



NEW WESTMINSTER

October 20, 2016

**ADDENDUM #2
NWIT-16-38
Exterior Stair Replacement
Queen's Park Arena, New Westminster, BC**

This addendum modifies the Invitation to Tender only as noted:

INSTRUCTIONS TO BIDDERS

3.0 Submission of Tender

3.3 <CHANGE TO READ> **“prior to 3:00 pm (Local Time) on Thursday, October 27, 2016.”**

ADDITIONAL INFORMATION

Please refer to Addendum – October 12, 2016 from Siefken Engineering Ltd (6 pages following)

Please acknowledge this addendum on page 2 of 4 in the Bid Form.

END OF ADDENDUM #2

Yours truly,

Heather M. Rossi
Intermediate Buyer

Addendum – October 12, 2016
Queens Park Arena – Stairs
City of New Westminster

<u>Drawing Number</u>	<u>Description</u>
S-1	<ol style="list-style-type: none">1. Concrete testing agency retained and paid for by owner.2. All wood to be pressure treated.3. Galvanize all connections and miscellaneous steel typical.4. P-T wood specification added.5. Geotech to be paid for by owner.
S-2	<ol style="list-style-type: none">1. Two holes in existing area wall at support beams - Stair #1:<ol style="list-style-type: none">a. Contractor to remove wood lumber.b. Clean hole.c. Grout hole solid.2. Galvanize all connections.3. Re-use existing non-slip/high vis strips.
S-3	<ol style="list-style-type: none">1. Galvanize all connections.2. Re-use existing non-slip/high vis strips.3. Detail "D" section detail revised. Stair #2.
S-4	<ol style="list-style-type: none">1. Galvanize all connections.2. Re-use existing non-slip/high vis strips.
S-5	<ol style="list-style-type: none">1. Joist hangers added.2. 2x8 beams called out adjacent to joist hangers.3. Blocking at stair treads.

GENERAL NOTES

1. THESE STAIR STRUCTURES HAVE BEEN DESIGNED IN ACCORDANCE WITH THE BRITISH COLUMBIA BUILDING CODE 2012, PART 4.
- 1.4. THE EXISTING STRUCTURE HAS NOT BEEN REVIEWED FOR CONFORMANCE WITH THE BC BUILDING CODE REQUIREMENTS.
2. CONTRACT REPAIRS TO BRITISH COLUMBIA BUILDING CODE REQUIREMENTS, DESIGN LOADS (P99):

LEVEL	LL
STAR LITE LOAD	100
GROUND SNOW LOAD	42

B) SNOW (P24) D) WIND (P24)

$$S_f = 0.2$$

$$Q_{Sf} = 0.47$$

$$d) \text{ WINDIC: } W_s (1.0) = 0.66, W_s (1.0) = 0.33, W_s (2.0) = 0.17$$

$$PGA = 0.49$$

4. REAO STRUCTURAL DRAWINGS IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND DOCUMENTS. ANY DISCREPANCIES MUST BE REPORTED IMMEDIATELY FOR CLARIFICATION.
5. DO NOT INSTALL OPENINGS, SET INSERTS, DRILL OR ATTACH TO STRUCTURAL FRAME WITHOUT APPROVATION OF ENGINEER EXCEPT AS NOTED ON DRAWINGS.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS BY ANOTHER SUITABLE QUALIFIED PERSON.
7. NOTIFY THE ENGINEER 24 HOURS IN ADVANCE FOR INSPECTION OF THE FOLLOWING:
 - a) REINFORCING STEEL : BEFORE EACH CONCRETE POUR.
 - b) WOOD FRAMING : FLYWOOD WALLS, ROOF, BEFORE COVER UP.
 - c) BRICK STRUCTURE: THE BRICK WALLS AND ROOF SHALL BE FULLY FASTENED IN PLACE. BRACKING SHOWN IS FOR COMPLETED STRUCTURE ONLY.
 10. VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION. FAILURE TO DO SO SHALL RENDER THE CONTRACTOR RESPONSIBLE TO REPAIR ANY IMPROPER WORK.
 11. METRIC AND IMPERIAL UNITS USED INTERCHANGEABLY.
 12. DO NOT STRUCTURAL COMPONENTS DETAIL ON OUR DRAWINGS HAVE BEEN APPROVED BY THE ENGINEER. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND THE RESPONSIBILITY OF THEIR RESPECTIVE DESIGNERS, THIS INCLUDES, BUT IS NOT LIMITED TO, DAMP PROOFING AND WATER PROOFING SYSTEMS.
 13. THESE DESIGN DOCUMENTS ARE PREPARED SOLELY FOR THE USE BY THE PARTY WITH WHOM THE PROFESSIONAL HAS ENTERED INTO A WRITTEN CONTRACT AND ENTERED INTO SUCH A CONTRACT OF ANY OTHER PROFESSIONAL HAS NOT DO NOT BUILD FROM THESE DRAWINGS UNLESS THEY ARE MARKED 'ISSUED FOR CONSTRUCTION'.
 15. DESIGN ALL GUARDRAILS, AND HANDRAILS, TO THE REQUIREMENTS OF THE B.C. BUILDING CODE.
 16. ALL FORMING SHORING, AND SITE SAFETY ISSUES ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
 18. ANY CHANGES TO THE FRAMING SHOWN ON THE DRAWINGS SHALL HAVE PRIOR WRITTEN APPROVAL OF THE ENGINEER. FRAMING CHANGES THAT HAVE NOT BEEN APPROVED WILL BE REJECTED.
 19. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE CORRECTION OF DEFICIENCIES AS DETERMINED BY THE ENGINEER.

CONCRETE

1. GENERAL
 - a) PROVIDE CONCRETE AND FERROK WORK TO CSA CAN3 A23.1
 - a) PROVIDE CONCRETE REPAIRS TO BE APPROVED BY THE ENGINEER TO TEST AGGREGATES, DESIGN MIX AND TAKE AND TEST CONCRETE CORNERS TO CSA-A23.1 AND CSA-A23.2. SUBMIT REPORTS TO ENGINEER.
2. PRODUCTS
 - a) CEMENT: TYPE 10 PORTLAND CEMENT.
 - b) REINFORCING STEEL : NEW DEFORMED BARS TO CSA G30.1 & GRADE 400.
 - c) AGGREGATE AND WATER : TO CSA CAN3-A23.1.
 - d) ADMIXTURES : AIR ENTRAINING TO CSA A266.1, WATER REDUCING TO ASTM C494-TYPE A.
 - e) ANCHOR BOLTS : TO ASTM A307.
 - f) FORMWORK : SMOOTH, SQUARE EDGED FLYWOOD PANELS.
 - g) DISCREPTION STRENGTH (MPa) AGGREGATE EXPOSURE CLASS
 - h) FLOORING 25 3/4" F2
 - i) SLAB/GRADE 32 3/4" F2
3. EXECUTION
 - a) MAKE AND PLACE CONCRETE TO CSA CAN3 A23.1.
 - b) MINIMUM DEPTH OF CONCRETE NOT TO BE LESS 5'-0".
 - c) COMPACT CONCRETE WITH INTERNAL TYPE MECHANICAL VIBRATORS, WORK CONCRETE AROUND ALL EMBEDDED MATERIAL AND INTO CORNERS OF FORMS.
 - d) UNLESS NOTED OTHERWISE PROVIDE CLEAR CONCRETE COVER OVER REBAR AS FOLLOWS :

BEAMS AND COLUMNS	1 1/2"
e) REINFORCING DETAILS SHALL CONFORM TO ACI 315-80 OR AS NOTED ON DRAWINGS, COLUMNS, PILEGERS, AND PILESTAYS TO HAVE TIES HOOKED 135 DEGREES OR AS DETAIL ON DRAWINGS.	
 - f) REINFORCING SHALL BE PLACED WITH 1" MINIMUM CLEARANCE FROM OTHER COATINGS. PLACE REBAR IN ACCORDANCE WITH CSA CAN3-A23.1 AND SECURE WITH CLIPS OR WIRE NOT LESS THAN 1/8 GAUGE.
 - g) CONTINUE WALL STEEL AROUND CORNERS.
 - h) MINIMUM SPLICE LENGTH, UNLESS NOTED OTHERWISE :

FOUNDATIONS

1. GENERAL
 - a) DESIGN SOIL BEARING PRESSURE IS 1500 psf.
 - b) AFTER EXCAVATION AND BEFORE CONSTRUCTING FOUNDATIONS HAVE A GEOTECHNICAL ENGINEER INSPECT THE FOUNDATIONS AND CONFIRM THE SOIL BEARING PRESSURE. **IF GEOTECHNICAL ENGINEER REQUIRE CHANGES TO THE FOUNDATION (GEOTECH) TO BE MADE FOR BY OWNER.**
2. PRODUCTS
 - a) PROTECT BASE 3/4" MINIMUM
 - b) PASSING THE # 200 SIEVE
 - c) CLEAN IT RAIN SAND AND GRAVEL WITH LESS THAN 5% FINNING THE # 200 SIEVE
3. EXECUTION
 - a) REMOVE TOPSOIL AND OTHER ORGANIC MATERIAL FROM BUILDING AREA.
 - b) EXPOSE ALL FOUNDATIONS TO FIRM, UNDISTURBED, NATIVE SOIL, OR TO A MINIMUM 6" BELOW GRADE, OR TO ELEVATIONS SHOWN ON THE DRAWINGS.
 - c) REMOVE ALL LOOSE MATERIAL FROM FOOTING PRIOR TO POURING CONCRETE.
 - d) THE SLAB ON GRADE MAY BE PLACED ON A 6" LAYER OF ROAD WELCH DIRECTLY OR ON THE NATIVE SOIL. BACKFILL OVER EXCAVATED AREAS IN 9" LIFTS OF GRANULAR BASE COMPACTED TO 98% SFB0.

STRUCTURAL WOOD FRAMING

1. GENERAL
 - a) PROVIDE STRUCTURAL FRAMING AND FERROK WORK TO 201.2 BCBC AND CSA CAN3 046.
2. PRODUCTS
 - a) LUMBER TO BE NO. 2 OR BETTER S.P.F. AND TO CONFORM TO CSA TO THE LATEST STANDARD GRADING RULES FOR CANADIAN LUMBER, AND TO HAVE A MAXIMUM OF 1% MOISTURE CONTENT AT THE TIME OF INSTALLATION.
 - b) PLYWOOD : DOUGLAS FIR SHEATHING GRADE TO CSA O1.2, EXTERIOR GRADE FOR WALLS, WALLS AND ROOF. TONGUE AND GROOVE FOR FLOORS. SUBSTITUTION WITH OSB IS NOT PERMITTED.
 - c) BOLTS : TO ASTM STANDARD A307
 - d) NAILS : TO ASTM STANDARD A307
 - e) METAL FASTENERS, AND FRAMING ANCHORS: PROPERLY TESTED IN ACCORDANCE WITH ICCRC CRITERIA AND ANALYZED TO EVALUATE LOAD CAPACITIES
 - f) LUMBER GRADE : # 2 DOUGLAS FIR FOR ALL MEMBERS DETAIL ON STRUCTURAL DRAWINGS INCLUDING JOISTS, FLATES, STUDS, LEDGERS, AND BLOCKING. # 1 FOR COLUMNS
 - g) THE USE OF FINGER-JOINTED STUDS IS PERMITTED ONLY FOR INTERIOR NON-SHEAR WALLS. THE GRADING OF THE FINGER-JOINTED STUDS MUST COMPLY WITH THE GRADING SPECIFIED BY THE NIGRA STANDARDS. DO NOT USE FINGER-JOINTED LUMBER FOR EXTERIOR WALLS, SHEAR WALLS, FOR ANY TOP OR BOTTOM FLATES, BRAGS/TRUS, AT STUDS W/ HOLD-DOWN STRAPS SUCH AS THE CONTRACTOR IS TO SUBMIT LIST OF PROPOSED LUMBER SPECIES AND GRADE TO THE ENGINEER PRIOR TO START OF CONSTRUCTION
 - ANY LUMBER NOT GRADE MARKED WILL BE REJECTED
3. EXECUTION
 - a) TRACT FRAMING TO BCBC PART 9, SECTION 23, WOOD FRAME CONSTRUCTION.
 - b) DO NOT OVERDRIVE NAILS FOR FLYWOOD SHEATHING, NAILS WHICH ARE RECESSED MORE THAN 1/8" OF THE SHEATHING THICKNESS WILL BE REJECTED

PRESERVED WOOD

1. GENERAL
 - a) UNLESS OTHERWISE SPECIFIED PRESERVED WOOD WORK IN ACCORDANCE WITH CAN3-S40C-M33, EXCEPT WHERE SPECIFIED OTHERWISE.
 - b) IDENTIFY EACH PIECE OF TREATED LUMBER AND FLYWOOD USED IN PRESERVED WOOD BY CSA 0322-1-976 CERTIFICATION STAMP.
2. PRODUCTS
 - a) LUMBER AND PAINT MATERIALS: TO CAN3-S40C-M33
 - b) SEALANT AND FIELD APPLIED PRESERVATIVE: TO CAN3-S40C-M33.
3. EXECUTION
 - a) CONSTRUCT PRESERVED WOOD IN ACCORDANCE WITH CAN3-S40C-M33.
 - b) PLACE CUT ENDS UP WHERE STUDS CUT TO LENGTH.
 - c) DO NOT BURN TREATED WOOD.
 - d) INSTALL PRESERVED WOOD IN ACCORDANCE WITH CAN3-S40C-M33.

NOTE:

- ALL JOISTS, COLUMNS, BEAMS, STRINGERS, AND JOISTS TO BE PRESSURE TREATED, TYP

3. EXECUTION
 - a) MAKE AND PLACE CONCRETE TO CSA CAN3 A23.1.
 - b) MINIMUM DEPTH OF CONCRETE NOT TO BE LESS 5'-0".
 - c) COMPACT CONCRETE WITH INTERNAL TYPE MECHANICAL VIBRATORS, WORK CONCRETE AROUND ALL EMBEDDED MATERIAL AND INTO CORNERS OF FORMS.
 - d) UNLESS NOTED OTHERWISE PROVIDE CLEAR CONCRETE COVER OVER REBAR AS FOLLOWS :

BEAMS AND COLUMNS	1 1/2"
e) REINFORCING DETAILS SHALL CONFORM TO ACI 315-80 OR AS NOTED ON DRAWINGS, COLUMNS, PILEGERS, AND PILESTAYS TO HAVE TIES HOOKED 135 DEGREES OR AS DETAIL ON DRAWINGS.	
 - f) REINFORCING SHALL BE PLACED WITH 1" MINIMUM CLEARANCE FROM OTHER COATINGS. PLACE REBAR IN ACCORDANCE WITH CSA CAN3-A23.1 AND SECURE WITH CLIPS OR WIRE NOT LESS THAN 1/8 GAUGE.
 - g) CONTINUE WALL STEEL AROUND CORNERS.
 - h) MINIMUM SPLICE LENGTH, UNLESS NOTED OTHERWISE :

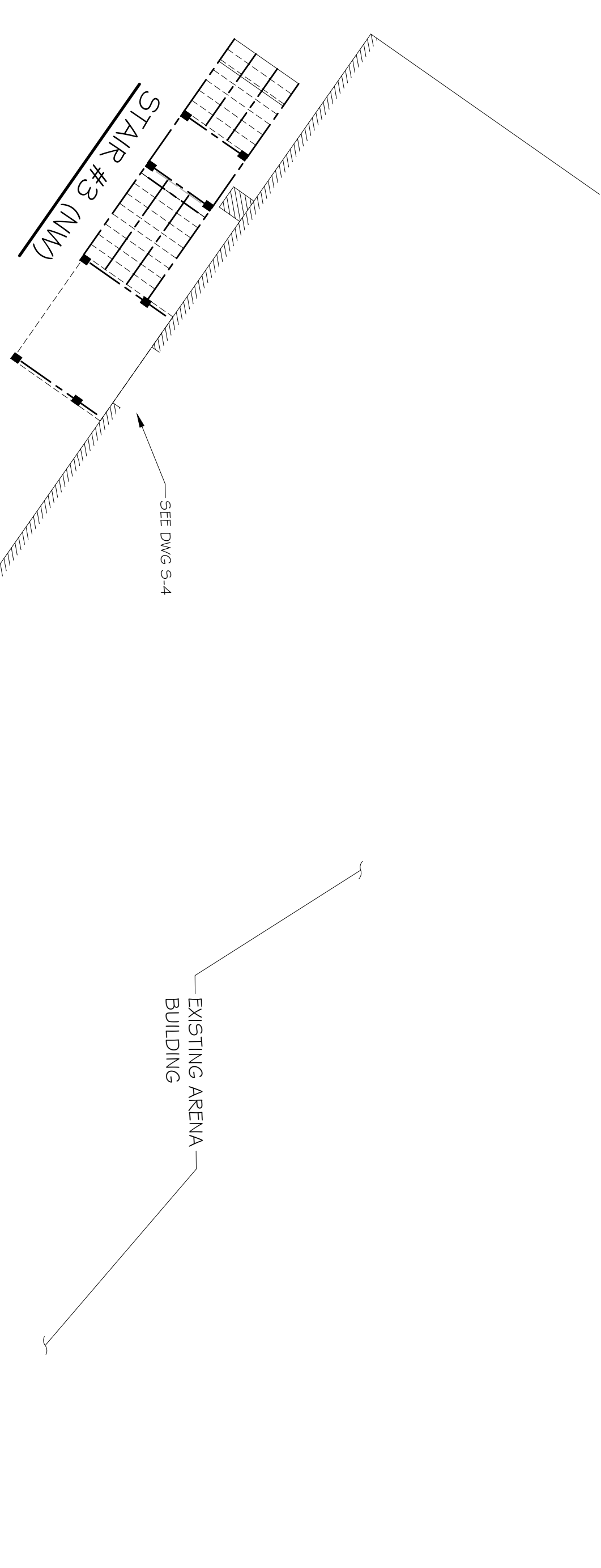
DIMENSIONS

- ALL BUILDING DIMENSIONS (EXISTING OR NEW) NOT SHOWN ON OUR DRAWINGS, ARE NOT REQUIRED BY US AND ARE THE RESPONSIBILITY OF THE ARCHITECT/CONTRACTOR TO OBTAIN. DO NOT SCALE DRAWINGS.
- ROOS OR JOIST MANUFACTURE TO FIELD VERIFY ALL DIMENSIONS AND EXISTING TO NEW CONNECTIONS

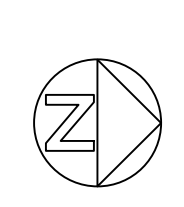
7		
6		
5		
4	ISSUED FOR TENDER APPENDIX	
3	ISSUED FOR TENDER	
2	ISSUED FOR BUILDING PERMIT	
1	DESCRIPTION	DATE

ABBREVIATIONS:

J1	JOIST TYPE
DP	DEEP
DT	DRAWN
DT/O	DIAGONAL NOTED OTHERWISE
S.F.	STEP FOOTING
S.F.	STEP FOOTING
FIG.	EACH FACE
BOTT.	EACH FACE STAGGERED
COMPETE WITH	
ROTATION	
HORIZ	BOTTOM EACH WAY
ATTENWATE	BOIT
TYP.	CANT
B.O.	CANTILVERED
C1	15M@7'-0" DIMONETS 15M BARS, 7'-0" LONG
P.A.	POST ABOVE

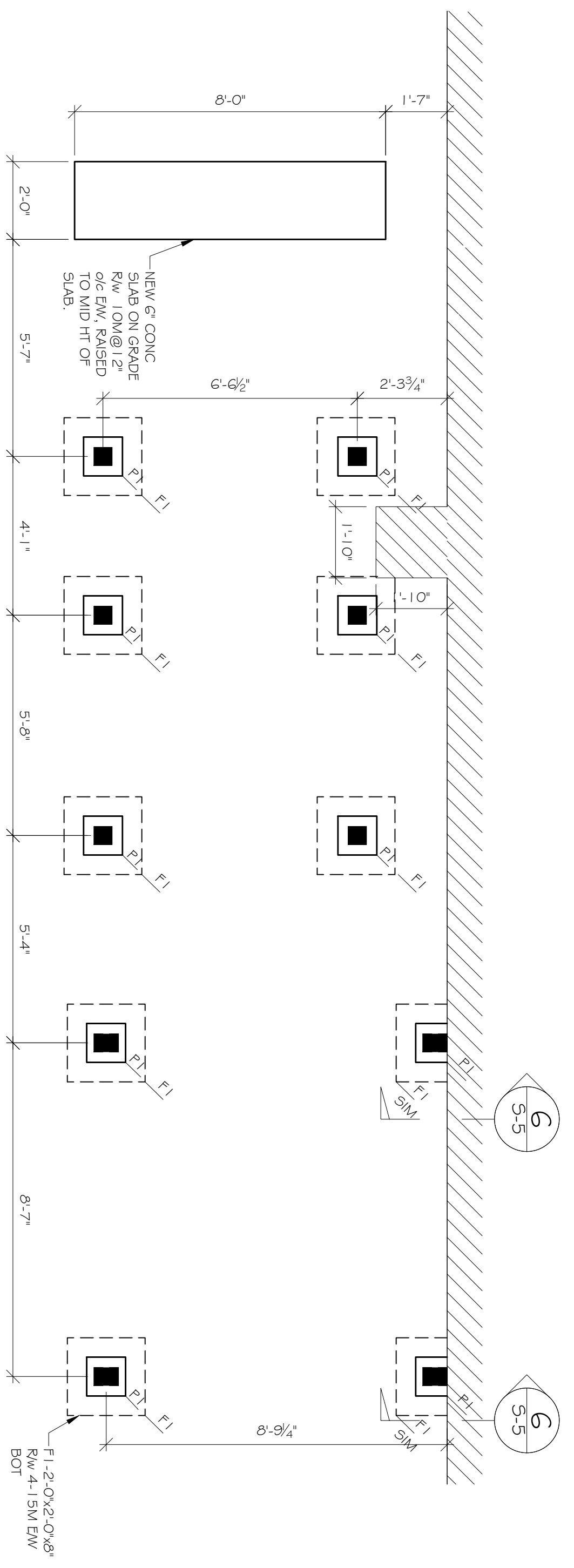


STAIRS SITE PLAN
SCALE : 1/8" = 1'-0"

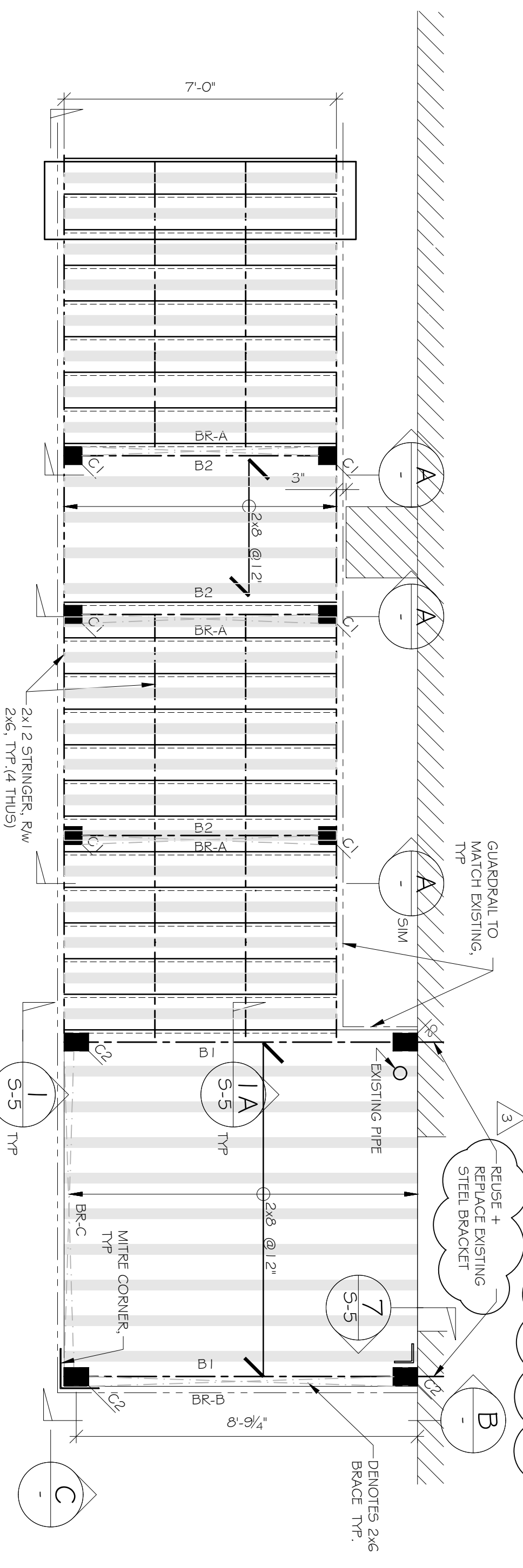


- ### NOTE
1. CONTRACTOR TO REMOVE ALL EXISTING FOOTINGS, STAIRS AND HANDRAILS.
 2. CONCRETE TESTING AGENCY RETAINED BY OWNER.
 3. ALL WELDED FABRIC TO BE GALVANIZED.
 4. EXISTING HANDRAILS TO BE SHOP GALVANIZED.

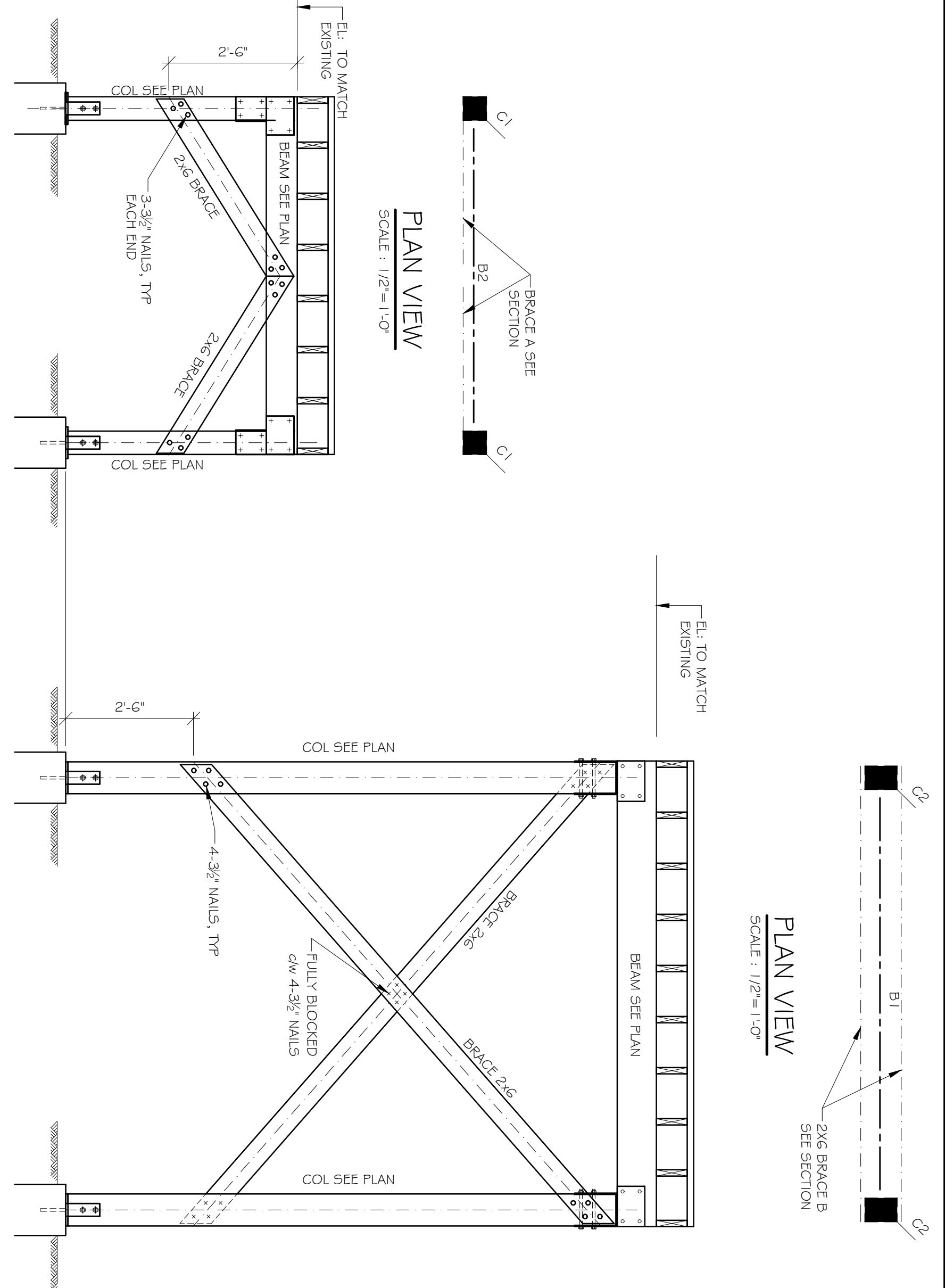
<p>SIERKEN ENGINEERING LTD. CONSULTING STRUCTURAL ENGINEERS #203-668 CARLARON ST. NEW WESTMINSTER, B.C. V3M 5Y6 TEL: (604) 525-4122 FAX: (604) 525-3557 E-MAIL: sierken@silus.net</p> <p>COPYRIGHT RESERVED This plan and design are, and at all times remain the exclusive property of the Engineer and cannot be used or reproduced without the written consent of Sierken Engineering.</p>	<p>DESIGNED LE</p> <p>DRAWN NS</p> <p>CHECKED GS</p> <p>APPROVED JRS</p>	<p>PROJECT QUEEN'S PARK ARENA-STAIR REPLACEMENT 220-238 FIRST STREET NEW WESTMINSTER, B.C.</p> <p>TITLE GENERAL NOTES / SITE PLANS</p>
<p>JOB NUMBER 2016-327</p> <p>SCALE AS NOTED</p> <p>SHEET NUMBER S-1</p>		



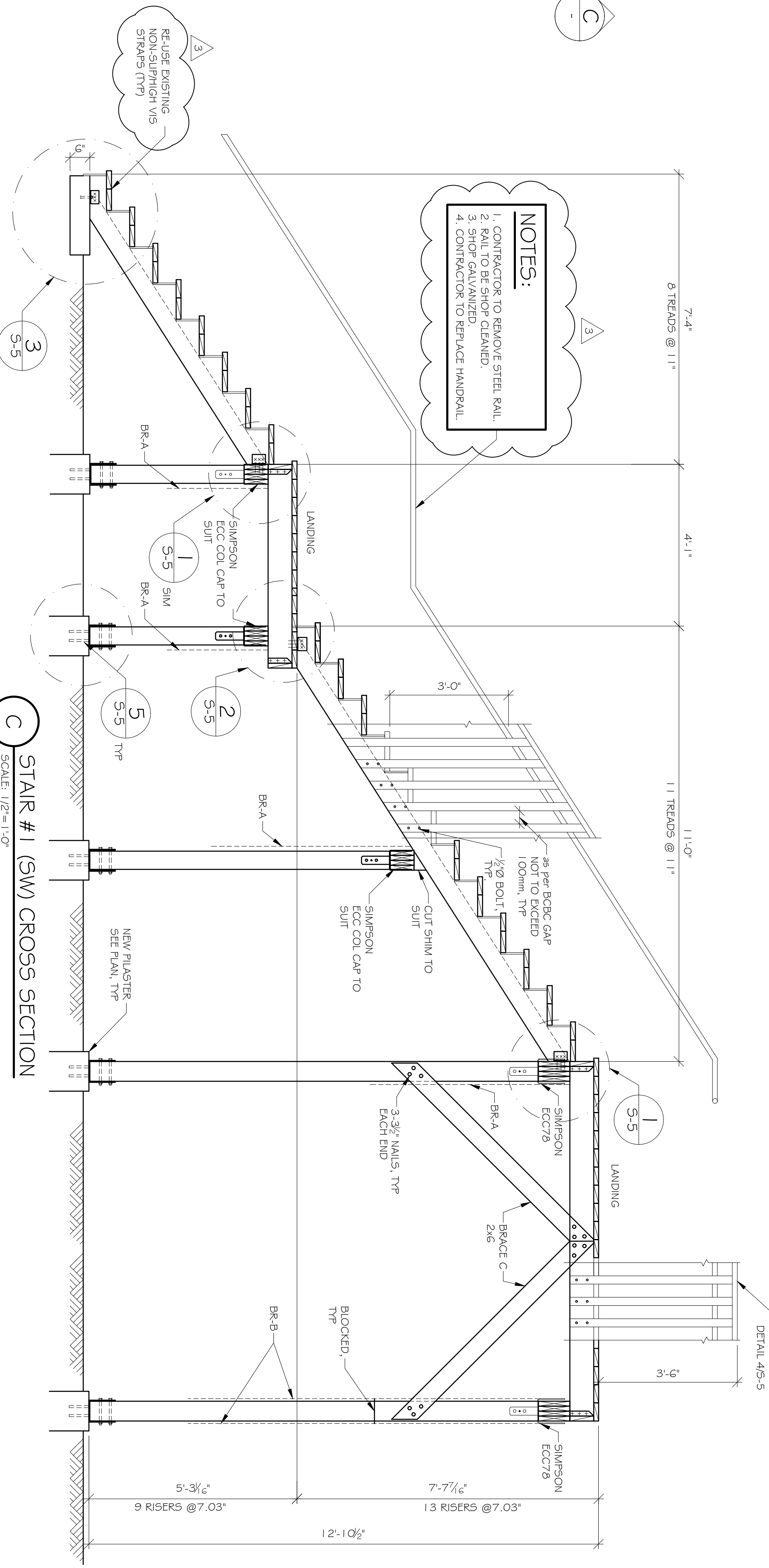
STAIR #1 (SW) FOUNDATION PLAN
SCALE: 3/8"=1'-0"



STAIR #1 (SW) FRAMING PLAN
SCALE: 3/8"=1'-0"



STAIR #1 (SW) CROSS SECTION
SCALE: 1/2"=1'-0"



STAIR #1 (SW) BEAM SECTIONS
SCALE: 1/2"=1'-0"

NOTE:			
RISE AND RUN TO MEET BC BUILDING CODE, TYP			
BEAM SCHEDULE			
MARK	SIZE	REINFC	MARK
B1	4-2X10		
B2	4-2X8		
COLUMN SCHEDULE			
MARK	SIZE	REINFC	MARK
C1	6X6		
C2	6X6		

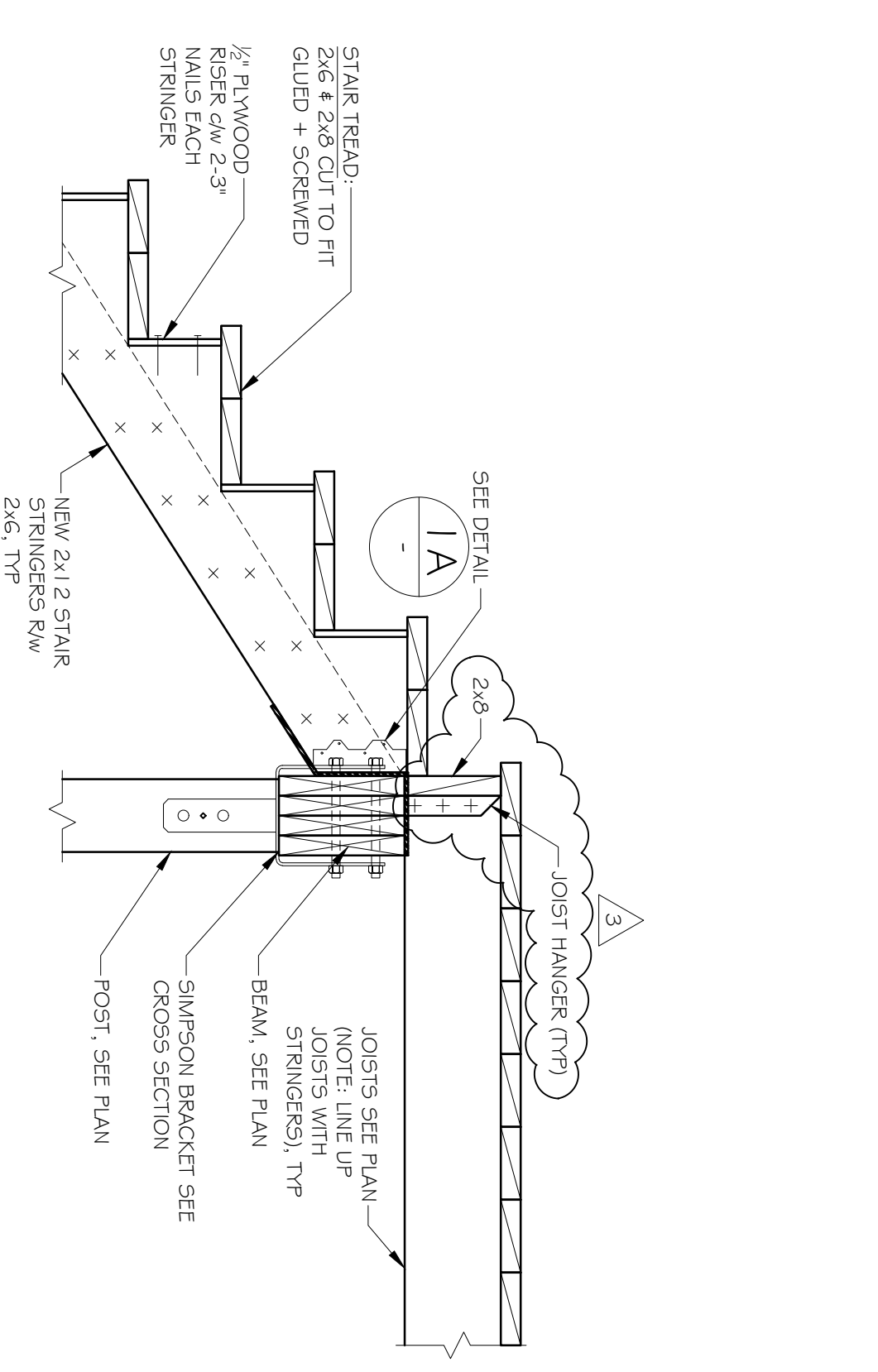
FOOTING & PEDESTAL SCHEDULE			
FOOTING		PEDESTAL	
MARK	SIZE	REINFC	MARK
F1	2'-0"x2'-0"x8"dp.		P1
			4-1.5M VERT 10M TICS @ 10"

FOUNDATION NOTES			
- ALL DIMENSIONS ARE TO CONFORM TO THOSE ON THE ARCHITECTURAL DRAWINGS. VERIFY ALL DIMENSIONS. DO NOT SCALE DRAWINGS.			
- 1'-6" MINIMUM FROST COVER TO TOP OF FOOTING.			
- ALL REINFORCING TO BE PLACED AT 3" CLEAR FROM BOTTOM OF FOOTING UNLESS NOTED OTHERWISE. CHECK ALL REINFORCING.			
- ALL JOISTS TO BE CENTERED ON FOOTING.			
- FOR ALL SLAB STUDIES AND CONDITIONS SEE ARCH DRAWINGS			

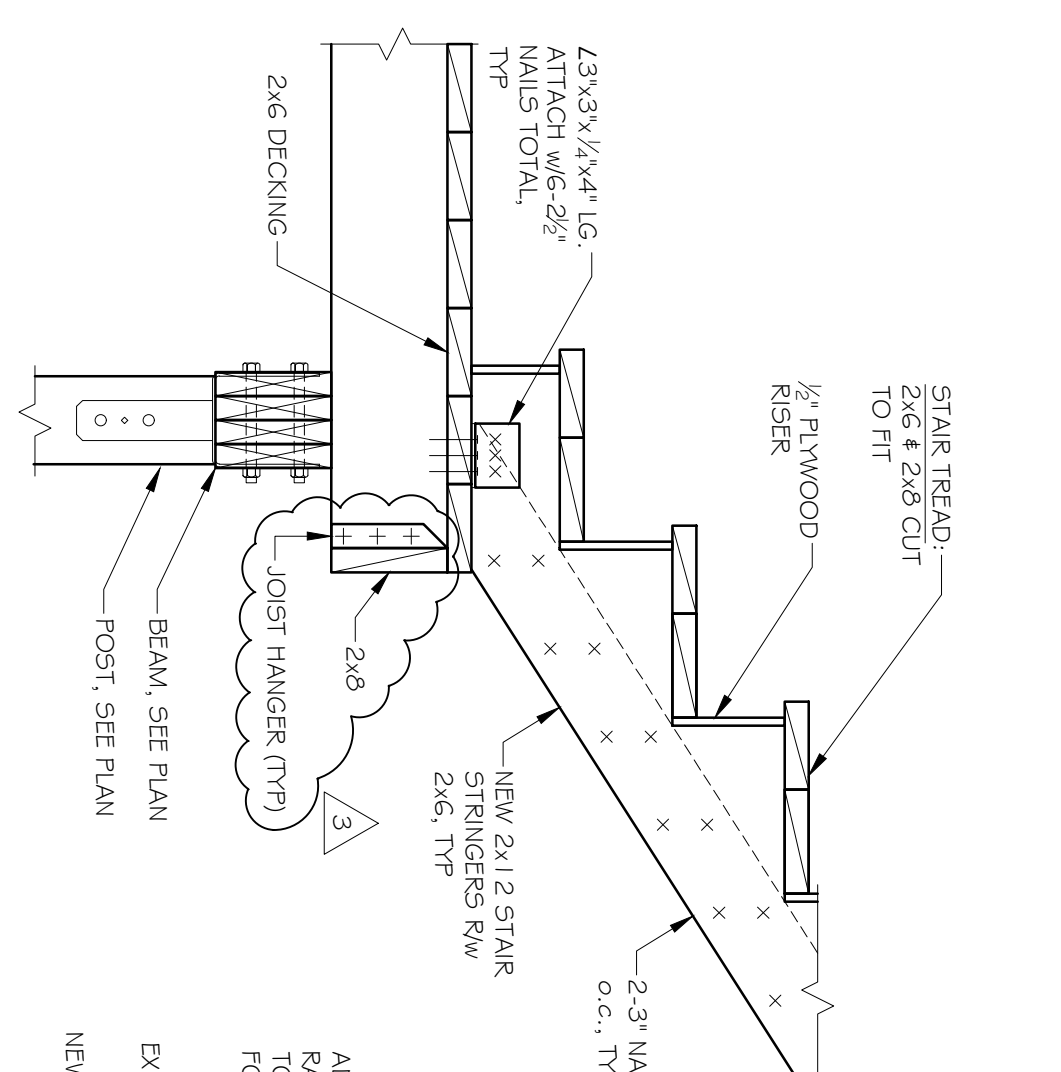
REVISIONS			
REV.	DESCRIPTION	DATE	BY
1	ISSUED FOR TENDER	OCT. 12, 2016	
2	ISSUED FOR BUILDING PERMIT	OCT. 3, 2016	
3	ISSUED FOR TENDER	SEPT. 23, 2016	

SIEFKEN ENGINEERING LTD.
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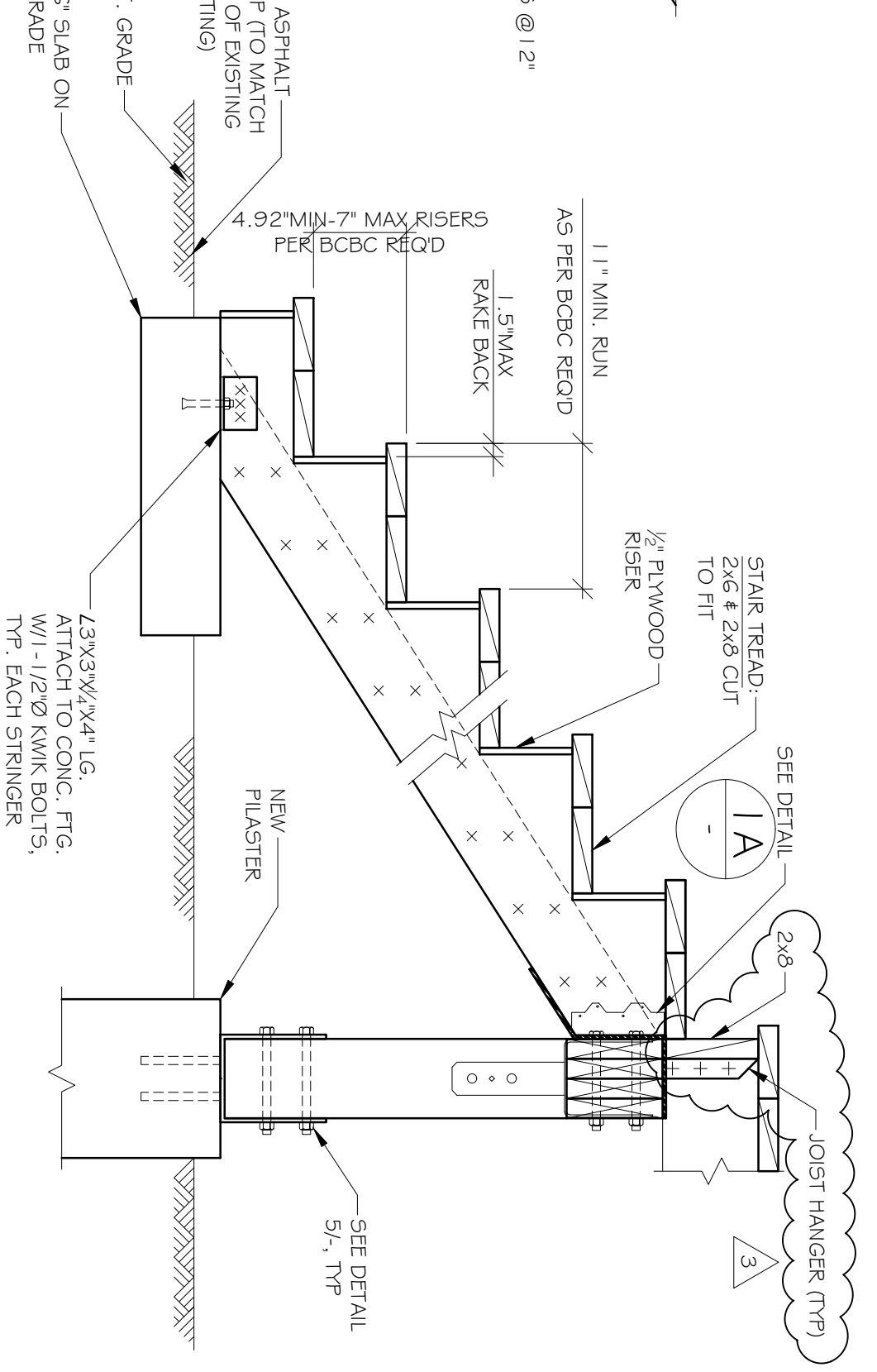
DESIGNED	LE
DRAWN	NS
CHECKED	GS
APPROVED	JRS
PROJECT	QUEENS PARK ARENA-STAIR REPLACEMENT 220-238 FIRST STREET NEW WESTMINSTER, B.C.
TITLE	STAIR #1 (SW) PLANS, SECTIONS
JOB NUMBER	2016-327
SCALE	AS NOTED
SHEET NUMBER	S-2



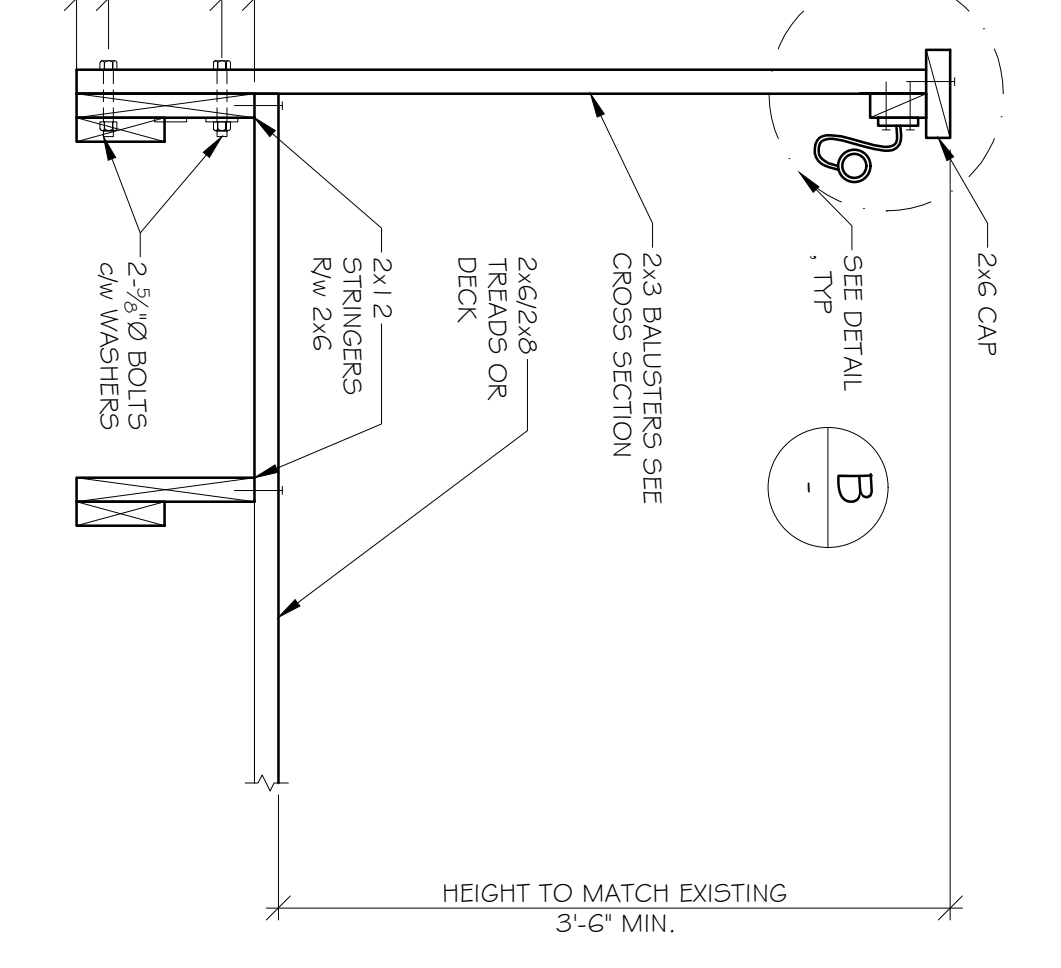
1 CONNECTION TO THE TOP OF FLIGHT
SCALE: 1"=1'-0"



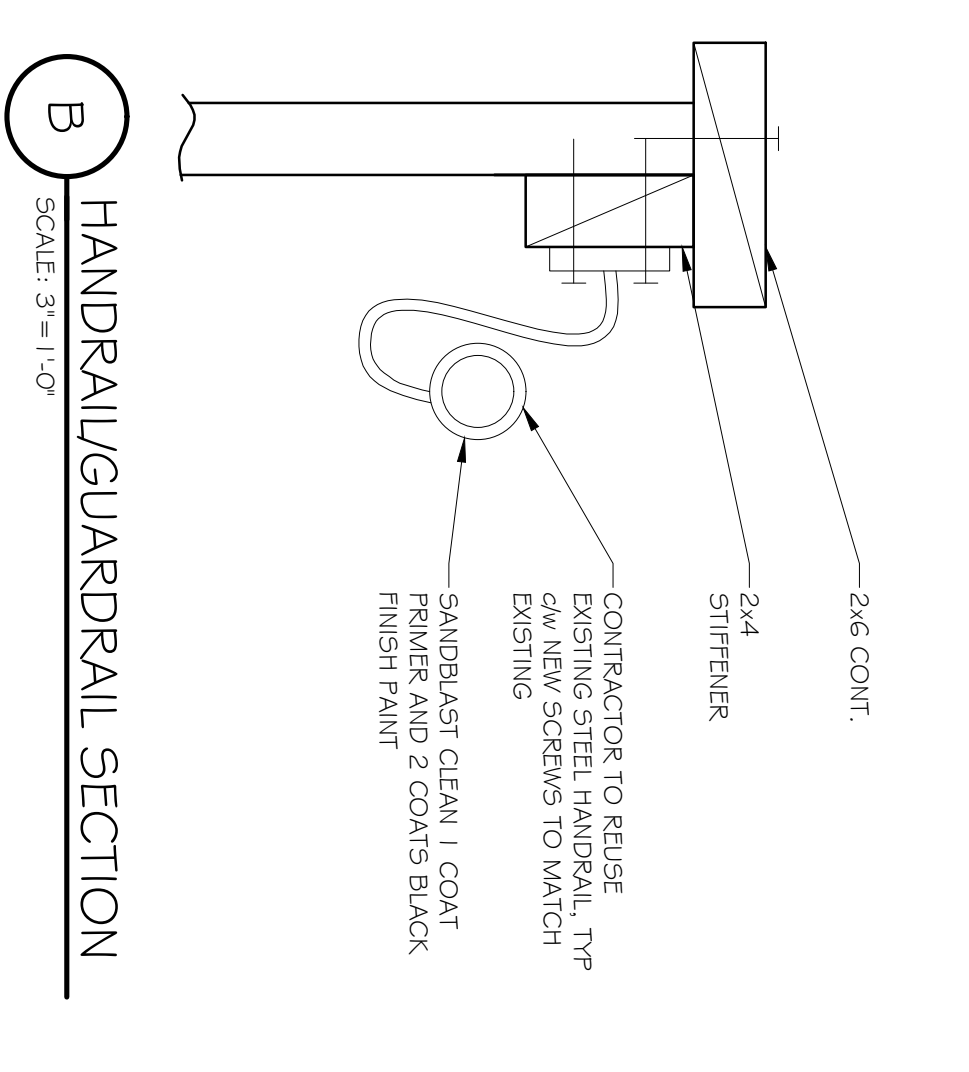
2 CONNECTION AT THE BOTTOM OF FLIGHT
SCALE: 1"=1'-0"



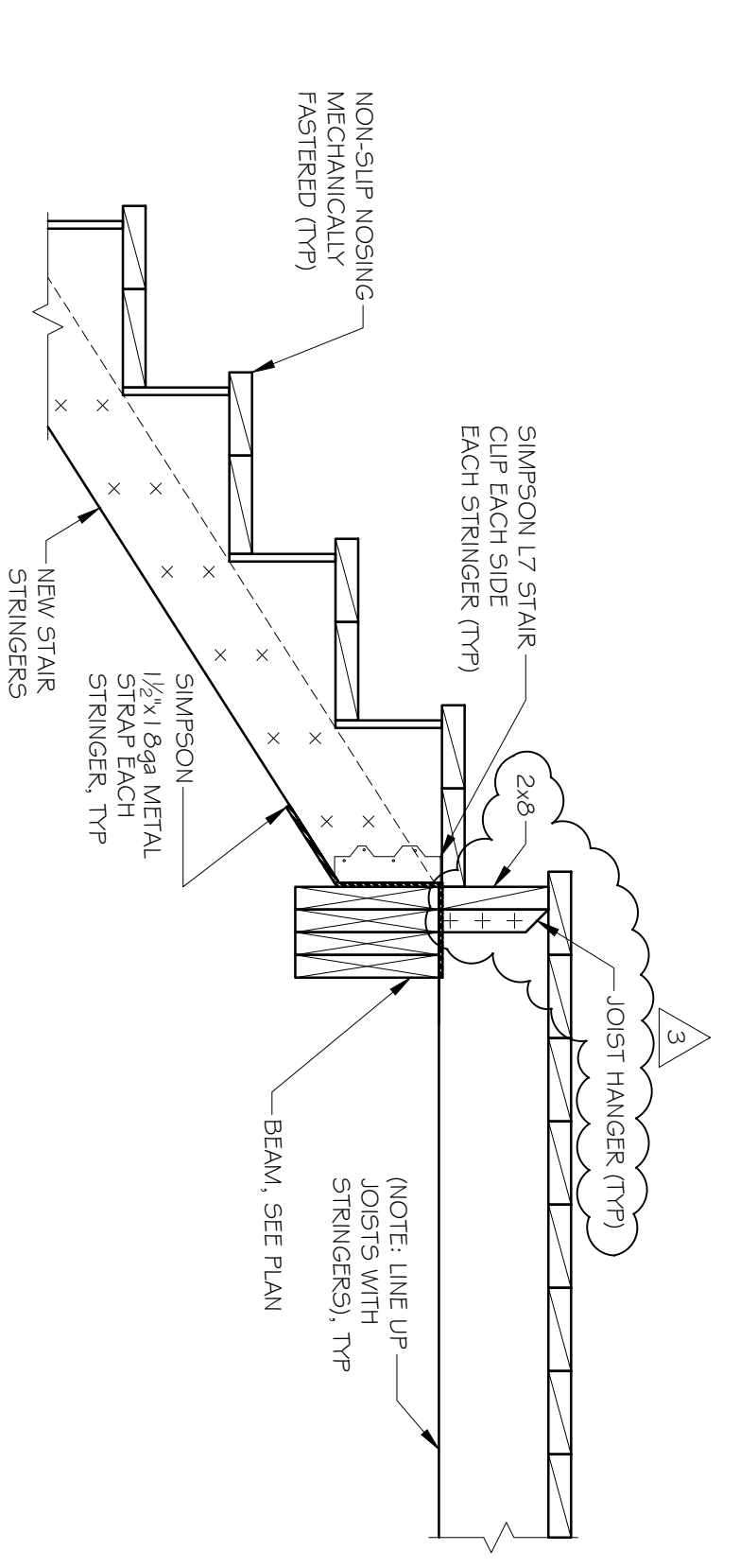
3 STAIR BASE DETAIL
SCALE: 1"=1'-0"



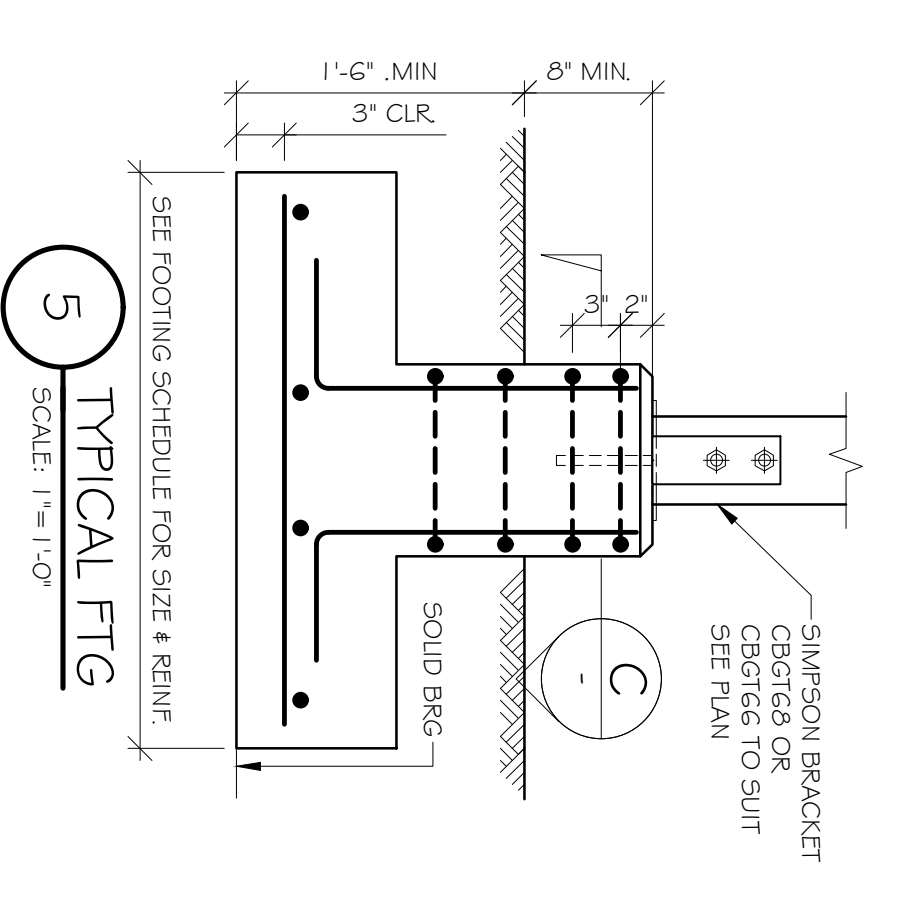
4 HANDRAIL/GUARDRAIL SECTION
SCALE: 1"=1'-0"



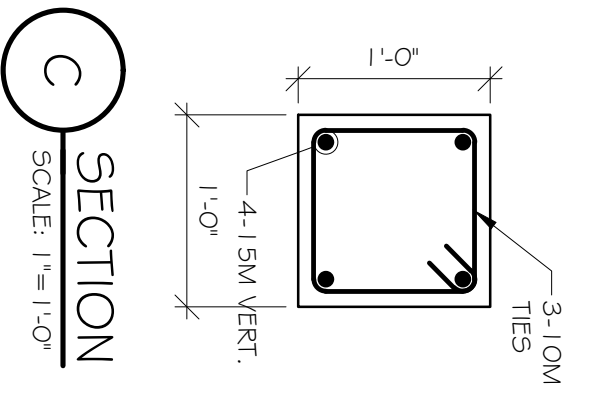
B HANDRAIL/GUARDRAIL SECTION
SCALE: 3"=1'-0"



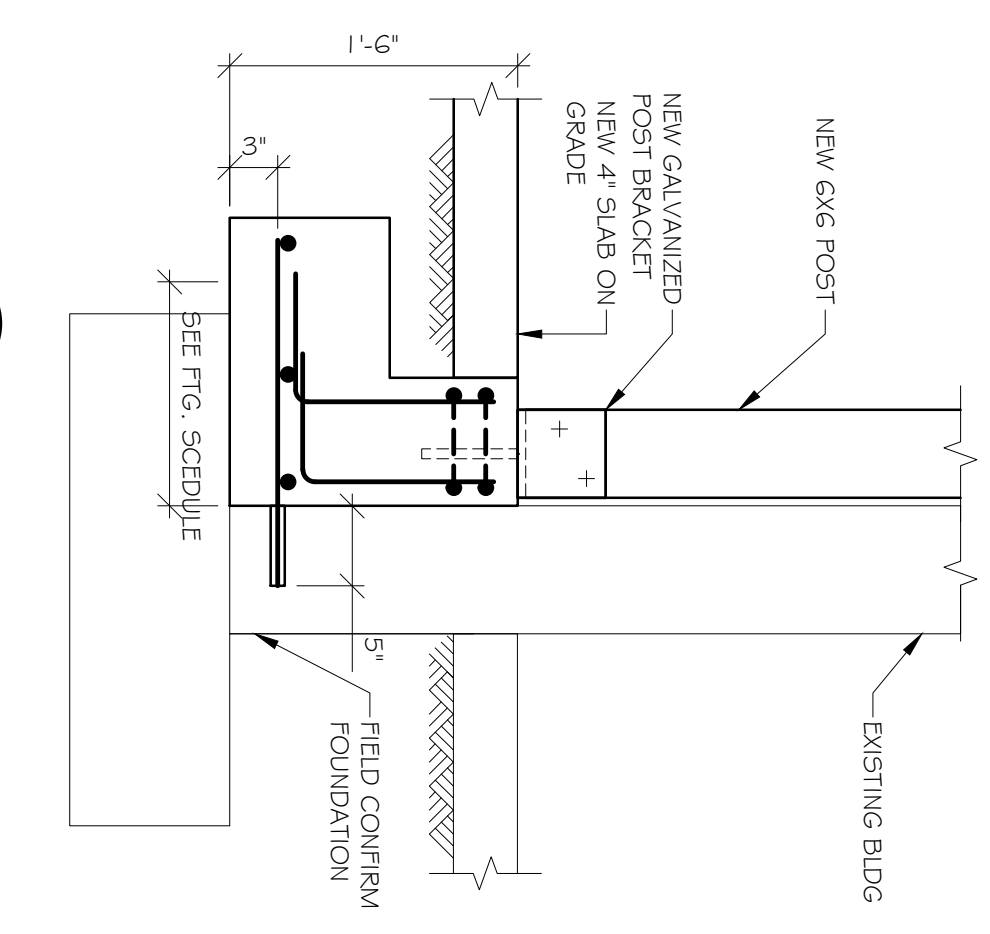
1A TYPICAL STRINGER CONNECTION
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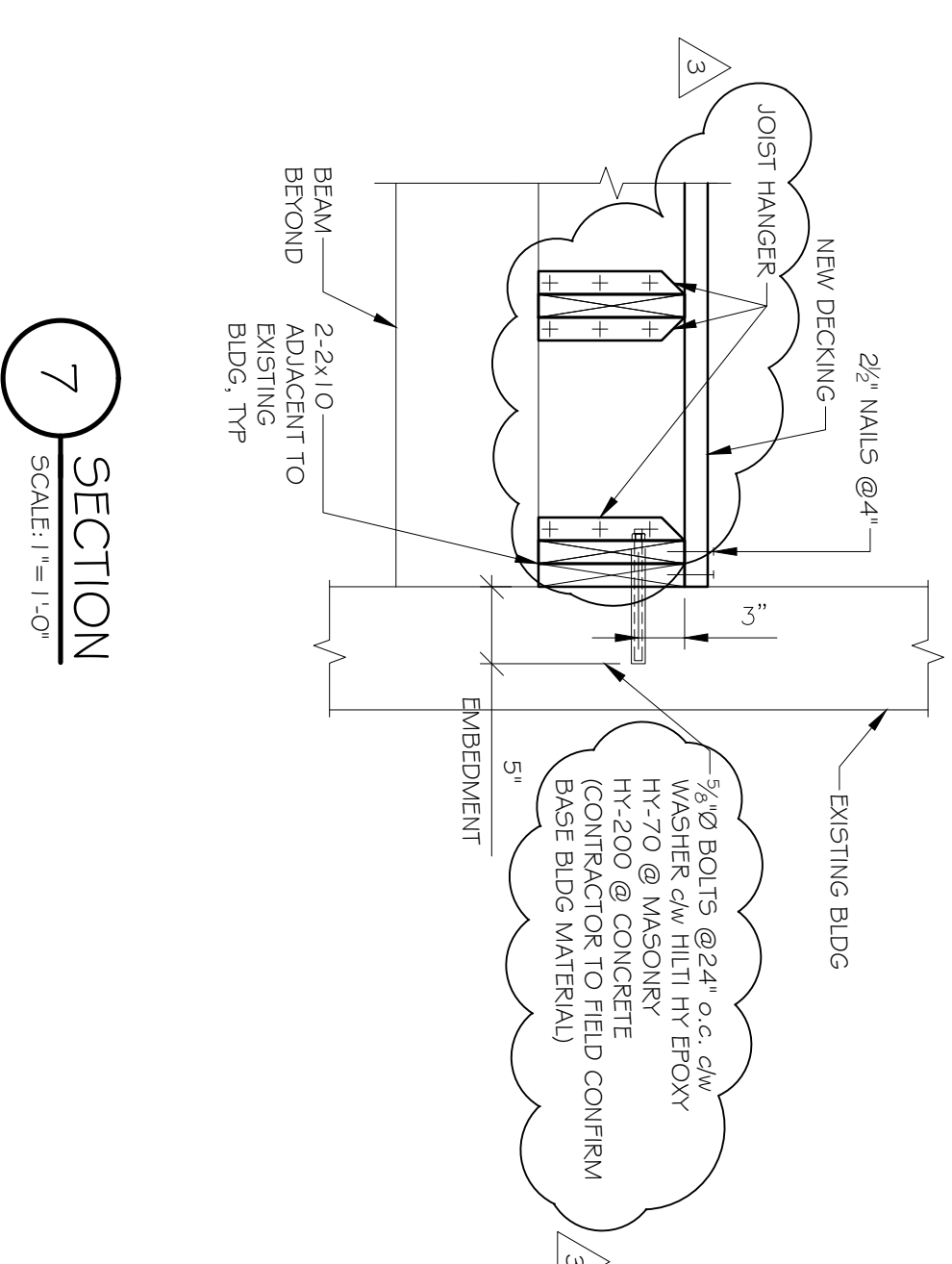
5 TYPICAL FTG
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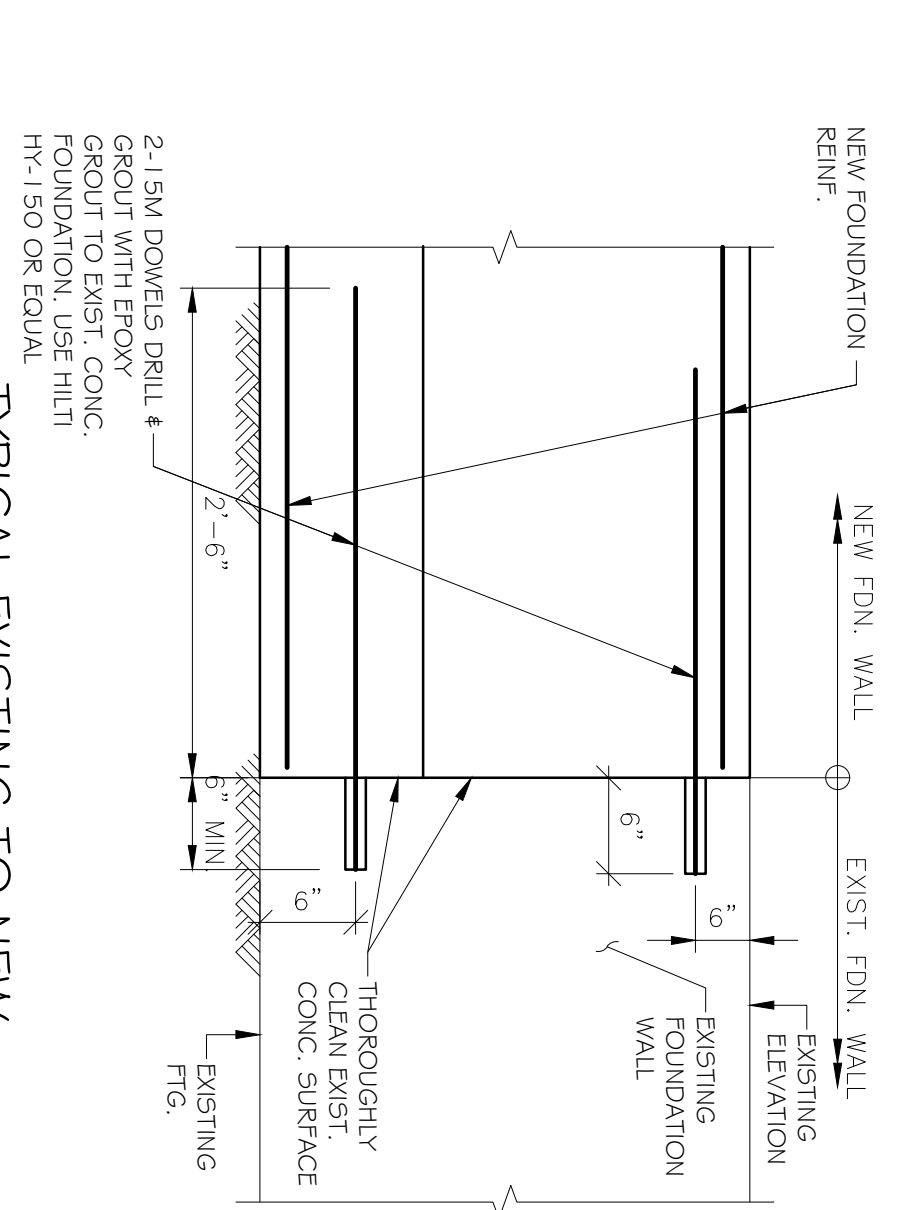
C SECTION
SCALE: 1"=1'-0"



6 SECTION
SCALE: 1"=1'-0"



7 SECTION
SCALE: 1"=1'-0"



TYPICAL CONNECTION TO NEW FOUNDATION EXISTING TO NEW FOUNDATION
SCALE: 1"=1'-0"

7		
6		
5		
4	ISSUED FOR TENDER APPENDIX	OCT. 12, 2016
3	ISSUED FOR TENDER	OCT. 3, 2016
2	ISSUED FOR BUILDING PERMIT	SEPT 23, 2016
1	DESCRIPTION	DATE

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DESIGNED	LE
DRAWN	NS
CHECKED	GS
APPROVED	JRS

PROJECT: QUEEN'S PARK ARENA-STAIR REPLACEMENT
220-238 FIRST STREET
NEW WESTMINSTER, B.C.

JOB NUMBER: 2016-327
SCALE: AS NOTED
SHEET NUMBER: S-5