSA S16, CLAUSE 27.

SOURCE OF STRUCTURAL STEEL (INCLUDING FASTENERS AND CFS):

ALL STEEL TO MEET SPECIFIED STANDARDS AND THE FOLLOWING: PROVIDE MILL CERTIFICATES FOR ALL STEEL. PROVIDE TRACING REPORT SHOWING CHAIN OF CUSTODY

FROM POINT OF ORIGIN TO SITE. ALL STEEL SHALL HAVE A BORON CONTENT OF NOT MORE THAN 0.0008% BY MASS (8 PARTS IN ONE MILLION

STEEL ORIGINATING FROM OUTSIDE OF CANADA. THE UNITED STATES AND THE EUROPEAN UNION SHALL ADDITIONALLY MEET THE FOLLOWING: PROVIDE MATERIAL TESTING TO CONFIRM THE CONFORMANCE TO THE RELEVANT STANDARDS AND THE MAXIMUM BORON CONTENT NOTED ABOVE. THIS TESTING SHALL BE PERFORMED IN CANADA BY AN ISO 17025 ACCREDITED TESTING LABORATORY.

MISCELLANEOUS METALS & STEEL STAIRS

MISC. METALS AND STEEL STAIRS ARE TO BE DESIGNED AND DETAILED BY MISC. METALS AND STEEL STAIRS SUPPLIER. SHOP DRAWINGS ARE TO BE SUBMITTED TO NRC DEPARTMENTAL REPRESENTATIVE FOR REVIEW. SHOP DRAWINGS ARE TO BE SEALED BY A NRC DEPARTMENTAL REPRESENTATIVE. ALL MISC. METALS AND STEEL STAIR WORK TO BE INSPECTED DURING CONSTRUCTION BY THE MISC. METALS AND STEEL STAIR DESIGN ENGINEER WITH REPORTS FORWARDED TO THE PROJECT CONSULTANTS.

GUARD RAIL SYSTEMS ARE TO DE DESIGNED IN ACCORDANCE WITH BUILDING CODE CLAUSE 4.1.5.14, -.15 & -.16 WITH SHOP DRAWINGS SUBMITTED TO NRC DEPARTMENTAL REPRESENTATIVE FOR REVIEW. SHOP DRAWINGS ARE TO INDICATE LOADING CONDITIONS AND ARE TO BE SEALED BY A PROFESSIONAL ENGINEER. ALL ELEMENTS ARE TO BE INSPECTED BY THE DESIGN ENGINEER WITH REPORTS FORWARDED TO THE PROJECT CONSULTANTS.

MECHANICAL AND ELECTRICAL EQUIPMENT, PIPE SUPPORTS AND SEISMIC BRACES

SUPPORTS FOR MECHANICAL AND ELECTRICAL EQUIPMENT, PIPES AND SEISMIC ARE TO BE DESIGNED AND DETAILED BY CONTRACTORS ENGINEER. SHOP DRAWINGS ARE TO BE SUBMITTED TO NRC DEPARTMENTAL REPRESENTATIVE FOR REVIEW. SHOP DRAWINGS ARE TO BE SEALED BY A PROFESSIONAL ENGINEER. ALL SUPPORTS ARE TO BE INSPECTED DURING CONSTRUCTION BY THE SUPPORT DESIGN ENGINEER WITH REPORTS FORWARDED TO THE PROJECT CONSULTANTS.

SHOP DRAWING SUBMITTALS SHALL INCLUDE PAINT COLOUR AND FINISH. SHOP DRAWINGS ARE TO BE SUBMITTED TO NRC DEPARTMENTAL REPRESENTATIVE FOR REVIEW.

DIMENSIONS

CHECK DIMENSIONS ON THESE DRAWINGS AGAINST DIMENSIONS ON ARCHITECTURAL DRAWINGS BEFORE USING THEM FOR FABRICATION OR CONSTRUCTION. REPORT DISCREPANCIES IMMEDIATELY UPON

DRAWINGS HAVE BEEN MADE REASONABLY TO SCALE BUT CONTRACTOR MUST NOT SCALE THE DRAWINGS.

CONTRACTOR TO CONFIRM EXISTING BUILDING LOCATION AND TIE-IN POINTS BEFORE CONSTRUCTION.

RECORD DRAWINGS

CONTRACTOR SHALL MAINTAIN TWO SETS OF RECORD DRAWINGS, SHOWING AS-BUILT CONDITIONS OF ALL ASPECTS OF THE STRUCTURE, AVAILABLE FOR REVIEW DURING CONSTRUCTION, AND FOR SUBMISSION TO THE CONSULTANT AND THE OWNER UPON PROJECT COMPLETION.

MOBILIZATION

CONTRACTOR TO ALLOW ADQUATE TIME IN THEIR SCHEDULE FOR ALL SUBMITTALS TO BE REVIEWED AND APPROVED AS WELL AS HAVE ALL MATERIALS FABRICATED AND DELIVERED TO THE SITE, PRIOR TO THE CONTRACTOR MOBILIZATION AND ANY DEMOLITION/REMOVALS.

INSPECTIONS AND TESTING

THE FOLLOWING ITEMS SHALL BE INSPECTED OR TESTED BY INDEPENDENT INSPECTION/ TESTING AGENCIES, TESTING COSTS TO BE CARRIED BY THE CONTRACTOR. MATERIALS AND WORKMANSHIP NOT CONFORMING TO THE SPECIFICATIONS SHALL BE REJECTED BY THE CONTRACTOR, REPORTS AND TEST RESULTS SHALL BE PROMPTLY SUBMITTED TO THE ENGINEER FOR REVIEW. TESTING SHALL INCLUDE BUT NOT BE LIMITED TO:

STRUCTURAL STEEL & CONNECTIONS

VERIFY THAT MATERIALS AND FABRICATION, INCLUDING ALIGNMENT, PLUMBNESS, BEARING, TOLERANCES. CONNECTIONS, BOLTS, TORQUE, WELDS, AND PAINTING CONFORM TO THE CONTRACT DOCUMENTS, TO CSA S16, TO CSA W59, AND TO OTHER APPLICABLE STANDARDS.

TIGHTNESS OF BOLTED CONNECTIONS AND CHECK ON BEARING, PLUMBNESS AND ALIGNMENT OF STEEL STRUCTURES.

WELDING INSPECTIONS TO BE VISUAL, EXCEPT WHERE NON-DESTRUCTIVE TESTING IS DEEMED NECESSARY BY THE TESTING AGENCY OR ENGINEER. NON-DESTRUCTIVE TESTING TO VERIFY THE QUALITY OF WELDING, WHERE DEEMED QUESTIONABLE BY VISIBLE DEFECTS OR WHERE REQUIRED BY THE ENGINEER.

SURFACE PREPARATION AND PAINT APPLICATION IN BOTH SHOP AND FIELD FOR EXPOSED PAINTED STRUCTURAL STEEL.

SUBMIT INSPECTION REPORTS, OUTLINING PROGRESS OF WORK, AND STATING WHETHER OR NOT IT CONFORMS TO THE CONTRACT DOCUMENTS.

MONORAIL IS TO BE TESTED IN ACCORDANCE WITH CAN/CSA-B167, INCLUDING PROFESSIONAL ENGINEER'S APPROVAL. CONTRACTOR IS TO SUBMIT TESTING CERTIFICATE, STAMPED AND SEALED BY A LICENSED ENGINEER IN THE PROVINCE OF ONTARIO.

STRUCTURAL STEEL

STRUCTURAL STEEL DESIGN AND CONSTRUCTION SHALL COMPLY WITH CSA S16, UNLESS OTHERWISE

NOTED.	
ITEM	APPLICABLE SPECIFICATION
W-SHAPES	CSA G40.20/G40.21 - 350W
HP-SHAPES	CSA G40.20/G40.21 - 350W
M AND S-SHAPES	CSA G40.20/G40.21 - 300W
C, MC AND L-SHAPES	CSA G40.20/G40.21 - 300W
HSS (TUBE)	CSA G40.20/G40.21 - 350W CLASS C OR ASTM A1085
PIPE	ASTM A53 Gr B
PLATE AND BARS	CSA G40.20/G40.21 - 300W
BOLTS, NUTS AND WASHERS	ASTM A325M c/w A563M AND F436M
CHECKER PLATE	CSA G40.20/G40.21 - 300W

DO NOT CUT OR CORE ANY OPENINGS IN ANY STRUCTURAL STEEL MEMBERS WITHOUT PRIOR WRITTEN APPROVAL FROM THE STRUCTURAL ENGINEER.

WHERE A STRUCTURAL STEEL SHAPE SHOWN ON THE DRAWINGS IS UNAVAILABLE, A SHAPE OF EQUAL OR GREATER SECTION PROPERTIES AND STRUCTURAL CAPACITY SHALL BE SUBSTITUTED, UPON APPROVAL BY OWNER AND CONSULTANT, AT NO EXTRA COST.

WHERE AN ALTERNATIVE MATERIAL IS REQUESTED, THE CONTRACTOR SHALL FORWARD ALL PRODUCT TECHNICAL INFORMATION FOR REVIEW BY THE ENGINEER.

BOLTS AND RODS SHALL BE SUPPLIED TO SITE AS AN ASSEMBLY WITH THEIR ASSOCIATED NUTS AND

THREADED COMPONENTS SHALL MEET ANSI/ASME B18.2.6M HEAVY HEX CLASS 2A.

THE APPLICABLE EDITIONS OF ALL ABOVE STANDARDS SHALL BE THOSE REFERENCED BY CSA S16 UNLESS NOTED OTHERWISE.

GRATING SHALL BE TYPE 30-102, WITH BEARING BAR SIZE: 25x3mm.

MONRAIL & TRAVEL RESTRAINT SYSTEM

MONORAIL SHALL COMPLY WITH CSA Z271:20 DESIGN OF SUSPENDED ACCESS EQUPMENT. ACCEPTABLE SUPPLIERS FOR MONORAIL ARE MUNCK, DEMAG AND LOADLIFTER.

DESIGN INTENT

CONTRACTOR TO UPGRADE EXISTING GUARDRAILS, TOEBOARDS, AND LADDERS TO CURRENT STANDARDS.

- NEW GUARDRAILS, TOEBOARDS AND LADDERS TO FOLLOW: NATIONAL BUILDING CODE 2015
- INFRASTRUCTURE HEALTH & SAFETY ASSOCIATION
- MINISTRY OF LABOUR FIXED ACCESS LADDERS ENGINEERING DATA SHEET 1997

CONTRACTOR TO DESIGN WELD CONNECTION POINTS AT BASE OF GUARDRAIL PER TYPICAL GUARDRAIL SECTION ON S3100.

IN ADDITION, CONTRACTOR TO DESIGN TRAVEL RESTRAINT SYSTEM, INCLUDING MONORAIL, ABOVE BOILER #2. REFER TO STANDARD CSA Z271:20 DESIGN OF SUSPENDED ACCESS EQUIPMENT. REFER TO SECTION 18/S3300.

CONTRACTOR TO RE-USE EXISTING CONNECTION POINTS, U/N.

CONTRACTOR TO EXPOSE CONNECTION IF BEYOND CLADDING. AAR TO REVIEW TO BASE BUILDING STRUCTURE.

ASSUME ALL CONNECTIONS ARE WELDED CONNECTIONS.

CONTRACTOR TO ENSURE THAT ALL EXISTING ELEMENTS ARE UNDAMAGED AND IMPACTED BY THE PROPOSED SCOPE OF WORK.

STRUCTURAL STEEL SHALL RECEIVE ONE SHOP COAT OF PRIMER CONFORMING TO CAN/CGSB 1-40-97, "ANTI-CORROSIVE STRUCTURAL STEEL ALKYD PRIMER." COMPLETED STRUCTURAL STEEL SHALL RECEIVE ONE COAT OF ALKYD PAINT.

STRUCTURAL STEEL SHALL BE PAINTED YELLOW TO MATCH EXISTING. CONTRACTOR TO SUBMIT PAINT SAMPLE FOR EXAMPLE.

THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS ON SITE BEFORE THE START OF FABRICATION.

CONTRACTOR IS RESPONSIBLE FOR ALL REQUIREMENT ABATEMENT AND SAFETY PROTOCALS, AND MUST BE INCLUDED IN THE TENDER SUBMISSION.

THE EXISTING BUILDING OPERATIONS ARE TO REMAIN FULLY ACTIVE AND UNIMPEDED DURING ALL CONTRACTOR WORK. CONTRACTOR TO COORDINATE ALL ACTIVITIES WITH DEPARTMENTAL REPRESENTATIVES TO ENSURE DAILY OPERATIONS ARE NOT IMPACTED.

ADDITIONAL DOCUMENTATION

CONTRACTOR TO REFER TO GENERAL INSTRUCTIONS ONTARIO AUG 2020 AND GENERAL FIRE SAFETY REQUIREMENTS ONTARIO MAY 2020 PROVIDED BY THE NRC.

CONTRACTOR TO REFERENCE DSR REPORT FOR ADDITIONAL INFORMATION REGARDING DESIGNATED SUBSTANCES ON SITE.

National Research Real Property Planning

Conseil national de recherches Canada Planification et gestion des biens immobiliers

RC - CRC

Adjeleian Allen Rubeli Consulting Engineers

75 Albert Street, Ottawa, Ontario 4211 Yonge Street, Toronto, Ontario

AAR PROJECT 5564-45

KEYPLAN

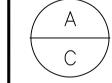
2022-10-27 ISSUED FOR TENDER 2022-09-22 ISSUED FOR REVIEW Date Revision

Verify all dimensions and site conditions and be responsible

Date imprimé

dessin no.

o Vérifier toutes les dimensions et l'etat des liéux et en assumer la responsabilité



Date Printed

A Detail no. No. du détail B Location drawing no. sur dessin no. C Drawing no. dessin no.

NRC - BUILDING M5, M6

CATWALK REPAIRS

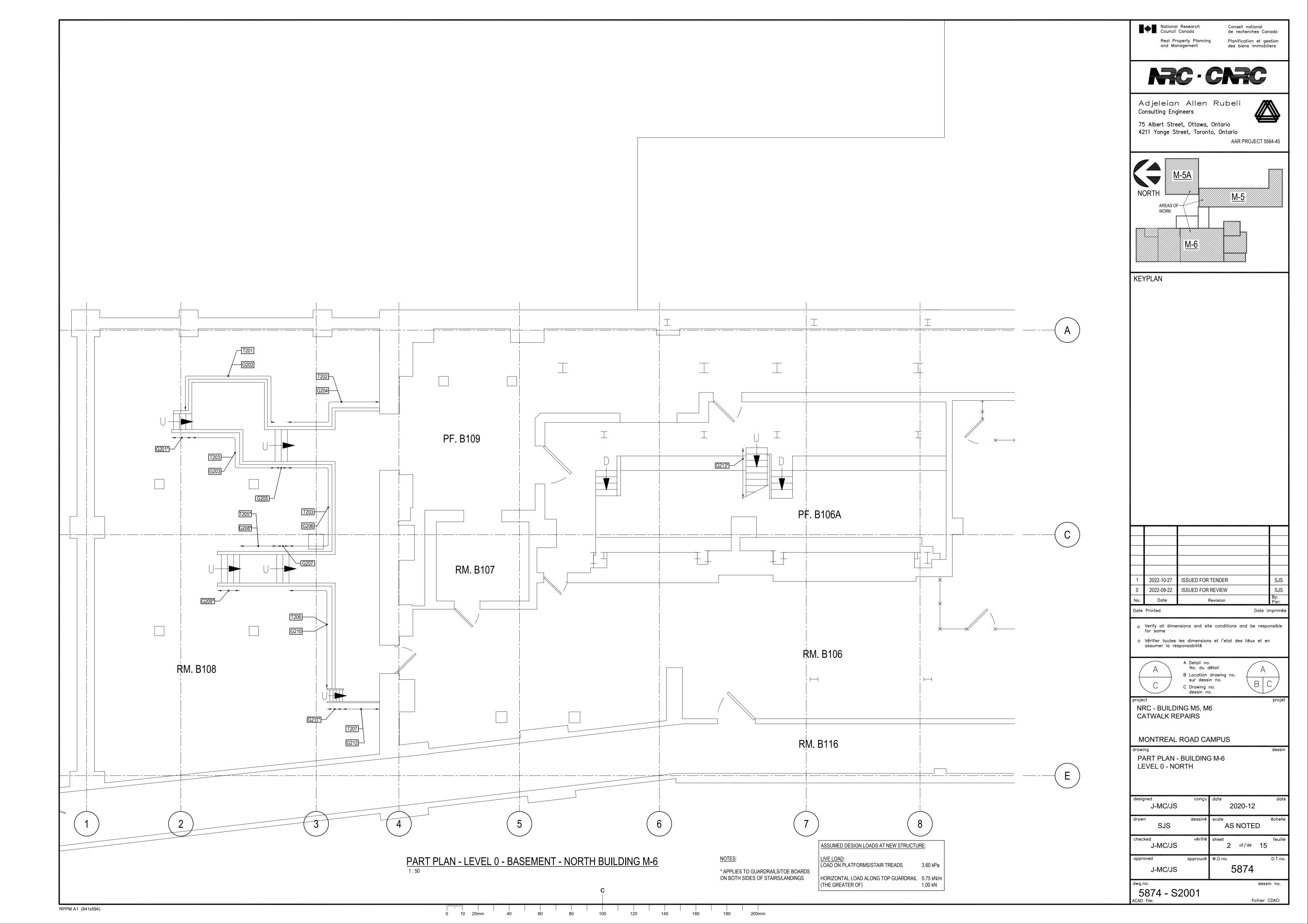
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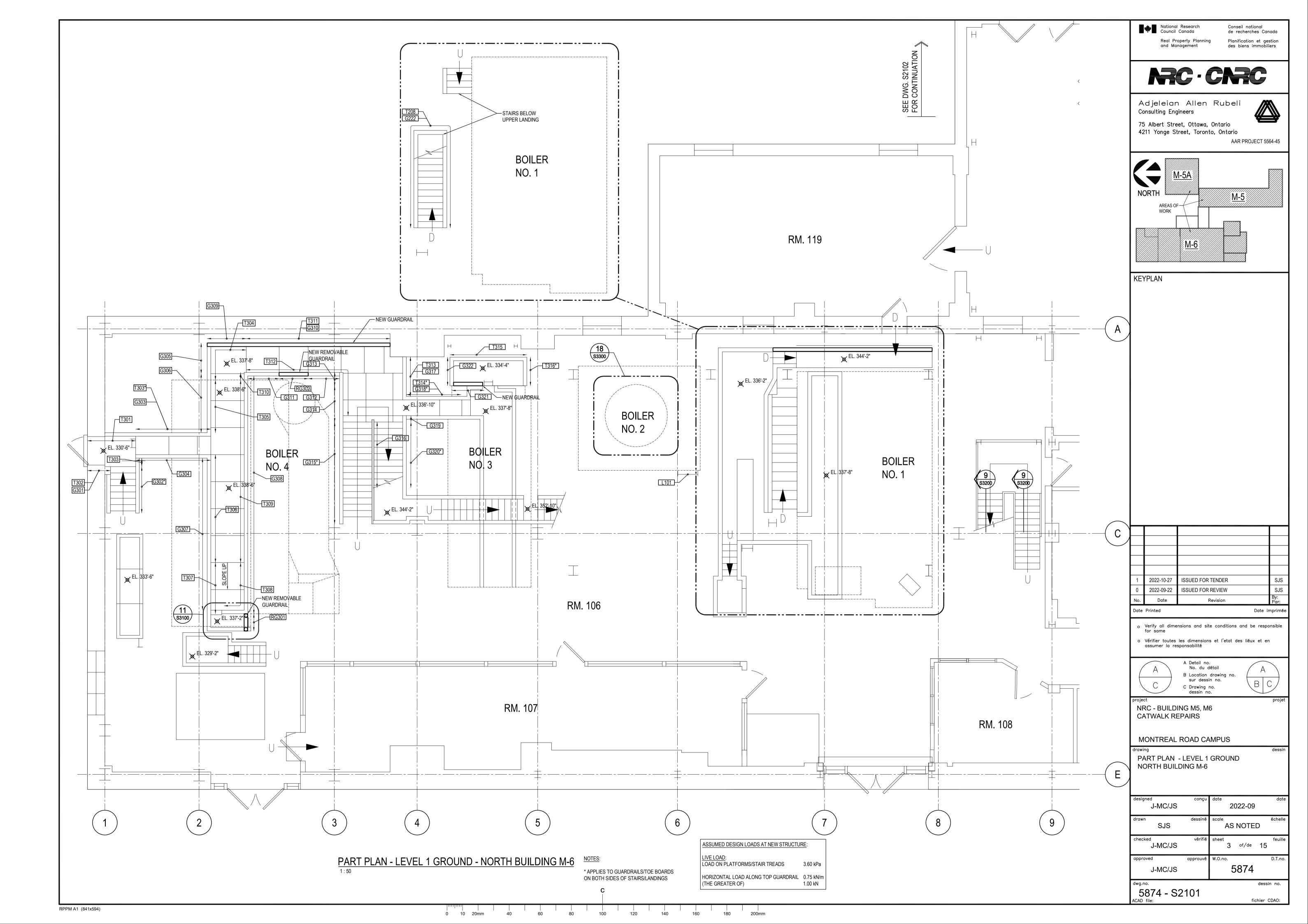
GENERAL NOTES

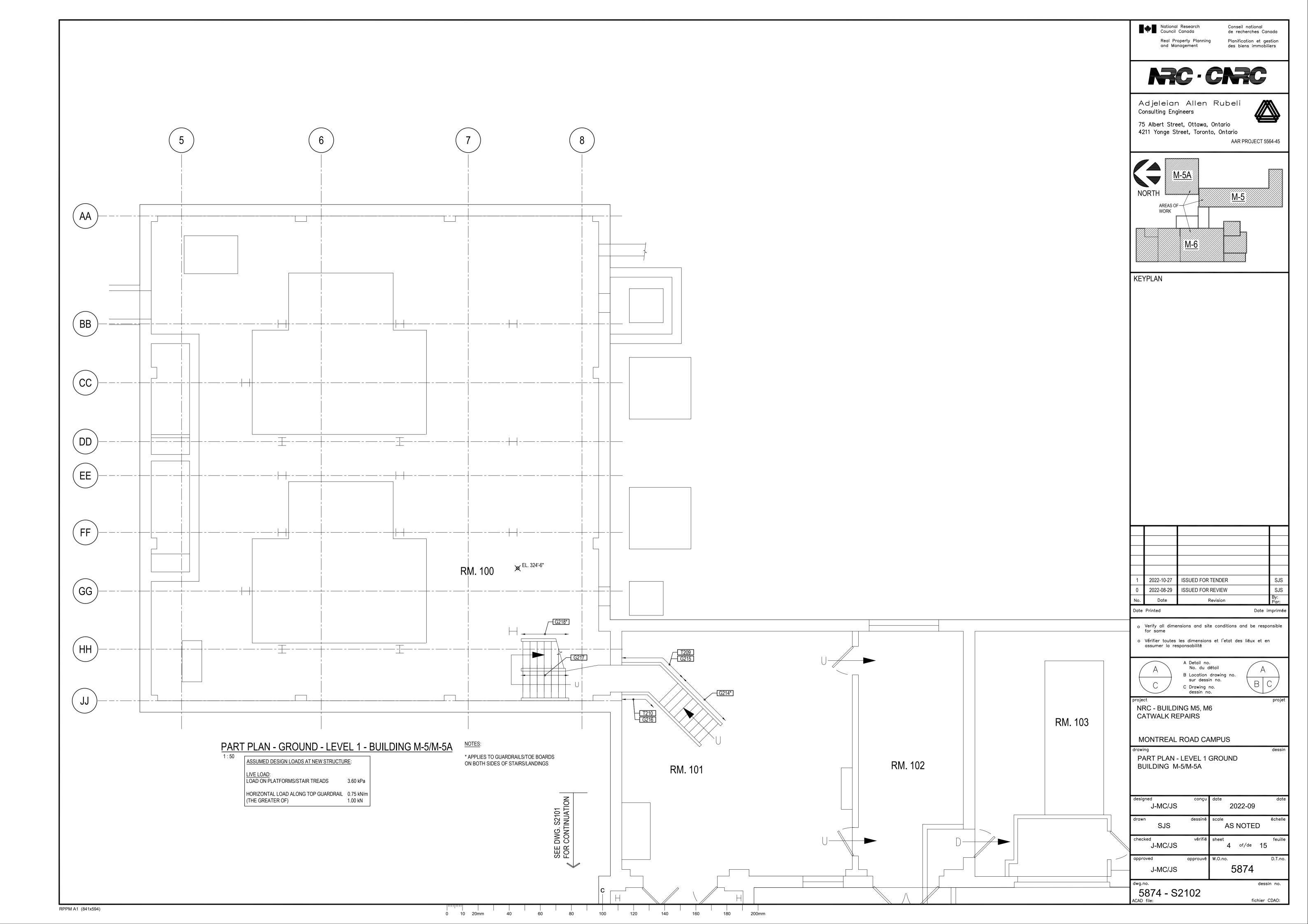
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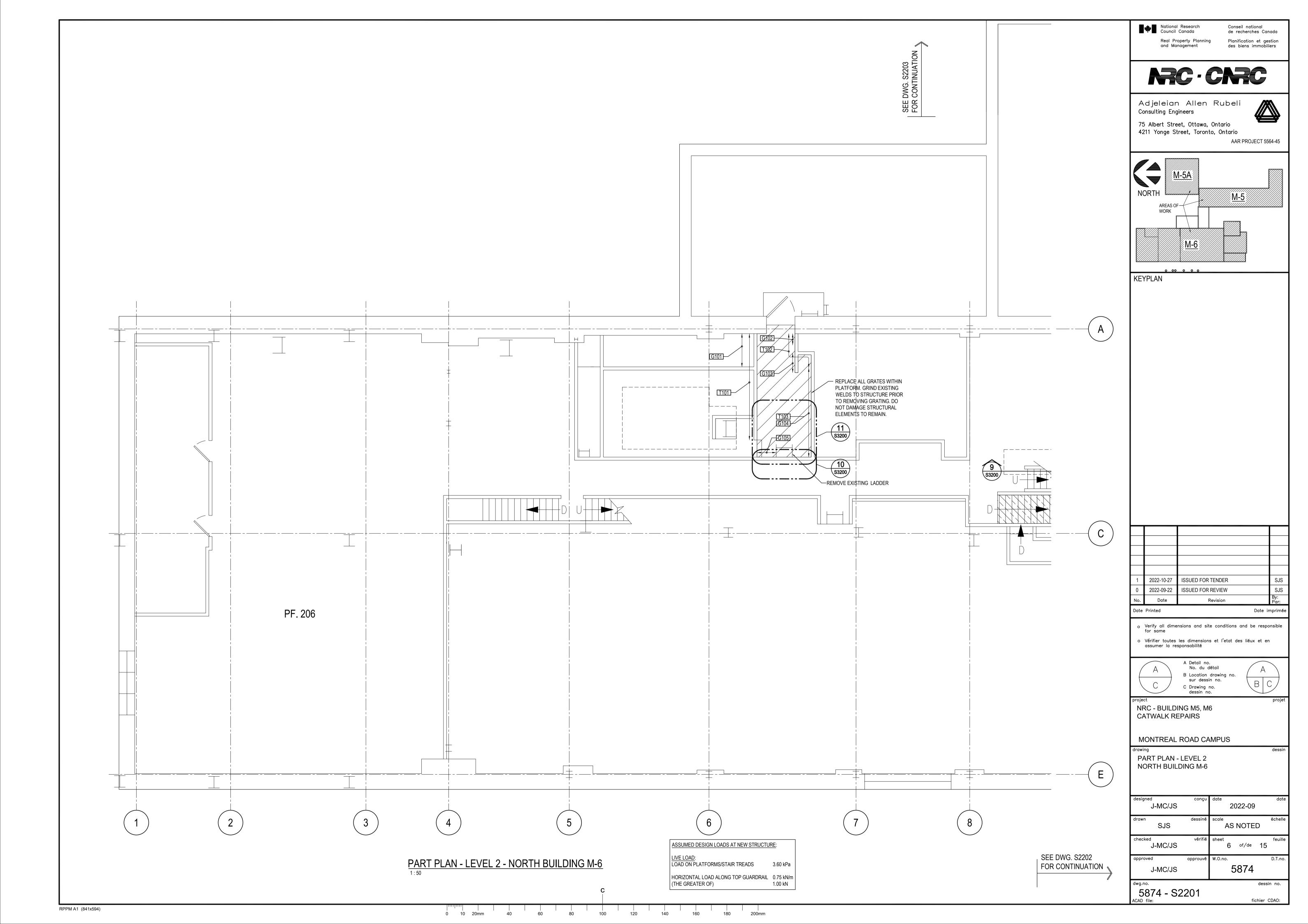
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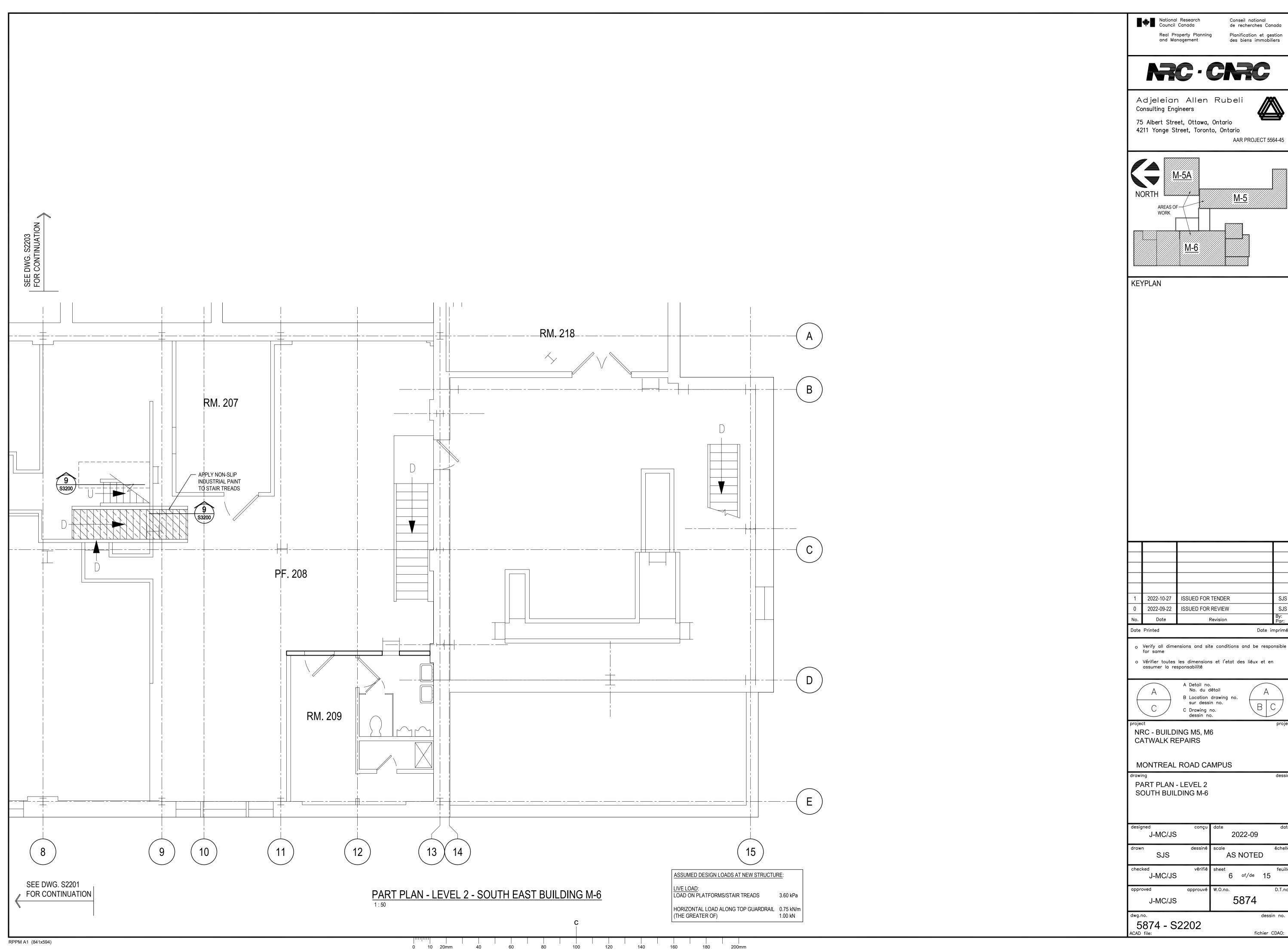
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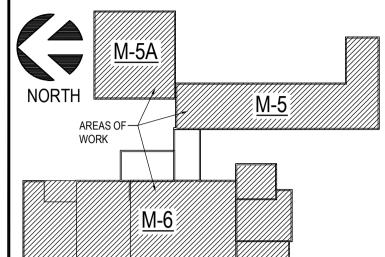






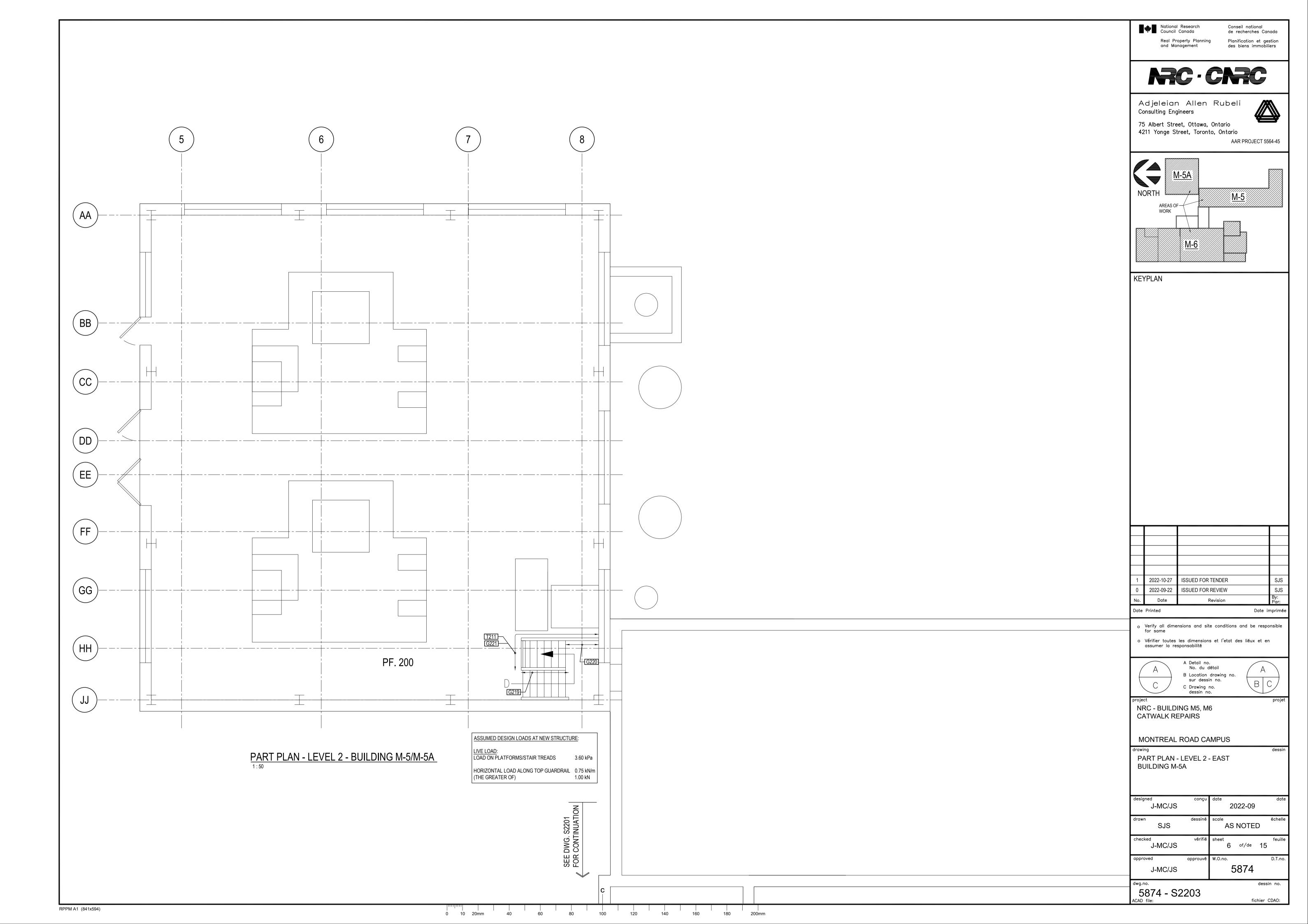


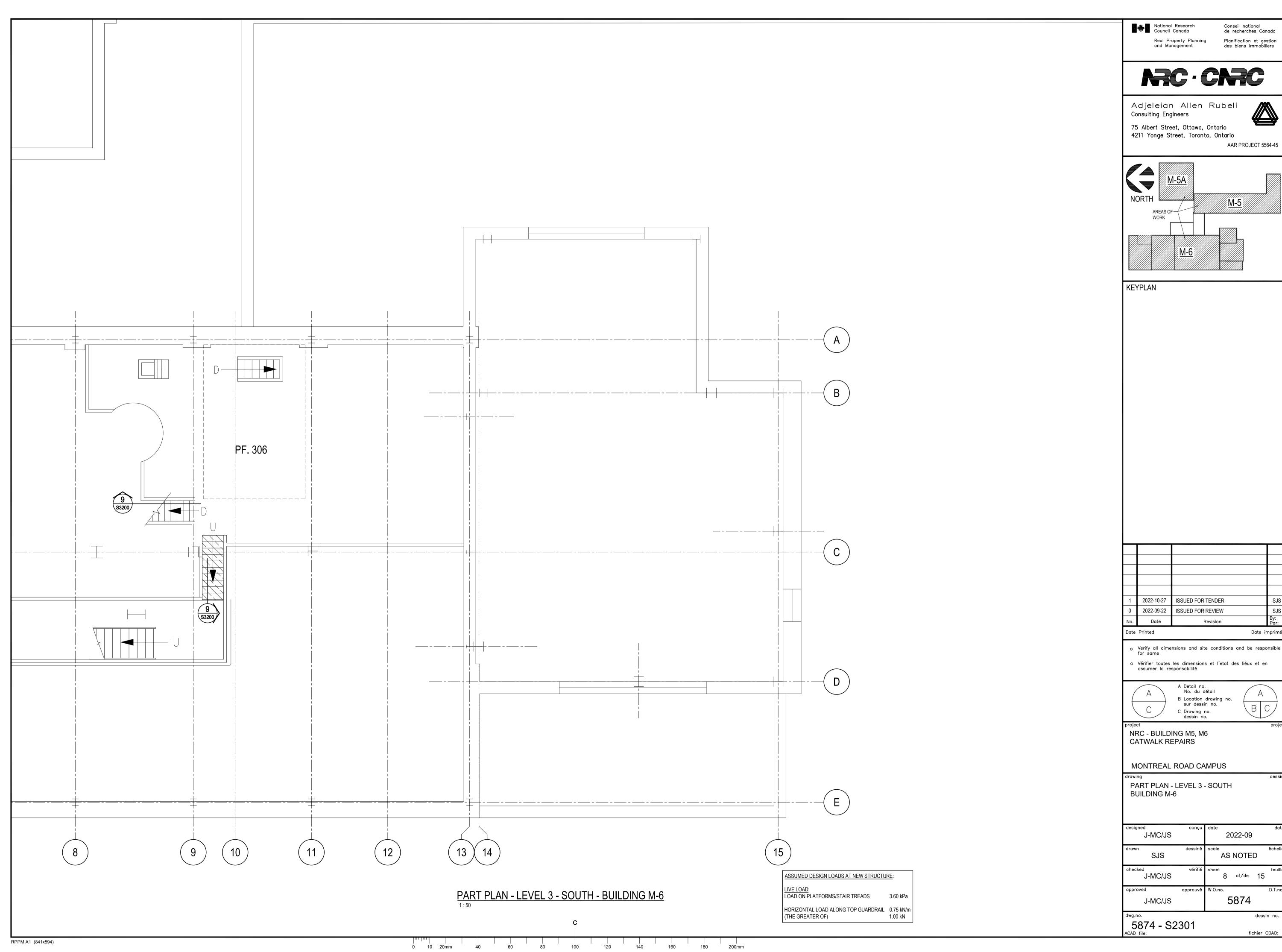


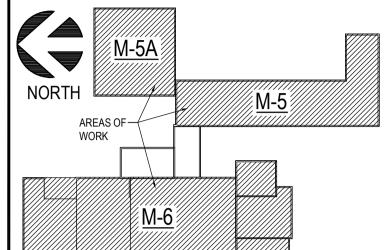


1	2022-10-27	ISSUED FOR TENDER	SJS
0	2022-09-22	ISSUED FOR REVIEW	SJS
No.	Date	Revision	By: Par:

J-MC/JS	•	2022-09
drawn SJS	dessiné	scale échelle AS NOTED
checked J-MC/JS	vérifié	sheet feuille 6 of/de 15
approved	approuvé	W.O.no. D.T.no.

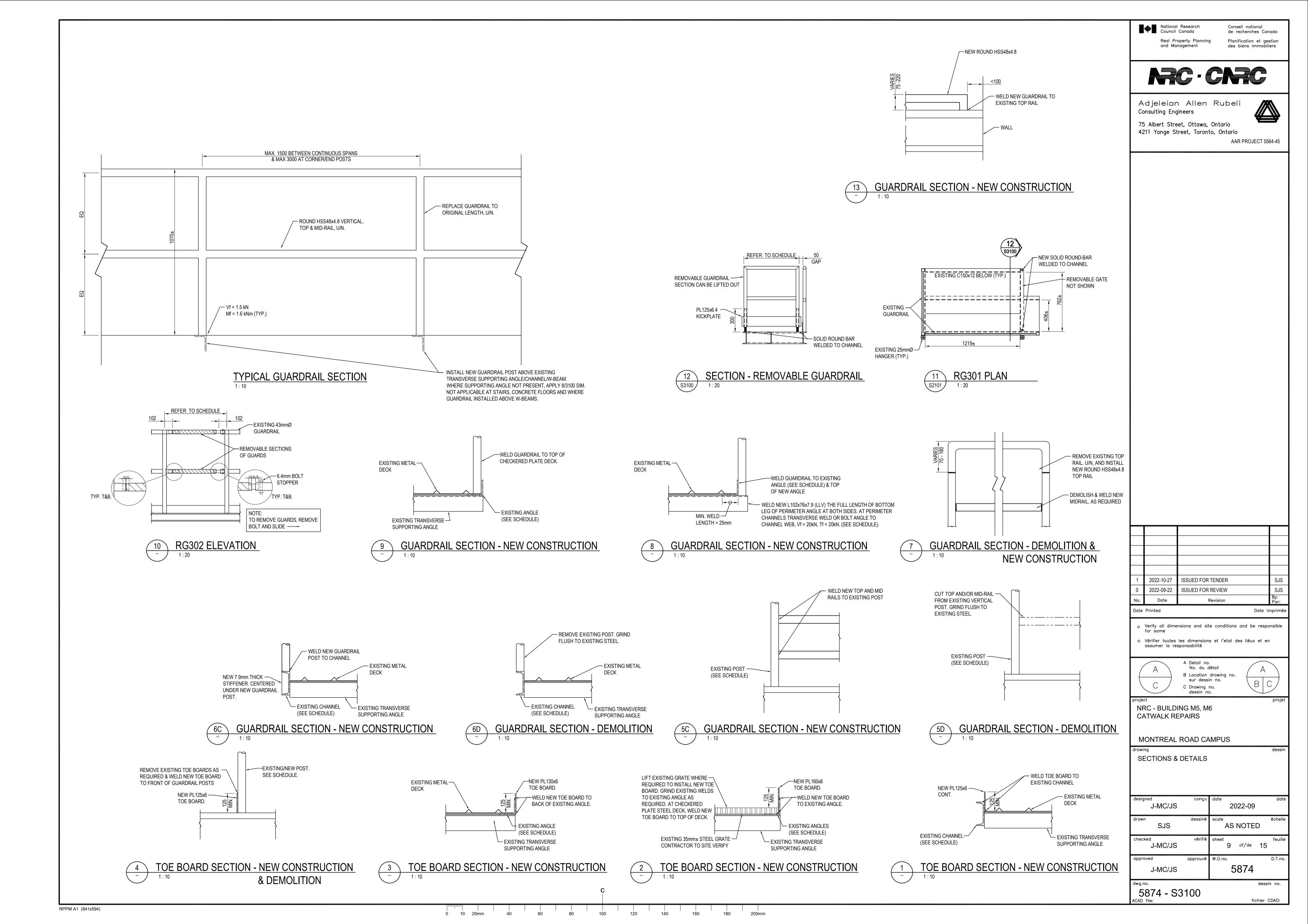


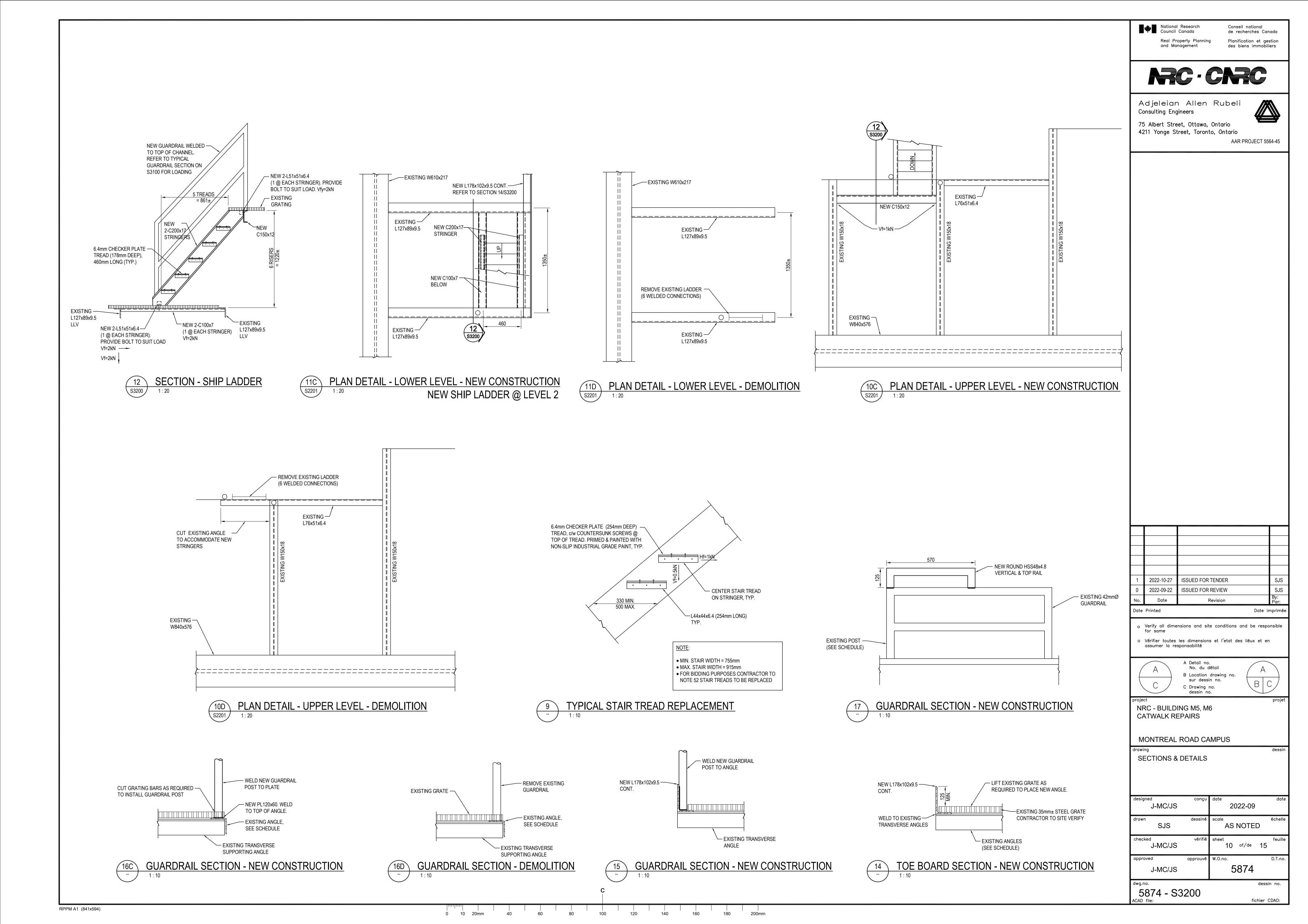


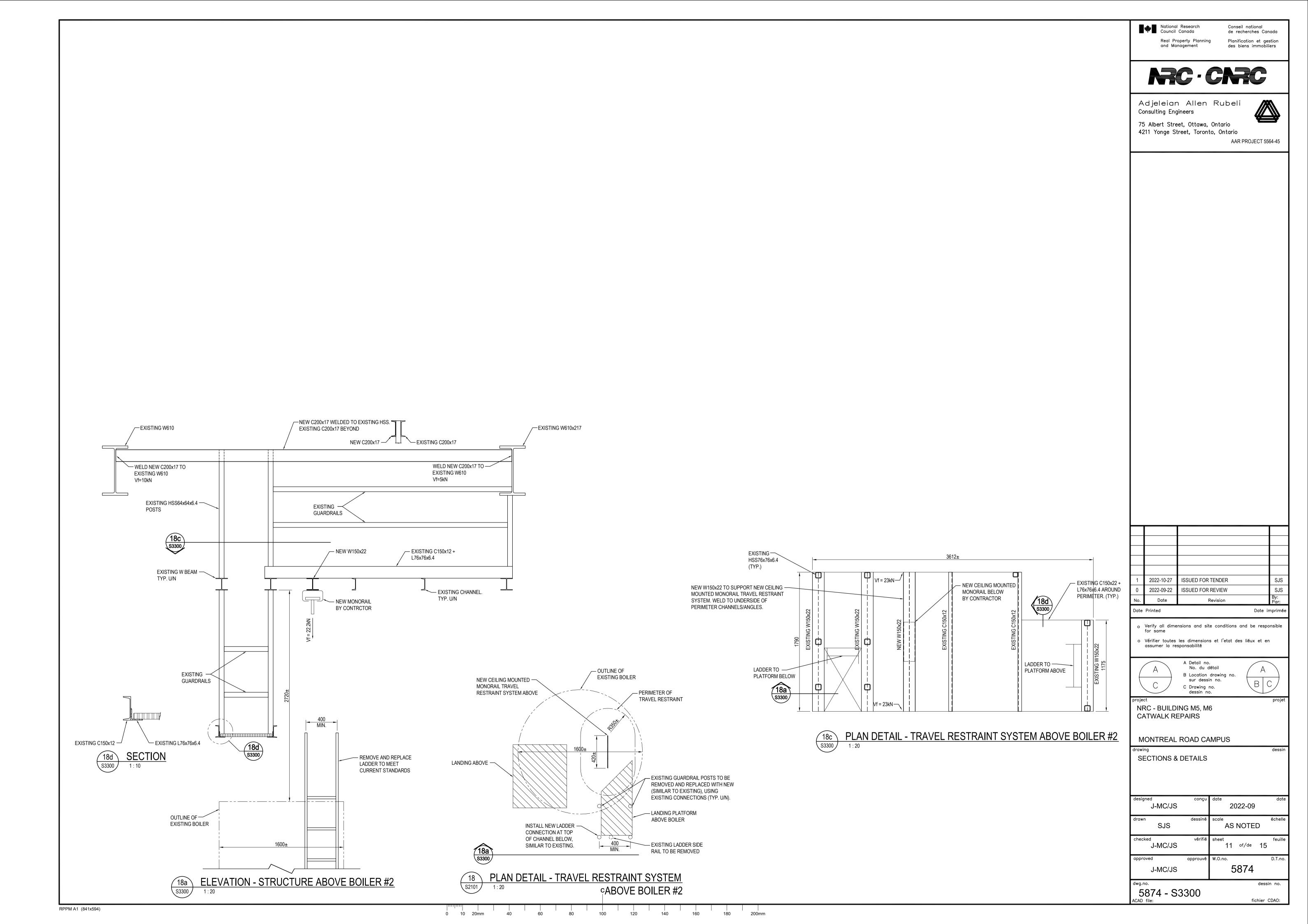


1	2022-10-27	ISSUED FOR TENDER	SJS
0	2022-09-22	ISSUED FOR REVIEW	SJS
No.	Date	Revision	By: Par:

designed J-MC/JS	conçu	date 2	022-09		date
drawn SJS	dessiné	scale AS	NOTE	D	échelle
checked J-MC/JS	vérifié	sheet 8	of/de	15	feuille
					-







GUARDRAIL SCHEDULE

MARK	SECTION	LENGTH (mm)	CONNECTED MATERIAL	COMMENTS	REFERENCE PHOTO
G101	6D/S3100, 16/S3200	1230.0	L64x64x6.4	CUT GUARDRAIL FROM ADJACENT POST (GRAY), SEE PHOTO	PHOTO 3/S5001
G102	6/S3100	570.0	EXISTING POST: Ø = 42		PHOTO 4/S5001
G103	LEFT: 5D/S3100 RIGHT: 16D/S3200	624.0	EXISTING POST: Ø = 42 L64x64x6.4		PHOTO 4/S5001
G104	RIGHT: 5/S3100 TYPICAL:	2400.0	EXISTING POST: Ø = 42		PHOTO 2/S5001
G105	15/S3200 7/S3100	430.0	L178x102x9.5 EXISTING POST: Ø = 42		PHOTO 5/S5001
G201	6/S3100	1440.0	C150x16		PHOTO 9, SIM/ S5001
G202	6/S3100	5470.0	C150x16		PHOTO 9, SIM/ S5001
G203	6/S3100	3700.0	C150x16		PHOTO 9, SIM/ S5001
G204	6/S3100	3560.0	C150x16		PHOTO 9, SIM/ S5001
G205	6/S3100	1100.0	C150x16		PHOTO 9, SIM/ S5001
G206	6/S3100	6010.0	C150x16		PHOTO 9, SIM/ S5001
G207	6/S3100	1100.0	C150x16		PHOTO 8, SIM/ S5001
G208	6/S3100	2380.0	C150x16		PHOTO 9, SIM/ S5001
G209	6/\$3100	1440.0	C150x16		PHOTO 9, SIM/ S5001
G210	6/S3100	4920.0	C150x16		PHOTO 9, SIM/ S5001
G211	6/S3100	1030.0	C150x16		PHOTO 9, SIM/ S5001
G212	6/S3100	1500.0	C150x16		PHOTO 9, SIM/ S5001
G213	6/S3100	5730.0	EXISTING POST: Ø = 42		PHOTO 8/S5001
G214	6/S3100	4460.0	C150x16		PHOTO 9/S5001
G215	6/S3100	2130.0	C150x16		PHOTO 9/S5001
G216	6/S3100	1340.0	C150x17		PHOTO 9, SIM/ S5001
G217	6/S3100	1765.0	MC250x12.5		PHOTO 9, SIM/ S5001
G218	6/S3100	3530.0	MC250x12.5		PHOTO 9, SIM/ S5001
G219	6/S3100	1760.0	MC250x12.5		PHOTO 9, SIM/ S5001
G220	6/S3100	1060.0	MC250x12.5		PHOTO 9, SIM/ S5001
G221	LEFT: 13/S3100 TYPICAL: 7/S3100	- 3380.0	EXISTING POST: Ø = 42 EXISTING POST: Ø = 42		- PHOTO 10/S5001
G222	6/S3100	5150.0	MC250x12.5		PHOTO 9, SIM/ S5001

GUARDRAIL SCHEDULE (CONT.)

MARK	SECTION	LENGTH (mm)	CONNECTED MATERIAL	COMMENTS	REFERENCE PHOTO
G301	6D/S3100	3440.0	C150x16		PHOTO 12/S5001
G302	6/S3100	1720.0	C150x16		PHOTO 18, SIM/S5002
G303	LEFT: 7/S3100	2410.0	EXISTING POST: Ø = 42	DO NOT REMOVE GUARDRAIL EXTENDING TO WALL	PHOTO 19/S5002
	RIGHT: 7/S3100		C100x7		PHOTO 18, SIM/S5002
0004	LEFT: 5/S3100	0440.0	EXISTING POST: Ø = 60		PHOTO 20, SIM/S5002
G304	RIGHT: 7/S3100	2410.0	EXISTING POST: Ø = 42		PHOTO 19/S5002
	LEFT: 8/S3100		EXISTING POST: Ø = 60		PHOTO 20, SIM/S5002
G305	6C/S3100, 6D/S3100	- 800.0	C100x7		PHOTO 18, SIM/S5002
	5/S3100 @ 2835		EXISTING POST: Ø = 60		PHOTO 20, SIM/S5002
G306	ALTERNATE 6C/S3100 @	2150.0			PHOTO 18,
	2835 ALTERNATE		C100x7		SIM/S5002
G307	5/S3100 @ 2835 ALTERNATE	5000.0	EXISTING POST: Ø = 60		PHOTO 20, SIM/S5002
G307	6C/S3100 @ 2835 ALTERNATE	3000.0	C100x7		PHOTO 18, SIM/S5002
G308	5/S3100 @ 2835 ALTERNATE	7720.0	EXISTING POST: Ø = 60		PHOTO 20, SIM/S5002
G300	6C/S3100 @ 2835 ALTERNATE	7720.0	C100x7		PHOTO 18, SIM/S5002
G309	6C/S3100, 6D/S3100	1250.0	C100x7		PHOTO 18, SIM/S5002
G310	6C/S3100, 6D/S3100	4630.0	MC250x12.5		PHOTO 18, SIM/S5002
G311	LEFT: 6C/S3100	350.0	C100x7		PHOTO 18, SIM/S5002
0311	RIGHT: 5/S3100	330.0	EXISTING POST: Ø = 60		PHOTO 20, SIM/S5002
G312	LEFT: 7/S3100	1920.0	EXISTING POST: Ø = 42		PHOTO 19, SIM/S5002
G312	RIGHT: 6C/S3100	1920.0	C100x7		PHOTO 18, SIM/S5002
0040	LEFT: 5/S3100	255.0	EXISTING POST: Ø = 60		PHOTO 20, SIM/S5002
G313	RIGHT: 7/S3100	- 255.0	EXISTING POST: Ø = 42		PHOTO 21/S5002
G314	5/S3100	1760.0	EXISTING POST: Ø = 60		PHOTO 20, SIM/S5002
G315	6/S3100	8040.0	MC250x12.5		PHOTO 18, SIM/S5002
G316	6/S3100	2660.0	MC250x12.5		PHOTO 18, SIM/S5002
G317	6/S3100	1270.0	MC250x12.5		PHOTO 18, SIM/S5002
C240	LEFT: 6/S3100	1900.0	MC250x12.5		PHOTO 18, SIM/S5002
G318	TYPICAL: 8/S3100	1900.0	L102x76x6.4		PHOTO 16/S5002
G319	LEFT: 6/S3100 RIGHT:	200.0	MC250x12.5		- PHOTO 22/S5002
	5/S3100 LEFT:		POST: Ø = 42 EXISTING		
G320	5/S3100 TYPICAL:	2660.0	POST: Ø = 60		- PHOTO 22/S5002
	6/S3100 LEFT:		MC250x12.5		
G321	9/S3100 RIGHT:	930.0	L76x76x4.8 C100x7		- PHOTO 23/S5002
G322	6/S3100 6/S3100	720.0	C100x7		PHOTO 18,
1075	2.23.33		2.50///		SIM/S5002

• LEFT = LEFT-MOST VERTICAL POST WITHIN GUARDRAIL, STANDING ON THE ADJACENT LANDING.

- RIGHT = RIGHT-MOST VERTICAL POST WITHIN GUARDRAIL, STANDING ON THE ADJACENT LANDING.
- TYPICAL = TYPICAL FOR ALL VERTICAL POSTS OTHER THAN THOSE SPECIFIED AS LEFT-MOST OR RIGHT-MOST. WHERE "*" INDICATING GUARDRAIL SECTION TO BE APPLIED AT BOTH SIDES OF STAIRS/LANDINGS APPLY OPPOSITE
- LEFT/RIGHT TO GUARDRAIL WITHOUT EXTENTS ARROW U/N
- LENGTHS PROVIDED FOR PRICING PURPOSES ONLY, CONTRACTOR TO SITE VERIFY

ASSUME BOTH DEMOLITION AND NEW CONSTRUCTION SECTION APPLY UNLESS ONLY ONE SECTION NOTED. REFER TO TYPICAL GUARDRAIL ELEVATION ON S3100.

TOE BOARD SCHEDULE

MARK	SECTION	LENGTH (mm)	CONNECTED MATERIAL	COMMENTS	REFERENCE PHOTO
T101	2/S3100	3420.0	NEW GUARDRAIL POST: Ø = 42		PHOTO 1/S5001
T102	2/S3100	2070.0	NEW GUARDRAIL POST: Ø = 42		PHOTO 4/S5001
T103	1/S3100	2400.0	L127x76x6.4		PHOTO 2/S5001
T201	1/S3100	5470.0	C150x16		PHOTO 7 SIM/ S5001
T202	1/S3100	3560.0	C150x16		PHOTO 7 SIM/ S5001
T203	1/S3100	3700.0	C150x16		PHOTO 7 SIM/ S5001
T204	1/S3100	6010.0	C150x16		PHOTO 7 SIM/ S5001
T205	1/S3100	2380.0	C150x16		PHOTO 7/S5001
T206	1/S3100	4920.0	C150x16		PHOTO 7 SIM/ S5001
T207	1/S3100	1500.0	C150x16		PHOTO 7 SIM/ S5001
T208	2/\$3100	5730.0	NEW GUARDRAIL POST: Ø = 42		PHOTO 8/ S5001
T209	2/S3100	2130.0	NEW GUARDRAIL POST: Ø = 42		PHOTO 9/ S5001
T210	2/S3100	1340.0	NEW GUARDRAIL POST: Ø = 42		PHOTO 9/ S5001
T211	2/S3100	3380.0	EXISTING POST: Ø = 42		PHOTO 10/ S5001
T301	1/S3100	1110.0	MC250x12.5		PHOTO 11 SIM/S5001
T302	4/S3100 SIM	130.0	NEW GUARDRAIL POST: Ø = 42		PHOTO 12/S5001
T303	1/S3100	270.0	MC250x12.5		PHOTO 13/S5002
T303	2/S3100	4820.0	L102x76x6.4		PHOTO 14 SIM/S5002
T304	1/S3100	2212.0	C100x7		PHOTO 15/S5002
T305	1/S3100	2150.0	C100x7		PHOTO 14 SIM/S5002
T306	1/\$3100	2790.0	C100x7		PHOTO 14/S5002
T307	4/S3100	2440.0	NEW GUARDRAIL POST: Ø = 42	ANGLE PLATE TO SUIT PLATFORM SLOPE	PHOTO 14/S5002
T308	4/S3100	3000.0	NEW GUARDRAIL POST: Ø = 42	ANGLE PLATE TO SUIT PLATFORM SLOPE	PHOTO 14/S5002
T309	1/\$3100	5680.0	C100x7	T D (II) O (III) O (II)	PHOTO 14 SIM/S5002
	LEFT: 4/S3100		EXISTING POST: Ø = 60		
T310	RIGHT: 4/S3100 SIM	215.0	L76x76x4.8		PHOTO 15/S5002
T311	1/S3100	4630.0	MC250x12.5		PHOTO 15 SIM/S5002
T312	1/S3100	4446.0	C100x7		PHOTO 15 SIM/S5002
T313	1/S3100	1272.0	MC250x12.5		PHOTO 15 SIM/S5002
T314	2/S3100	3570.0	L102x76x6.4		PHOTO 16/S5002
T315	2/S3100	5140.0	L76x76x4.8		PHOTO 17/S5002
T316	3/\$3100		C100x7		РНОТО

• LEFT = LEFT-MOST TOE BOARD CONNECTION, STANDING ON THE ADJACENT LANDING.

- RIGHT = RIGHT-MOST TOE BOARD CONNECTION, STANDING ON THE ADJACENT LANDING.
- TYPICAL = TYPICAL ALONG TOE BOARD LENGTH.
- WHERE "*" INDICATING TOEBOARD SECTION TO BE APPLIED AT BOTH SIDES OF STAIRS/LANDINGS APPLY OPPOSITE LEFT/RIGHT TO TOEBOARD WITHOUT EXTENTS ARROW U/N.
- LENGTHS PROVIDED FOR PRICIING PURPOSES ONLY, CONTRACTOR TO SITE VERIFY
- ASSUME BOTH DEMOLITION AND NEW CONSTRUCTION SECTION APPLY UNLESS ONLY ONE SECTION NOTED.

LADDER SCHEDULE

MARK	HEIGHT (mm)	NUMBER OF CONNECTIONS	CONNECTED MATERIAL	REFERENCE PHOTO(S)
L101	2550.0	8.0	TOP OF CHANNEL, TOP OF PLATFORM, TOP OF BOILER	PHOTO 6/S5001, PHOTO 26

REMOVE AND REPLACE ALL LADDERS IN SCHEDULE TO MEET CURRENT STANDARDS. REFER TO GENERAL NOTES.

REMOVABLE GUARDRAIL SCHEDULE

MARK	SECTION	LENGTH(mm)	REFERENCE PHOTO
RG301	11/S3100	760.0	PHOTO 24/S5002
RG302	10/S3100	800.0	PHOTO 25/S5003

O Verify all dimensions and site conditions and be responsible for same o Vérifier toutes les dimensions et l'etat des liéux et en assumer la responsabilité

Date imprimée

dessin no.

2022-10-27 ISSUED FOR TENDER 2022-09-22 ISSUED FOR REVIEW

Conseil national de recherches Canada

Real Property Planning

Adjeleian Allen Rubeli

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Consulting Engineers

RRC - CRRC

Planification et gestion des biens immobiliers

AAR PROJECT 5564-45

A Detail no.

No. du détail B Location drawing no. sur dessin no. C Drawing no. dessin no.

NRC - BUILDING M5, M6 CATWALK REPAIRS

MONTREAL ROAD CAMPUS

SCHEDULES

Date Printed

designed J-MC/JS	conçu	^{date} 2022-09	dat
drawn SJS	dessiné	AS NOTED	échel
checked J-MC/JS	vérifié	sheet 12 of/de 15	feuil
approved	approuvé	W.O.no.	D.T.n
J-MC/JS		5874	

5874 - S4000

fichier CDAO:

RPPM A1 (841x594)

