

D01) GENERAL

D01-1 GENERAL INFORMATION

- THE INFORMATION PRESENTED ON THESE DRAWINGS HAS BEEN DESIGNED AND ANALYZED IN ACCORDANCE WITH THE 2012 ONTARIO BUILDING CODE & 2010 NATIONAL BUILDING CODE OF CANADA. CONSTRUCTION IS TO BE PERFORMED IN ACCORDANCE WITH THIS AND ALL OTHER APPLICABLE CODES.
  - 1.1 CONCRETE STRUCTURE DESIGNED IN ACCORDANCE WITH CSA A23.3-04 (R2010)
  - 1.2 STEEL STRUCTURE DESIGNED IN ACCORDANCE WITH CAN/CSA-S16-09
  - 1.3 WOOD STRUCTURE DESIGNED IN ACCORDANCE WITH CAN/CSA-086.1-05
- CONTRACTOR IS TO VERIFY/COORDINATE ALL DIMENSIONS/PENETRATIONS WITH ARCHITECTURAL, MECHANICAL/ELECTRICAL DRAWINGS PRIOR TO CONSTRUCTION. REPORT INCONSISTENCIES BEFORE PROCEEDING WITH WORK. ANY OPENINGS NOT INDICATED ON STRUCTURAL DRAWINGS ARE TO BE APPROVED BY DEPARTMENTAL REPRESENTATIVE IN WRITING PRIOR TO CONSTRUCTION.
- CAD VERSIONS OF THE STRUCTURAL DRAWINGS SHALL BE MADE AVAILABLE TO THE CONTRACTOR UPON THE COMPLETION OF A RELEASE FORM INDEMNIFYING THE CONSULTANT FROM ANY ERRORS OR OMISSIONS ASSOCIATED WITH THE CAD FILES.
- SEISMIC RESTRAINT OF ARCH/MECH/ELECT ELEMENTS NOT NOTED ON THE DRAWINGS ARE THE RESPONSIBILITY OF THE CONTRACTOR'S ENGINEER. RESTRAINT DETAILS ARE TO BE DEVELOPED IN ACCORDANCE WITH THE 2012 OBC/2010 NBC. CONTRACTOR'S ENGINEER IS RESPONSIBLE FOR THE DESIGN AND DETAILING OF SEISMIC RESTRAINTS AND ISOLATIONS AS REQUIRED BY SPECIFICATIONS INCLUDING THE VERIFICATION THAT THE EXISTING/NEW STRUCTURE IS CAPABLE OF SAFELY SUPPORTING THE IMPOSED LOADS IN ACCORDANCE WITH THE 2012 OBC/2010 NBC. NO ELEMENTS MAY BE CONSTRUCTED WITHOUT WRITTEN CONFIRMATION OF THESE CONDITIONS BY CONTRACTOR'S ENGINEER.
- NO FOUNDATION ELEMENTS ARE TO BE CONSTRUCTED UNTIL WRITTEN APPROVAL OF THE BEARING SURFACES AND PRESSURES IS PROVIDED BY A GEOTECHNICAL ENGINEER THROUGH ON-SITE INVESTIGATION. FAILURE TO COMPLETE THIS WORK COULD RESULT IN THE REMOVAL/REINSTATEMENT OF ANY/ALL FOUNDATION ELEMENTS AT CONTRACTOR'S OWN COST.
- CONTRACTOR TO PROVIDE PRE-ENGINEERED SHORING AS REQUIRED TO ACCOMMODATE THE CONTRACTOR'S CONSTRUCTION ACTIVITIES AND TO PREVENT DAMAGE TO ANY ADJACENT PROPERTY. ALL CONSTRUCTION ACTIVITIES TO BE LIMITED TO THE LIMITS OF THE CONSTRUCTION SITE AND ALL DAMAGE TO EXISTING PROPERTIES MUST BE REINSTATE.

D01-2 GRAVITY LOADS:

SLS/ULS VALUES:

SNOW: Is:	ULS=1.0	SLS=0.9	SNOW LOAD FACTORS:
WIND: Iw:	ULS=1.0	SLS=0.75	S = Is [Ss(Cb+Cw+Cc+Cs) + Sr]
SEISMIC: Ie:	ULS=1.0		Ss = 2.4 kPa
			Sr = 0.4 kPa
			Cb = 0.8
			Cc = 1.0
			Cs = 1.0

FIRST FLOOR:	DEAD:	2.0 kPa
	LIVE:	4.8 kPa
SECOND FLOOR:	DEAD:	2.0 kPa
	LIVE:	2.4 kPa
ROOF:	DEAD:	1.0 kPa
	LIVE:	1.0 kPa
	SNOW:	2.32 kPa (+ DRIFT) U/N

D01-3 SEISMIC SYSTEM/LOADING DATA

SEISMIC FORCE RESISTING SYSTEM (SFRS)

SFRS: SYSTEM & CONNECTIONS: (2012 OBC CLAUSE 4.1.8.9/4.1.8.10)  
LATERAL LOAD RESISTING SYSTEM: CONVENTIONAL CONSTRUCTION  
Rd = 1.5  
CSA STANDARD: CAN/CSA S16-01  
APPLICABLE CLAUSE(S): 27.10

SFRS: SYSTEM FOUNDATIONS: (2012 OBC CLAUSE 4.1.8.16)  
CSA STANDARD: CAN/CSA  
APPLICABLE CLAUSE(S): ☐ FOR ANCHORED FOOTINGS

CONFIRMATION: FOUNDATIONS HAVE BEEN DESIGNED TO RESIST THE LATERAL FORCES APPLIED TO THE SFRS IN ACCORDANCE WITH THE 2012 OBC INCLUDING ALL APPLICABLE AMPLIFICATION FACTORS.

SEISMIC IMPORTANCE FACTOR: (2012 OBC CLAUSE 4.1.8.5)

Ie = 1.0

REFERENCE CITY: OTTAWA (CITY HALL)

SITE CLASS: THE NOTED SITE CLASSIFICATION FOR SEISMIC SITE RESPONSE AND SHEAR STRENGTH PARAMETERS INDICATED ARE AS REPORTED IN THE GEOTECHNICAL REPORT  
☐ A ☐ B ☐ C ☐ D ☒ E ☐ F (ASSUMED)

PGA: 0.320

RESPONSE SPECTRUM DATA:

5% DAMPED SPECTRAL RESPONSE

ACCELERATION VALUES FOR REFERENCE CITY: (2012 OBC SUPPLEMENTARY STANDARD SB-1)

Ss(0.2)	= 0.64
Ss(0.5)	= 0.31
Ss(1.0)	= 0.14
Ss(2.0)	= 0.046

DESIGN SPECTRAL RESPONSE ACCELERATION VALUES (DSRAV): (2012 OBC CLAUSE 4.1.8.4)

CLASS 'E': (Fa=1.232Fv+2.06)

Ss(0)	= 0.788
Ss(0.2)	= 0.788
Ss(0.5)	= 0.382
Ss(1.0)	= 0.288
Ss(2.0)	= 0.095
Ss(4.0)	= 0.047

SYSTEM RESTRICTION VALUE: Ifs(0.2)=0.0788 ≥ 0.35 ☒ YES ☐ NO

PERIOD DATA:

EMERGENCY PERIOD: (2012 OBC CLAUSE 4.1.8.11.3)(a),(b),(c))

To(IMP)RAVHS = 0.23 sec  
To(IMP)RAVLS = 0.23 sec

DESIGN PERIODS/MODE & MOMENT FACTORS: (2012 OBC CLAUSE 4.1.8.11(3))

Ss(0.2) ≥ 8.0 ☒ YES ☐ NO

To(IMP)RAVHS = 0.23 sec  
To(IMP)RAVLS = 0.23 sec  
Mv = 1.0 J = 1.0  
Mv = 1.0 J = 1.0

DESIGN FUNDAMENTAL PERIOD BASED (DSRAV): (2012 OBC CLAUSE 4.1.8.11(2))

Ss(0.2) = 0.78

Ss(0.2) = 0.78

IRREGULARITY REVIEW: (2012 OBC CLAUSE 4.1.8.6)

- VERTICAL STIFFNESS: ☐ YES ☒ NO
- WEIGHT: ☐ YES ☒ NO
- VERTICAL GEOMETRIC: ☐ YES ☒ NO
- IN PLANE DISCONTINUITY: ☐ YES ☒ NO
- OUT OF PLANE: ☐ YES ☒ NO
- NEAR STOREY: ☐ YES ☒ NO
- TORSIONAL: ☐ YES ☒ NO

8. NON-ORTHOGONAL: ☐ YES ☒ NO

CONCLUSION: BUILDING IS ☒ REGULAR ☐ IRREGULAR  
DYNAMIC ANALYSIS: ☐ REQUIRED ☒ NOT REQUIRED

DYNAMIC PROCEDURE: METHOD: ☐ REGULAR RESPONSE SPECTRUM ☒ NUMERICAL INTEGRATION TIME HISTORY ☒ N/A

TORSIONAL ECCENTRICITY:

☒ ≥ 0.10 Dnx (4.1.8.11(10a), B ≤ 1.7 EQUIV. STATIC FORCE PROCEDURE)  
☒ ≥ 0.10 Dnx (4.1.8.12(4a), B ≥ 1.7)  
☒ ≥ 0.05 Dnx (4.1.8.12(4a), B < 1.7, 3-D DYNAMIC ANALYSIS)

STRUCTURAL SEPARATION:

☐ THE ADJACENT STRUCTURES HAVE BEEN SEPARATED IN ACCORDANCE WITH 4.1.8.14(1) OF THE 2012 O.B.C.  
☒ N/A

BUILDING WEIGHT FOR SEISMIC DESIGN: W = 1035 kN

BASE SHEARS/MOMENTS: = W\* 0.40 = 414 kN

Vbase = Ss(0.2)Mbase/(RdRo) = 57 kN

STATIC MAXIMUM/MINIMUM VALUES:

NORTH-SOUTH: (±)

Vmax = Ss(0.2)Mbase/(RdRo) = W\* 0.40 = 57 kN

Vmax = -Ss(0.2)Mbase/(RdRo) = W\* 0.269 = 278 kN

EAST-WEST: (±)

Vmax = Ss(0.2)Mbase/(RdRo) = W\* 0.40 = 51 kN

Vmax = -Ss(0.2)Mbase/(RdRo) = W\* 0.269 = 278 kN

SEISMIC LOADS		
EQUIVALENT STATIC (ES) FORCE PROCEDURE 2012 OBC CLAUSE 4.1.8.11(1)-(10)	DYNAMIC ANALYSIS (DA) PROCEDURE (100) (UNIT: SQUARING FACTOR) 2012 OBC CLAUSE 4.1.8.12(1)-(5)	DESIGN (D) LOADS (1)
NORTH-SOUTH: (±)	NORTH-SOUTH: (±)	NORTH-SOUTH: (±)
Vbase = W* 0.269 = 278 kN Mbase = 2502 kNm	Vbase = N/A Mbase = N/A Mbase = N/A	Vbase = 278 kN Mbase = 2502 kNm
EAST-WEST: (±)	EAST-WEST: (±)	EAST-WEST: (±)
Vbase = W* 0.269 = 278 kN Mbase = 2502 kNm	Vbase = N/A Mbase = N/A Mbase = N/A	Vbase = 278 kN Mbase = 2502 kNm
NOTES:		
1. DESIGN LOAD SHEAR VALUES ARE BASED ON THE EVALUATION OF Vbs AND Vhw IN ACCORDANCE WITH 4.1.8.12 (5),(6) AND (7) OF THE 2012 OBC. LOADS INDICATED SHOW THE DESIGN BASE SHEAR AND CORRESPONDING OVERTURNING MOMENT.		
2. N/A = NOT USED IN THE DESIGN OF THE BUILDING.		

D01-4 WIND

MAIN BUILDING:

WIND:

q = 0.41 kPa  
(1 IN 50 YEARS)  
Iw = 1.0 (ULS)  
Iw = 0.75 (SLS)  
GzGy = ± 1.8

D01-4 SHOP DRAWINGS

- SUBMIT SHOP DRAWINGS FOR ALL STRUCTURAL WORK AND ANY WORK AFFECTING THE STRUCTURE TO THE CONSTRUCTION MANAGER. OBTAIN DEPARTMENTAL REPRESENTATIVE APPROVAL BEFORE PROCEEDING WITH THE FABRICATION.
- EACH OF THE FOLLOWING SHOP DRAWINGS MUST BEAR THE SIGNATURE AND STAMP OF A QUALIFIED PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE (PLUS OTHER DRAWINGS AS NOTED).
  - DRAWINGS FOR ANY TEMPORARY WORK.
  - DRAWINGS FOR ANY STRUCTURAL PARTS DESIGNED BY THE CONTRACTOR'S FORCES INCLUDING EXTERIOR BUILDING ENVELOPE.
  - STRUCTURAL STEEL.
  - FORMWORK.
  - CONCRETE REINFORCING.
- SHOP DRAWINGS MUST BE REVIEWED AND STAMPED REVIEWED BY THE CONTRACTOR BEFORE ISSUING TO THE DEPARTMENTAL REPRESENTATIVE. SHOP DRAWINGS NOT STAMPED BY THE CONTRACTOR WILL BE REJECTED. ANY DELAYS IN THE CONSTRUCTION SCHEDULE DUE TO NONCOMPLIANCE WITH THIS REQUIREMENT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- SHOP DRAWINGS ARE REVIEWED FOR CONFORMANCE WITH THE GENERAL DESIGN CONCEPT. THIS REVIEW DOES NOT IMPLY APPROVAL OF THE DETAILED DESIGN OR QUANTITIES DESCRIBED IN THE SHOP DRAWINGS. THE RESPONSIBILITY FOR THE QUANTITIES AND DETAILED DESIGN OF THE MATERIALS AND COMPONENTS AS REQUIRED TO PROVIDE THE COMPLETE AND SATISFACTORY JOB DESCRIBED IN THE DESIGN DOCUMENTS REMAINS WITH THE CONTRACTOR.

D2) FOUNDATIONS:

D2-1 FOOTINGS:

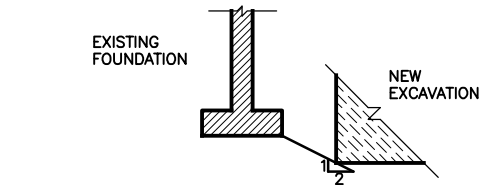
ALL FOOTINGS TO BEAR ON UNDISTURBED NATIVE MATERIAL.

D2-2 EXCAVATION, FOUNDATIONS AND BACKFILL:

- PRIOR TO ANY EXCAVATION, VERIFY LOCATION OF EXISTING SERVICES AND TAKE ALL NECESSARY MEASURES TO MAINTAIN SERVICES WHERE REQUIRED. NOTIFY OWNER AND ENGINEER IF ANY SERVICES NOT SHOWN ON PLAN OR OTHERWISE EXPECTED ARE ENCOUNTERED. DO NOT PROCEED FURTHER UNTIL DIRECTED.
- CARE MUST BE TAKEN TO AVOID UNDERMINING EXISTING BUILDING FOUNDATIONS OR UNDERGROUND SERVICES.
- PROTECT SUB-GRADE FROM FREEZING AND FROST ACTION AT ALL TIMES DURING CONSTRUCTION.
- FOOTINGS MUST BEAR ON APPROVED BEARING SURFACES.
- RE-USE OF EXCAVATED GRANULAR MATERIAL IS SUBJECT TO APPROVAL OF GEOTECHNICAL CONSULTANT.

D2-3 PROTECT LATERAL STABILITY OF BEARING STRATA UNLESS NOTED:

UNLESS OTHERWISE OUTLINED IN GEOTECHNICAL REPORT DO NOT EXCAVATE BELOW A LINE EXTENDING DOWNWARD FROM ANY BEARING STRATA AT A SLOPE OF 1 VERTICAL TO 2 HORIZONTAL. ADJUST FOOTING AND TRENCH ELEVATIONS TO MEET THIS REQUIREMENT (SEE DIAGRAM).



D03) CONCRETE

D03-1 CONCRETE COVER (CLEAR TO REINFORCING):

U/S FOOTINGS, PILE CAPS, GRADE BEAMS (AGAINST SOIL) 75mm (3")  
FOOTINGS (SIDES & TOP) 50mm (2")  
PIERS 40mm (1 1/2") (TO TIES)

D03-2 CONCRETE MIXES

PROPORTION NORMAL DENSITY CONCRETE IN ACCORDANCE WITH CAN/CSA-A23.1, TO GIVE THE FOLLOWING QUALITY FOR ALL CONCRETE AS INDICATED.

LOCATION	28 DAY STRENGTH	SUMP	CLASS OF CONCRETE
FOOTINGS	25 MPa	75mm	N
PIERS	25 MPa	75mm	F-2

\*OBTAIN THESE SLUMPS WITH AID OF SPECIFIED WATER REDUCING AGENT.  
\*NOTE: ALL CONCRETE EXPOSED TO EXTERIOR CONDITIONS TO HAVE MINIMUM 4-7% AIR ENTRAINMENT.

READY-MIXED CONCRETE AND CONCRETE PROPORTIONS SHALL BE IN ACCORDANCE WITH CSA A23.1, CLAUSE 12 AND AS FOLLOWS:

- MINIMUM ALLOWABLE COMPRESSIVE STRENGTH SHALL BE 30 MPa(4400psi) AT 28 DAYS OF AGE, UNLESS OTHERWISE NOTED OR SHOWN.
- IF BLENDED NORMAL PORTLAND CEMENT/CEMENTITIOUS HYDRAULIC SLAG IS USED EXCEPT FOR FLOOR MIXES, SLAG CONTENT SHALL NOT BE MORE THAN 20% OF TOTAL MASS OF CEMENT. TOTAL VOLUME OF CEMENT IN CONCRETE FLOOR MIXES SHALL BE 100% NORMAL PORTLAND CEMENT.
- PROVIDE CERTIFICATION THAT MIX PROPORTIONS SELECTED WILL PRODUCE CONCRETE OF SPECIFIED QUALITY AND YIELD AND THAT STRENGTH WILL COMPLY WITH CAN/CSA-A23.1-M08.
- USE OF CALCIUM CHLORIDE NOT PERMITTED.
- DO NOT CHANGE CONCRETE MIX WITHOUT PRIOR APPROVAL OF DEPARTMENTAL REPRESENTATIVE. SHOULD CHANGE IN MATERIAL SOURCE BE PROPOSED, NEW MIX DESIGN TO BE APPROVED BY DEPARTMENTAL REPRESENTATIVE.

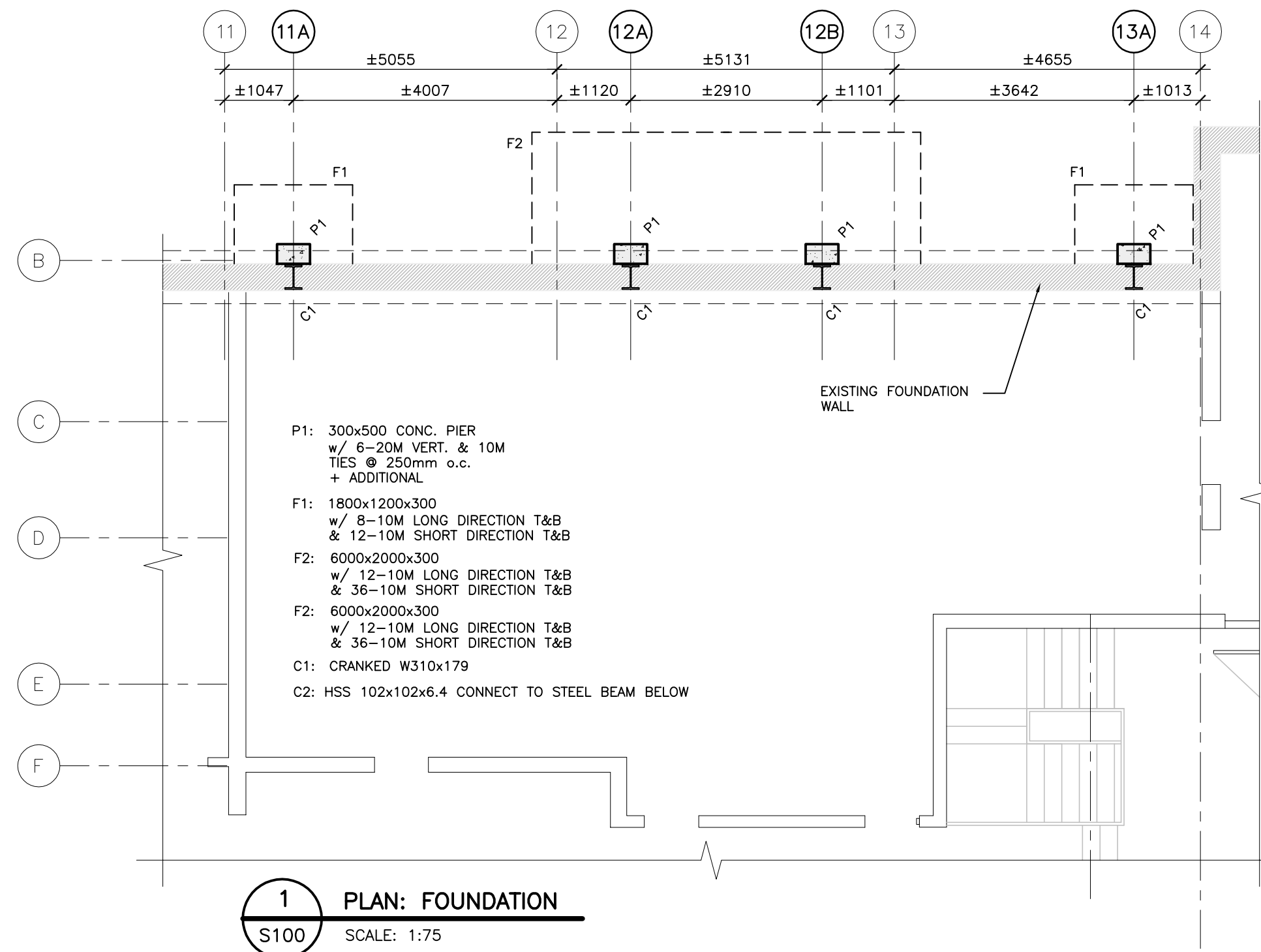
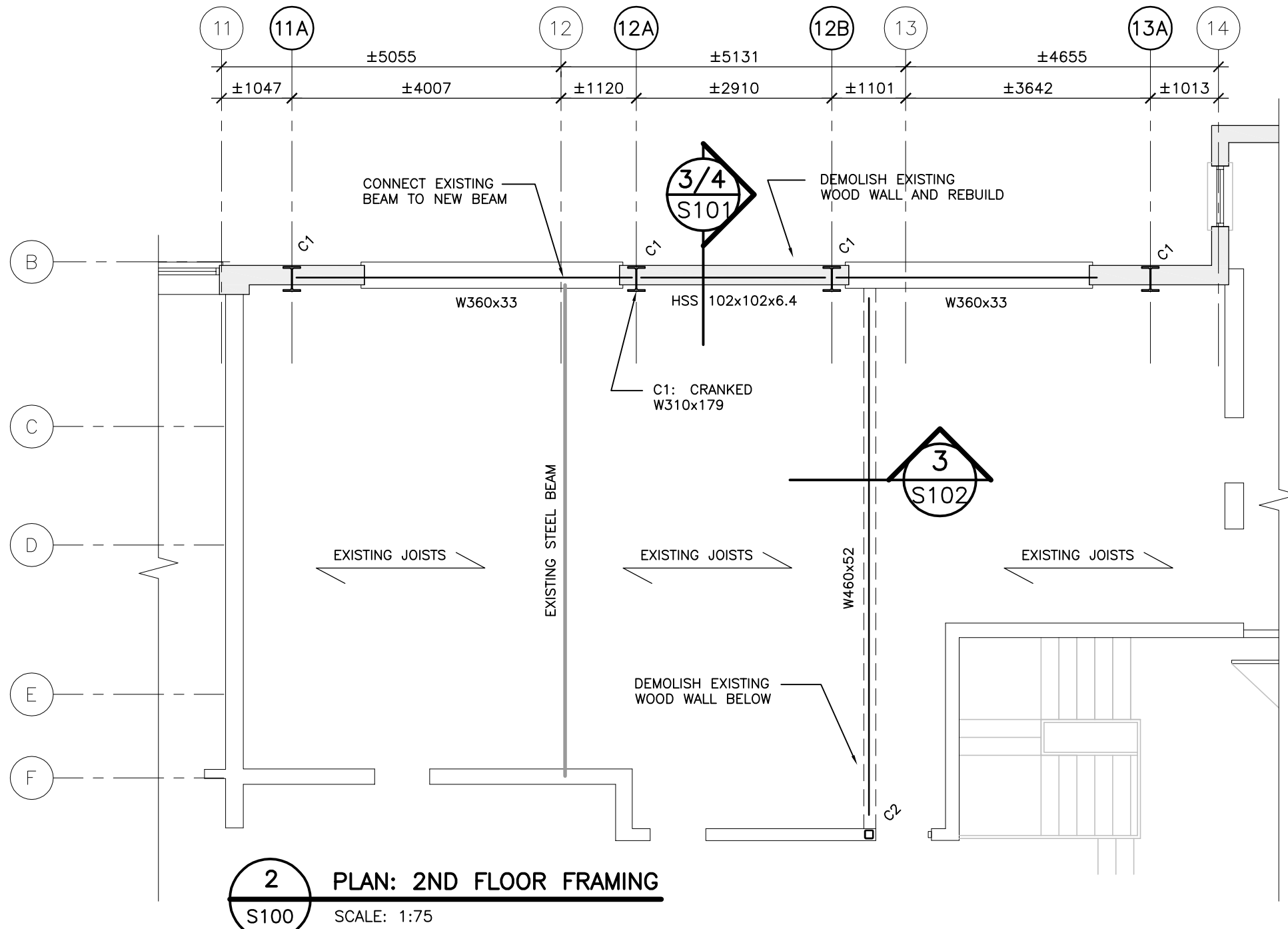
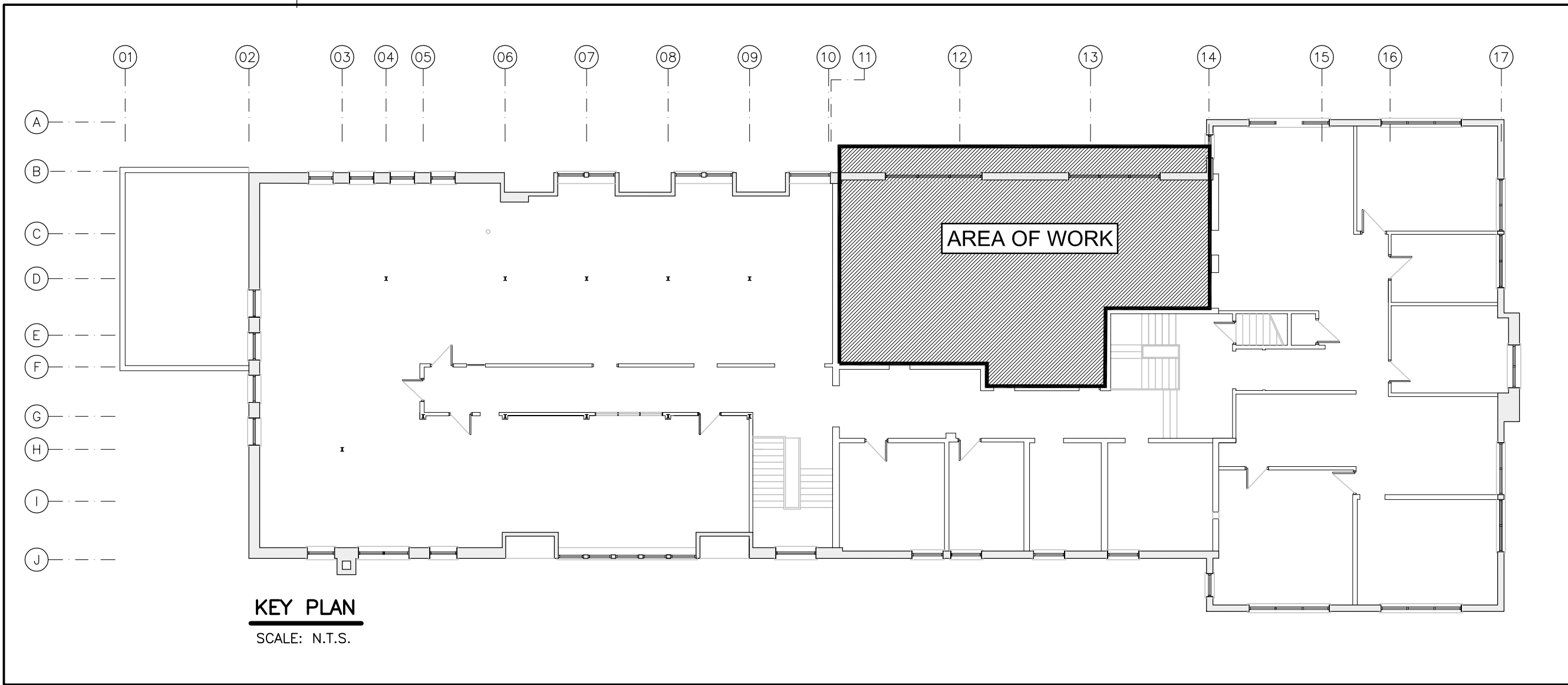
D04) STEEL

D04-1 STRUCTURAL STEEL

STRUCTURAL STEEL SHALL COMPLY WITH CAN3-S16-1-01(06) UNLESS OTHERWISE NOTED.

ITEM	APPLICABLE SPECIFICATION (UNLESS OTHERWISE NOTED)
ROLLED SECTIONS	G40.21M - 350W
HSS (TUBE) SECTIONS	G40.21M - 350W (CLASS C)
CONNECTION BOLTS	A325 (BEARING TYPE)
ANCHOR BOLTS	A307 (UNLESS OTHERWISE NOTED IN BASEPLATE SCHEDULE)
PLATES	G40.21M-300W

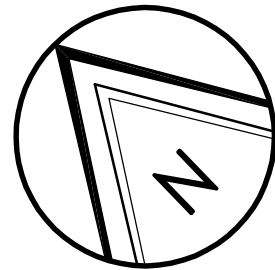
- ALL STEEL WORK SHALL BE GIVEN ONE COAT OF APPROVED PRIMER.
- FIELD AND SHOP CONNECTIONS SHALL BE WELDED OR HIGH TENSILE BOLTED (ASTM STANDARD A325).
- WELDING SHALL CONFORM TO LATEST CSA SPECIFICATION W59 AND BE UNDERTAKEN BY A FABRICATOR APPROVED BY THE CANADIAN WELDING BUREAU TO THE REQUIREMENTS OF CSA SPECIFICATION W47.1.
- ALL EXPOSED WELDS SHALL BE CONTINUOUS AND BE GRIND SMOOTH.
- STRUCTURAL STEEL MEMBERS SHALL NOT BE SPLICED UNLESS APPROVED BY THE DEPARTMENTAL REPRESENTATIVE IN WRITING.
- WHERE STRUCTURAL STEEL MEMBERS SPECIFIED ON THE STRUCTURAL DRAWINGS ARE UNAVAILABLE TO THE CONTRACTOR, THE STRUCTURAL STEEL CONTRACTOR SHALL PROVIDE MEMBERS HAVING ALL SECTION PROPERTIES EQUAL TO OR BETTER THAN THAT OF THE SPECIFIED MEMBERS AT NO ADDITIONAL COST. CONTACT DEPARTMENTAL REPRESENTATIVE FOR ACCEPTANCE OF ANY AND ALL SUBSTITUTIONS.



Architect/Structural Consultants:



CJE # 15-1320



04		
03	ISSUED FOR TENDER	JUN 17/16
02	ISSUED FOR 99% REVIEW	MAY 20/16
01	ISSUED FOR 50% REVIEW	MAY 10/16
revision		date

Do not scale drawings.  
Verify all dimensions and conditions on site and  
immediately notify the engineer of all discrepancies.

A	Detail No.
B	No. du détail
C	drawing no. - where detail required dessin no. - où détail exigé
	drawing no. - where detailed dessin no. - où détaillé

project title  
titre du projet

EXTERIOR WALL REPAIR  
CENTRAL EXPERIMENTAL FARM  
BUILDING #55

drawing title  
titre du dessin

GENERAL NOTES AND  
PARTIAL PLANS

drawn by  
dessiné par

M.E.

designed by  
conc par

A.S./C.F.

approved by  
approuvé par

A.S./C.F.

tender  
soumission

project manager  
administrateur  
de projets

project date  
date du projet

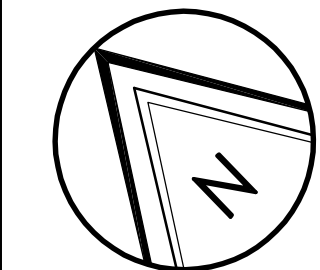
2016/05/10

project no.  
no. du projet

drawing no.  
dessiné no.

S100





04		
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02	ISSUED FOR 99% REVIEW	MAY 20/16
01	ISSUED FOR 50% REVIEW	MAY 10/16
revision		date

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**EXTERIOR WALL REPAIR  
CENTRAL EXPERIMENTAL FARM  
BUILDING #55**

drawing title  
titre du dessin

**PARTIAL PLAN,  
ELEVATION & DETAILS**

drawn by  
dessiné par **M.E.**

designed by  
conçu par **A.S./C.F.**

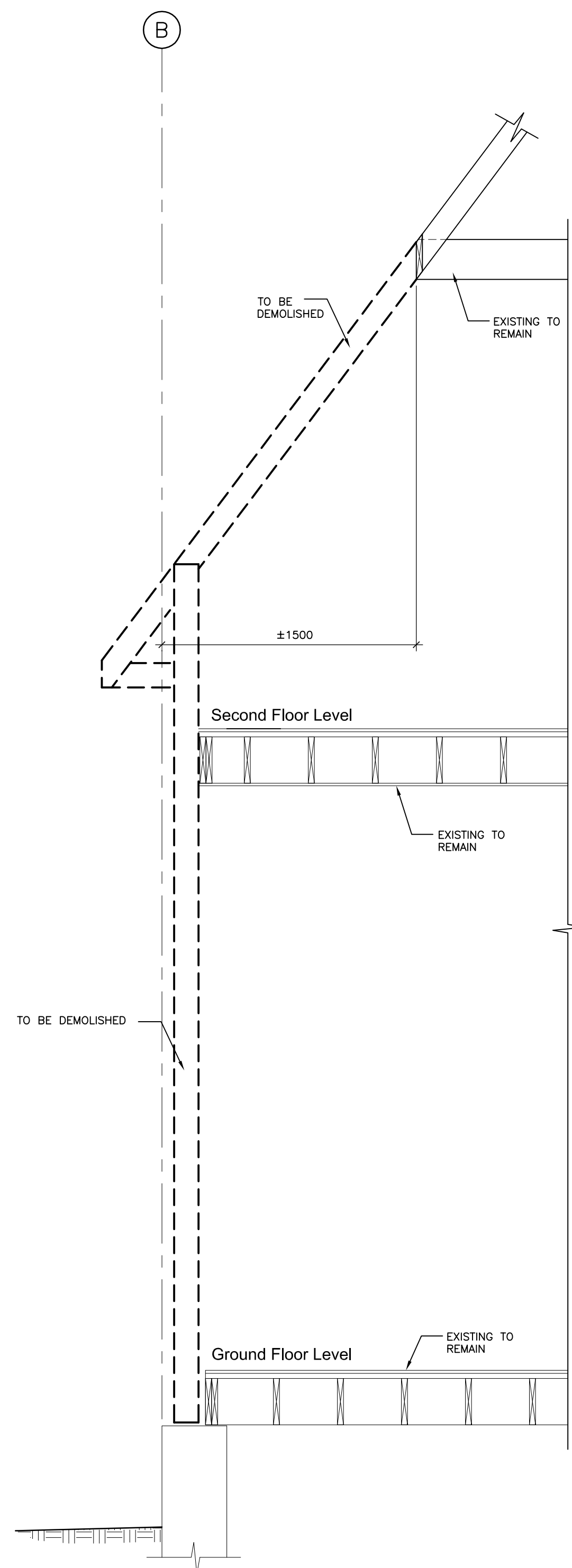
approved by  
approuvé par **A.S./C.F.**

tender  
soumission project manager  
administrateur de projets

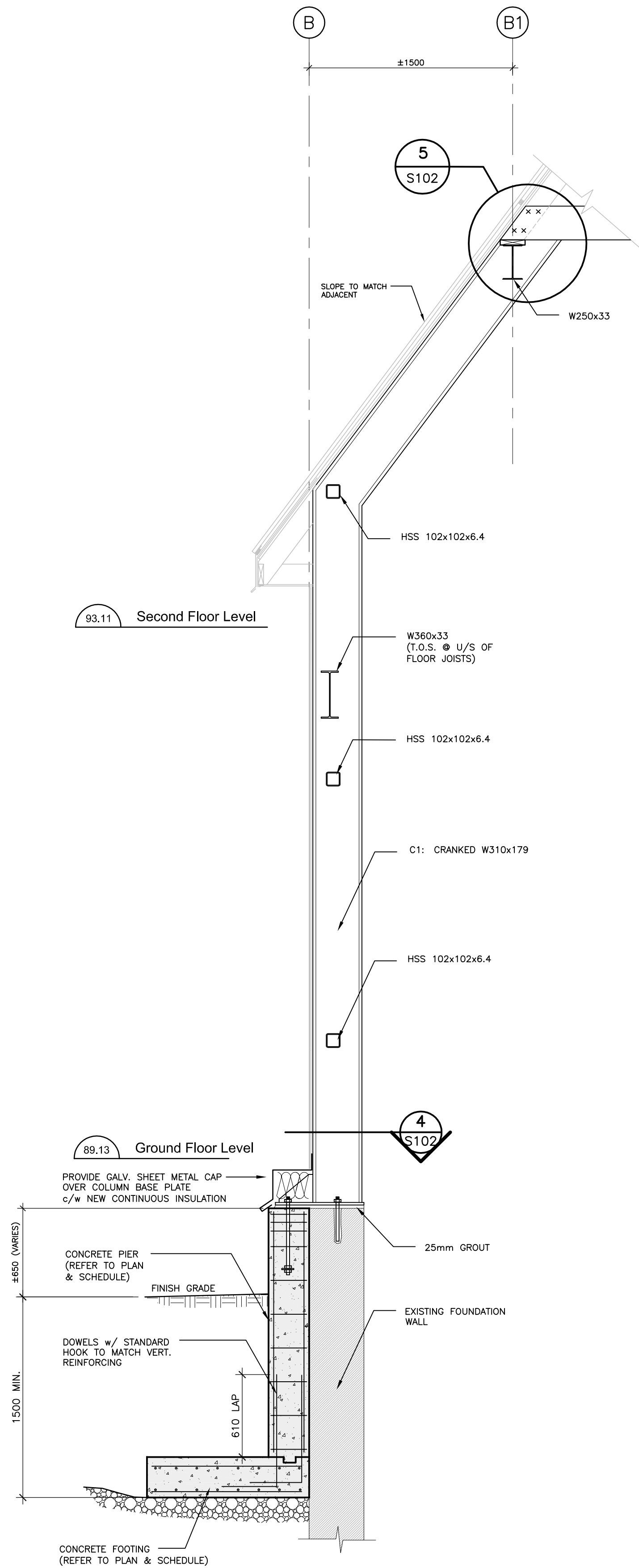
project date  
date du projet **2016/05/10**

project no.  
no. du projet

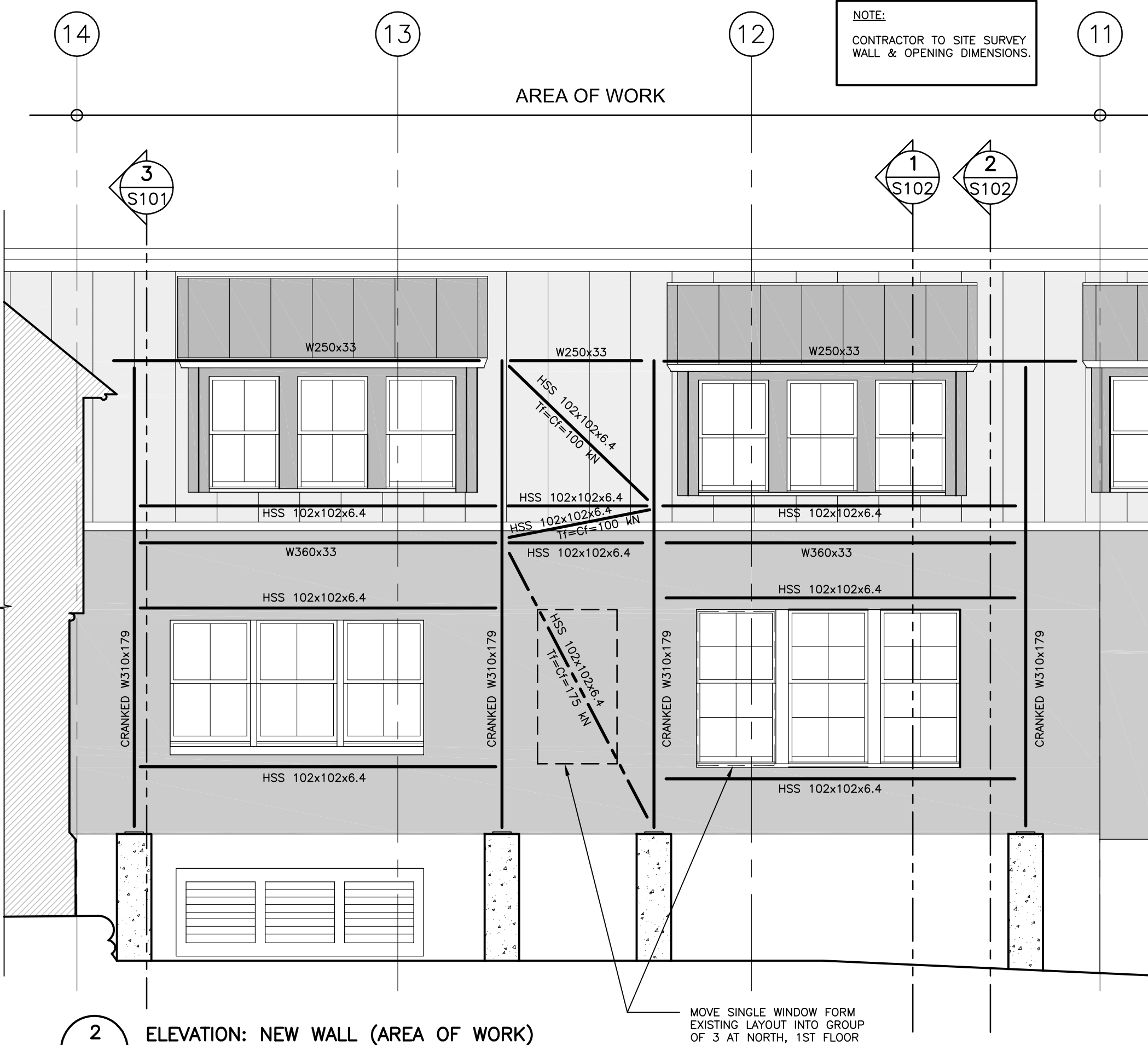
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dessiné no. **S101**



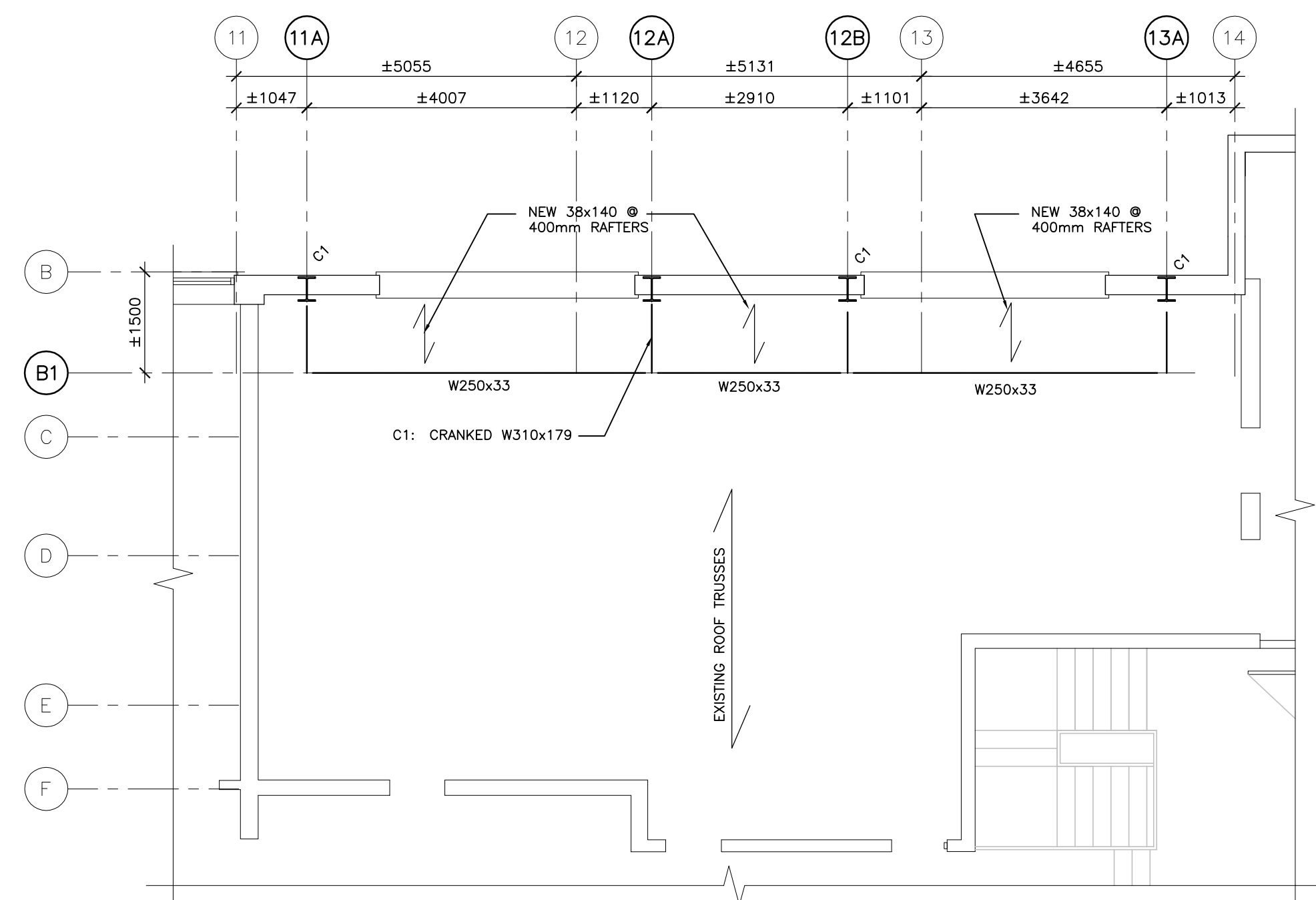
**4 SECTION: WALL DEMOLITION**  
S101 SCALE: 1:25



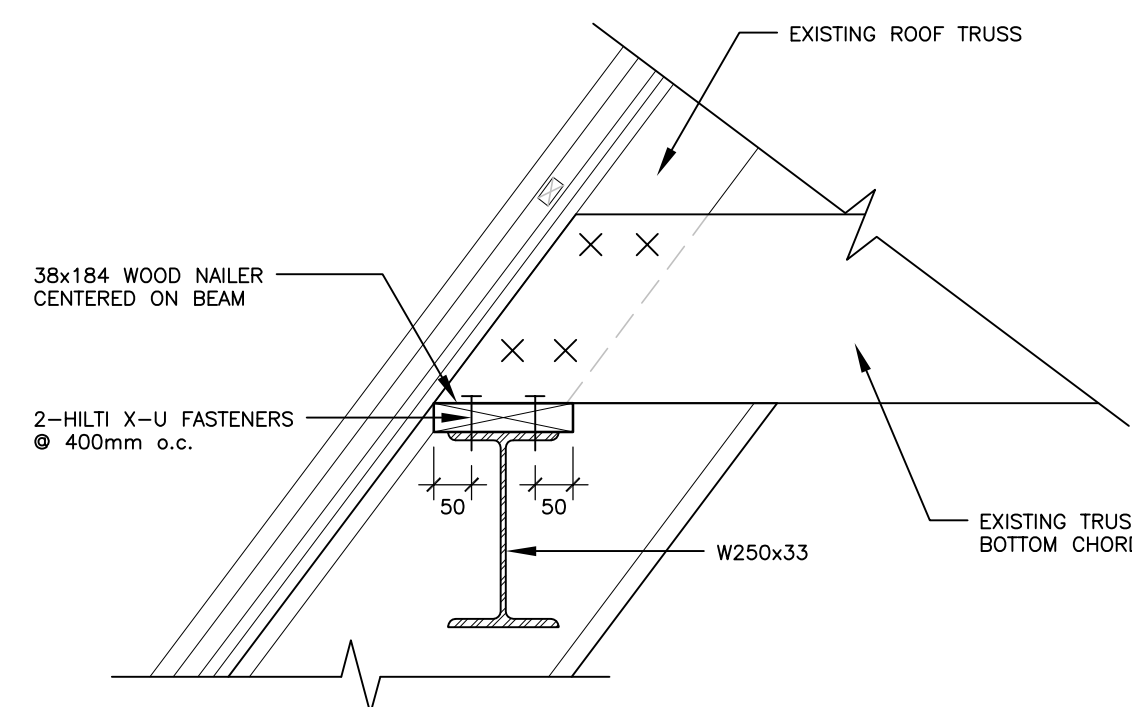
**3 SECTION: NEW STRUCTURAL WALL**  
S101 SCALE: 1:25



**2 ELEVATION: NEW WALL (AREA OF WORK)**  
S101 SCALE: N.T.S.



**1 PLAN: ROOF FRAMING**  
S101 SCALE: 1:75



NEW CONCRETE PIER BELOW

250

58

150

200

400

15

38

89

38

89

4-16mm $\phi$  HILTI HIT-Z RODS IN HILTI HIT-HY 200 ADHESIVE (190mm EMBEDMENT)

656x400x19mm THICK BASE PLATE

C1: CRANKED W310x179

mm $\phi$  ANCHOR BOLTS

76x10mm WASHER PLATE NUT ABOVE & BELOW. WELD NUT TO PLATE. (190mm EMBEDMENT)

3-16mm STIFFENER PLATES

EQ.

EQ.

406 (SITE CONFIRM)

EXISTING WOOD JOISTS

51 MIN.

38x184 WOOD NAILER

12.7mm A307 BOLTS  
⊗ 400mm o.c.  
ALTERNATE SIDES OF WEB

W460x52

152

Architectural section drawing of a building exterior wall and roof. The drawing shows a vertical wall section with a roofline sloping upwards to the right. Key features include:

- Roof:** NEW 38x140 RAFTER @ 400mm o.c. (TYPICAL). EXISTING ROOF TRUSS. SLOPE TO MATCH ADJACENT.
- Wall:** W360x33 (T.O.S. @ U/S OF FLOOR JOISTS). NEW STUD WALL INFILL 38x140 @ 400mm o.c. (TYPICAL).
- Foundation:** A concrete foundation is shown at the bottom.
- Annotations:** Section lines B-B1 and 3-4 are indicated. A dimension of  $\pm 1500$  is shown between lines B and B1.
- Labels:** "Floor Level" is marked on the left side.

Technical drawing of a roof-to-wall connection, showing five detailed callouts (1-5) and a section line B-B.

- Callout 1:** Shows the roof structure with rafters and a purlin.
- Callout 2:** Shows the roof edge with a new 38x140 rafter.
- Callout 3:** Shows the wall base on a concrete foundation.
- Callout 4:** Shows the wall section with floor joists.
- Callout 5:** Shows the wall section with floor joists.

Labels and notes include:

- SLOPE TO MATCH EXISTING
- NEW 38x140 RAFTER @ 400mm o.c. (TYPICAL)
- W360x33 (T.O.S. @ U/S OF FLOOR JOISTS)

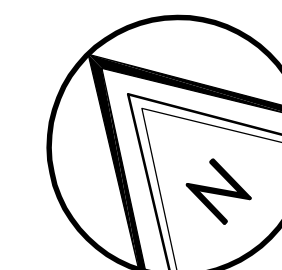
 **Public Works and  
Government Services Canada**  
Architectural and Engineering Services  
Ontario Region

**Travaux publics et  
Services gouvernementaux Canada**  
Services d'architecture et de génie  
Région de l'Ontario



**CLELAND  
JARDINE**  
ENGINEERING LTD

100-580 TERRY FOX DR,  
CANATA, ON K2L 4B9  
613) 591-1533



Do not scale drawings.  
Verify all dimensions and conditions on site and immediately notify the engineer of all discrepancies.

project title	
titre du projet	

EXTERIOR WALL REPAIR  
CENTRAL EXPERIMENTAL FARM  
BUILDING #55

drawing title
titre du dessin

## SECTIONS & DETAILS

drawn by  
dessine par

M.E.

designed by  
cong nar

A.S./C.F.

approved by	approuvé par
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A.S./C.F.

tender  
soumission

project manager  
administrateur  
de projets

project date	
date du projet	

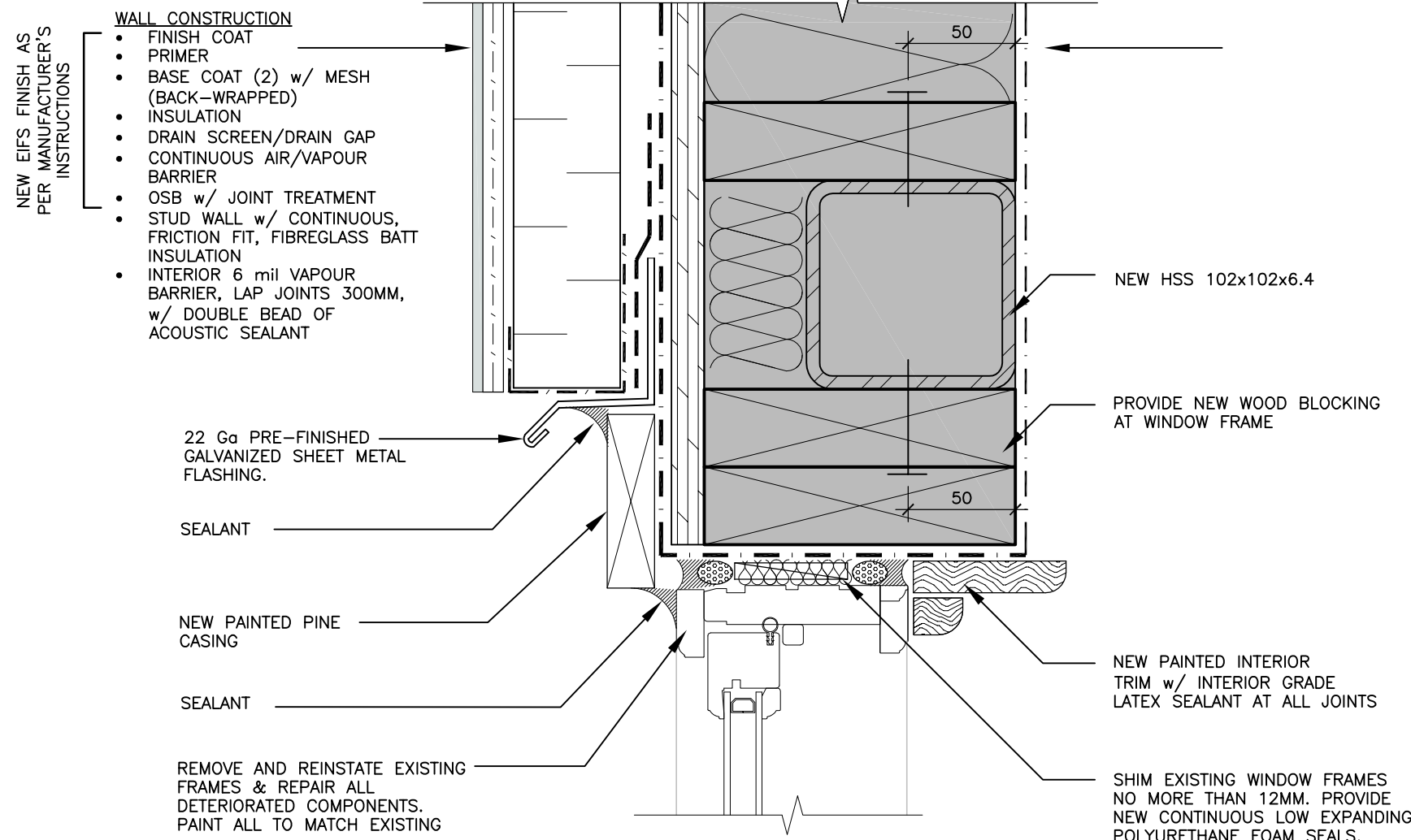
2016/05/10

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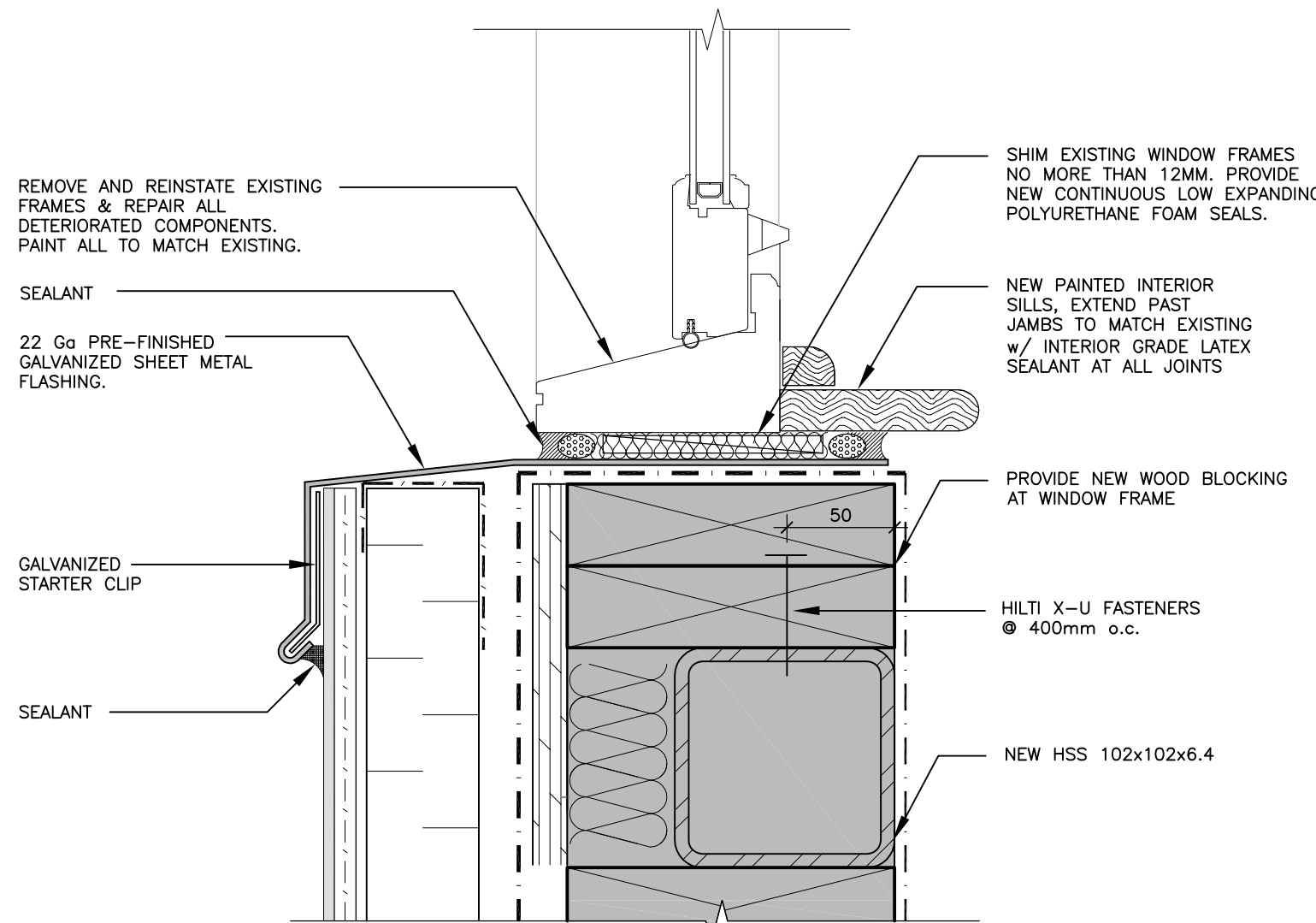
drawing no.  
dessine no.

S102

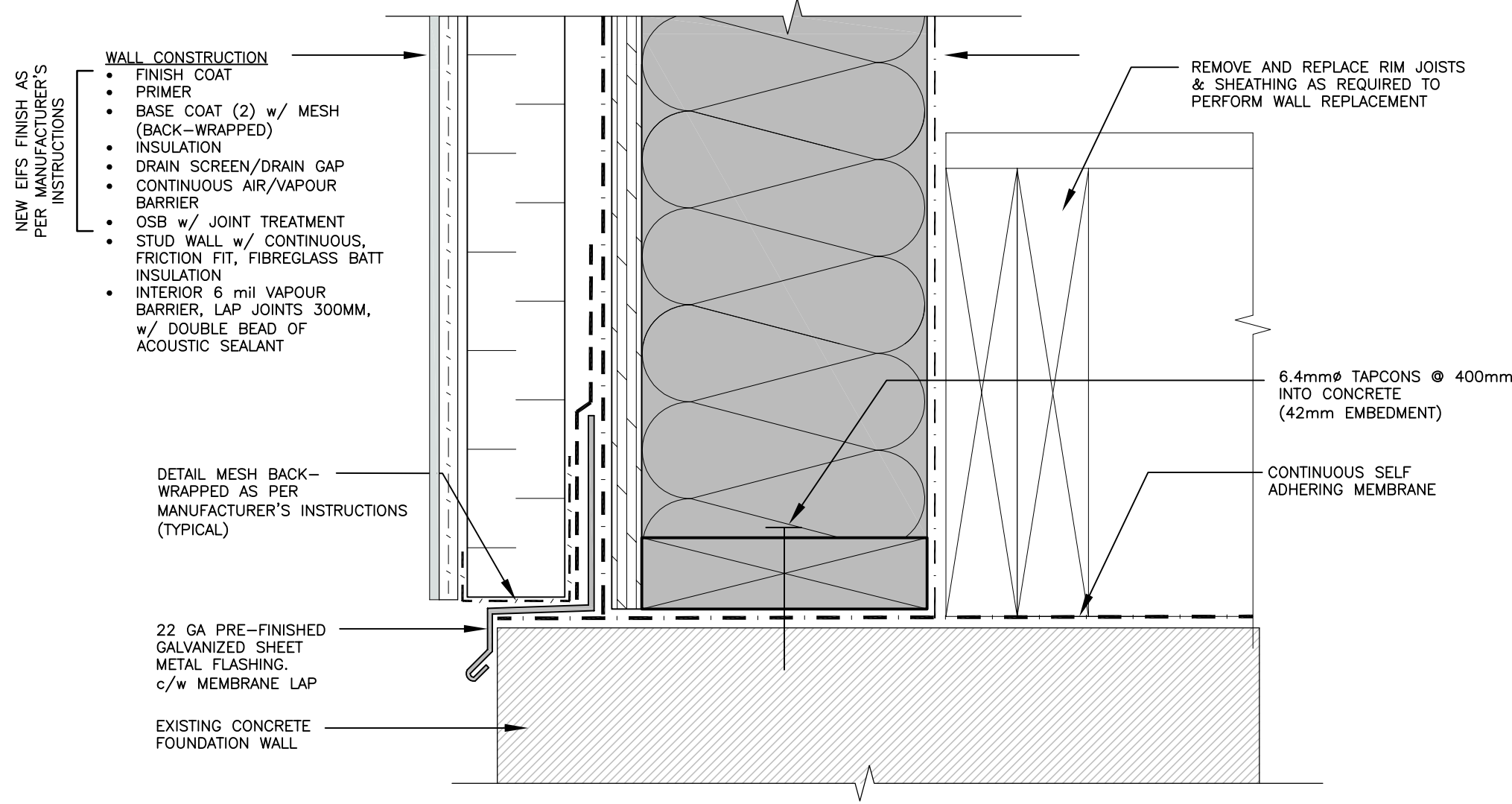




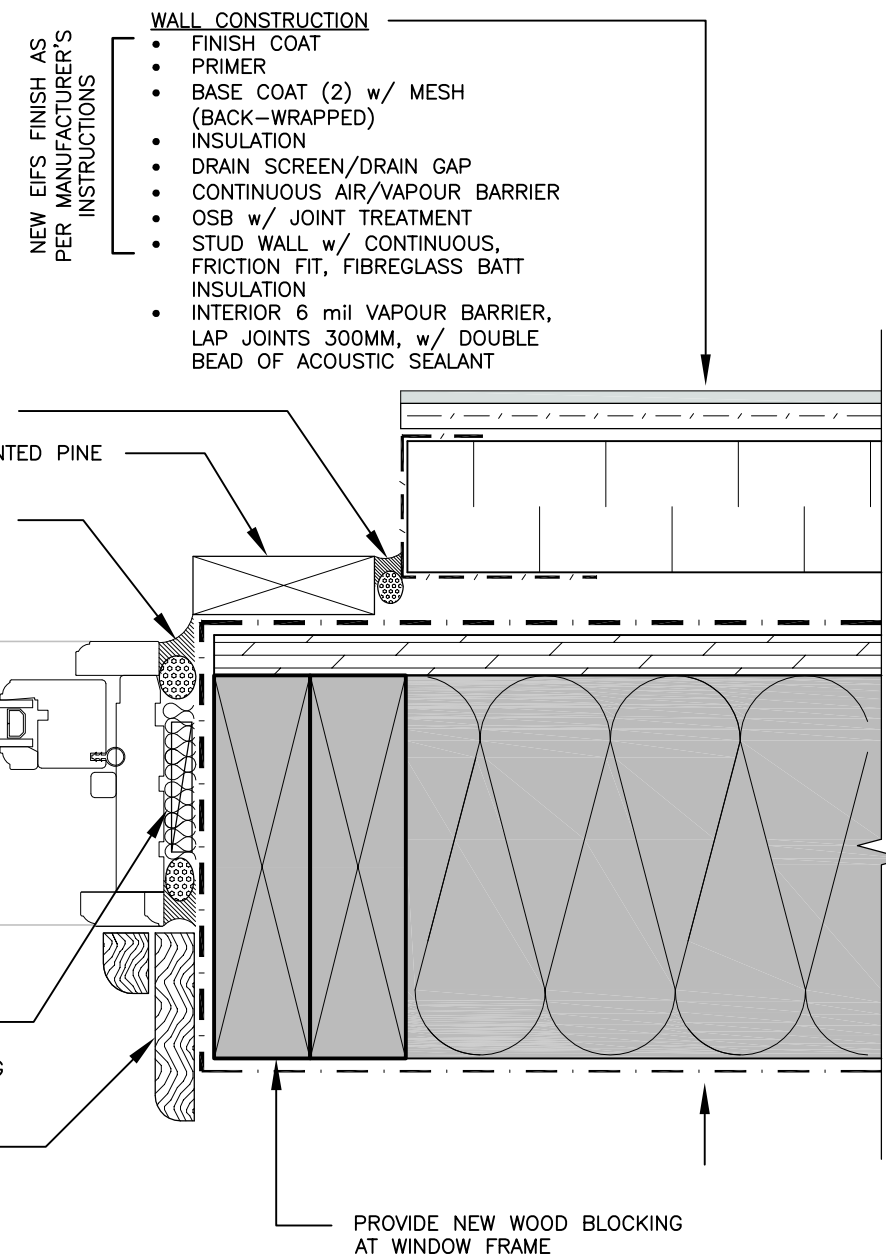
5 DETAIL: WINDOW HEAD @ STUCCO  
S103 SCALE: N.T.S.



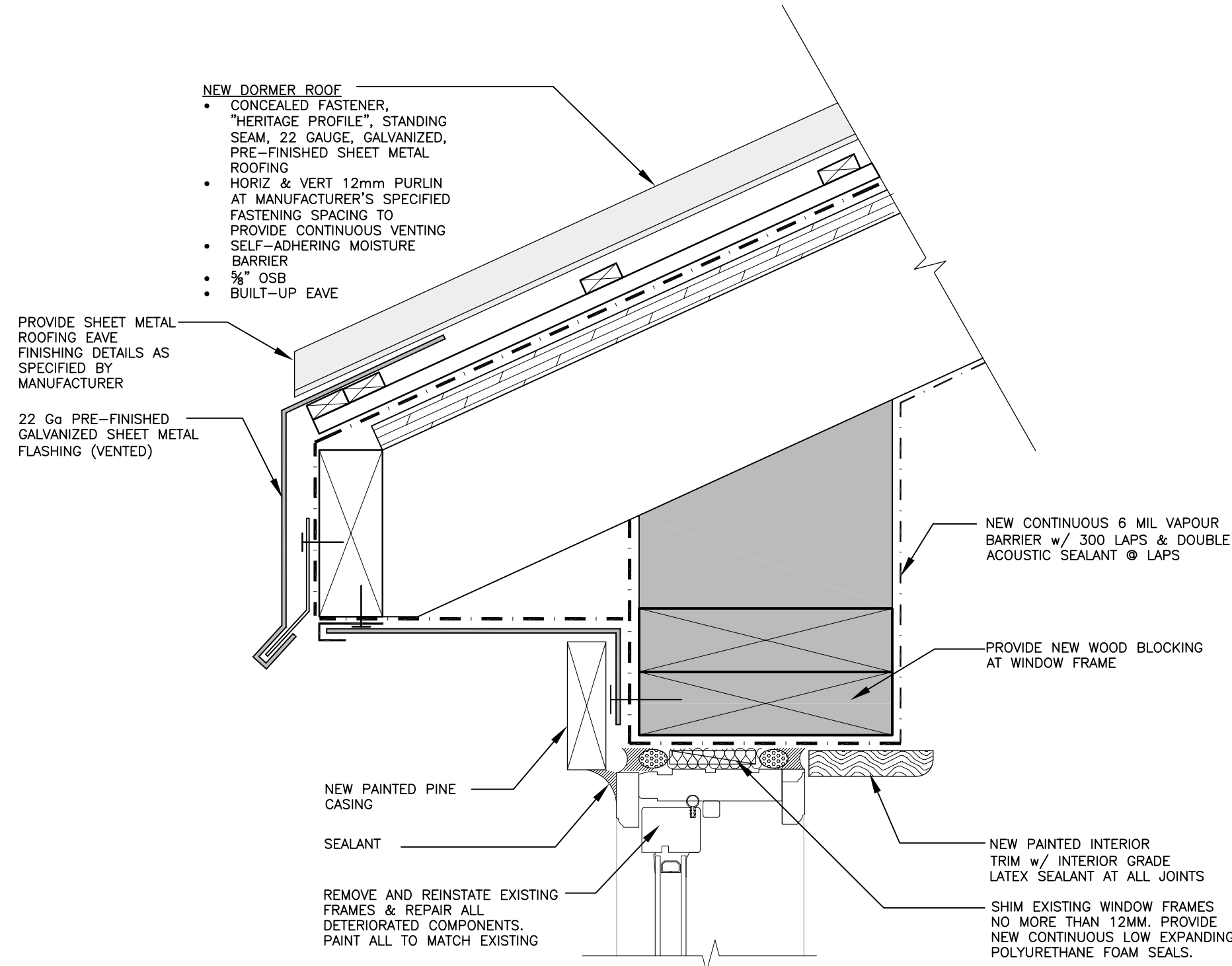
4 DETAIL: WINDOW SILL @ STUCCO  
S103 SCALE: N.T.S.



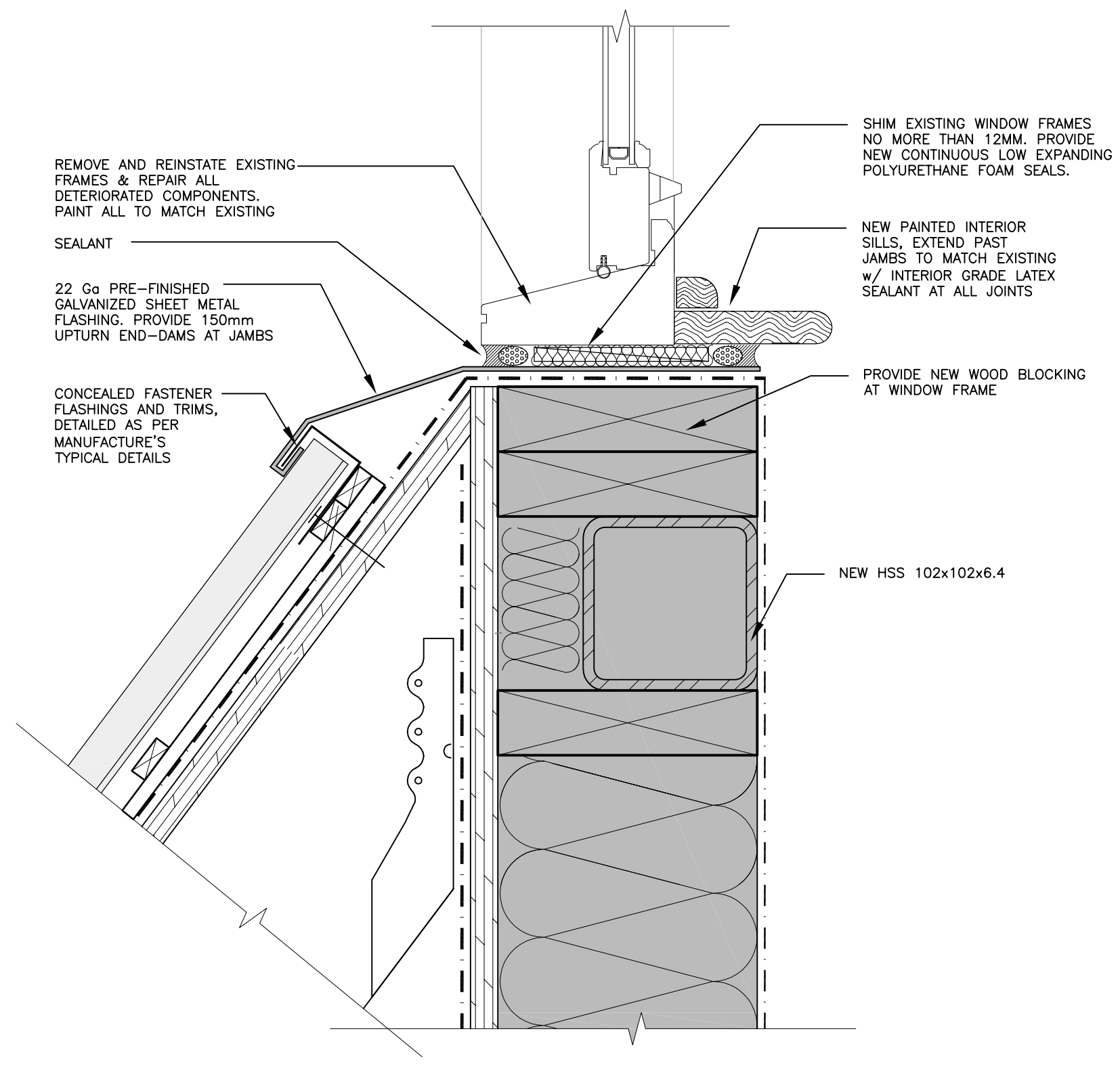
3 DETAIL: STUCCO TERMINATION @ FOUNDATION  
S103 SCALE: N.T.S.



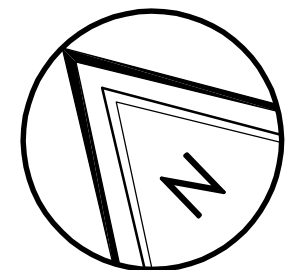
6 DETAIL: WINDOW JAMB @ STUCCO  
S103 SCALE: N.T.S.



2 DETAIL: DORMER HEAD  
S103 SCALE: N.T.S.



1 DETAIL: DORMER SILL  
S103 SCALE: N.T.S.



04		
03	ISSUED FOR TENDER	JUN 17/16
02	ISSUED FOR 99% REVIEW	MAY 20/16
01	ISSUED FOR 50% REVIEW	MAY 10/16
revision		date

Do not scale drawings.  
Verify all dimensions and conditions on site and immediately notify the engineer of all discrepancies.

A	Detail No.
B	No. du détail
C	drawing no. - where detail required dessin no. - où détail exigé
	drawing no. - where detailed dessin no. - où détaillé

project title  
titre du projet

EXTERIOR WALL REPAIR  
CENTRAL EXPERIMENTAL FARM  
BUILDING #55

drawing title  
titre du dessin

SECTIONS & DETAILS

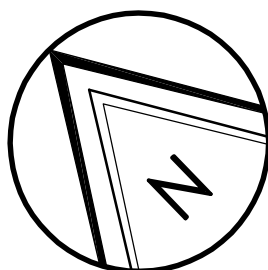
drawn by dessiné par	M.E.
designed by conçu par	A.S./C.F.
approved by approuvé par	A.S./C.F.
tender soumission	project manager administrateur de projets
project date date du projet	2016/05/10
project no. no. du projet	
drawing no. dessiné no.	S103



Architect/Structural Consultants:



CJE # 15-1320



04		
03	ISSUED FOR TENDER	JUN 17/16
02	ISSUED FOR 99% REVIEW	MAY 20/16
01	ISSUED FOR 50% REVIEW	MAY 10/16
revision		date

Do not scale drawings.  
Verify all dimensions and conditions on site and  
immediately notify the engineer of all discrepancies.

<div><div>A</div><div>B</div><div>C</div></div>	A Detail No. No. du détail B drawing no. - where detail required dessin no. - où détail exigé C drawing no. - where detailed dessin no. - où détaillé
---	--

project title  
titre du projet

## EXTERIOR WALL REPAIR CENTRAL EXPERIMENTAL FARM BUILDING #55

drawing title  
titre du dessin

### SECTIONS & DETAILS

drawn by  
dessiné par **M.E.**

designed by  
conç par **A.S./C.F.**

approved by  
approuvé par **A.S./C.F.**

tender  
soumission

project manager  
administrateur  
de projets

project date  
date du projet **2016/05/10**

project no.  
no. du projet

drawing no.  
dessiné no. **S104**

REMOVE & RESET EXISTING SHEET  
METAL CURB TO ALLOW FOR NEW  
SHEET METAL ROOFING  
INSTALLATION.  
UPTURN NEW SELF-ADHERING  
MEMBRANE ONTO SURFACE OF  
EXISTING CURB. ENSURE EXISTING  
VENTING REMAINS CLEAR.

CONCEALED FASTENERS  
AS PER MANUFACTURER'S  
TYPICAL DETAILS

EXISTING ROOF PURLIN

EXISTING TRUSS MEMBER

NEW MANSARD  
RAFTER MEMBER

**3** DETAIL: SECTION AT MANSARD/UPPER ROOF  
S104 SCALE: N.T.S.

- NEW MANSARD ROOF
- CONCEALED FASTENER, "HERITAGE  
PROFILE", STANDING SEAM, 22  
GAUGE, GALVANIZED, PRE-FINISHED  
SHEET METAL ROOFING
- HORIZ & VERT 12mm PURLIN AT  
MANUFACTURER'S SPECIFIED  
FASTENING SPACING TO PROVIDE  
CONTINUOUS VENTING
- SELF-ADHERING MOISTURE  
BARRIER
- 5/8" OSB
- BUILT-UP EAVE

PROVIDE SHEET METAL  
ROOFING EAVE  
FINISHING DETAILS AS  
SPECIFIED BY  
MANUFACTURER

GALVANIZED 22 Ga.  
PRE-FINISHED  
FASCIA w/ 12mm  
FURRING TO PROVIDE VENTING

NEW 22 Ga. GALVANIZED  
PRE-FINISHED SOFFIT w/  
TRIM AS PER MANUFACTURER'S  
INSTRUCTIONS

SEALANT  
NEW STUCCO SYSTEM  
AS PER (S-S103)

**2** DETAIL: MASARD EAVE @ STUCCO  
S104 SCALE: N.T.S.

- NEW DORMER JAMB:
- PREFINISHED SHEET METAL  
ROOFING IN VERTICAL  
ORIENTATION w/ TRIM CLIPS  
AS PER MANUFACTURER.
  - FURRING BLOCKS FOR VENTED  
CONDITION AT MANUFACTURER'S  
RECOMMENDED FASTENER  
SPACING.
  - CONTINUOUS SELF-ADHERING  
MEMBRANE
  - 5/8" OSB
  - WOOD FRAMED DORMER KNEE  
WALL w/ CONTINUOUS  
FRICTION FIT FIBREGLASS BATT  
INSULATION
  - INTERIOR 6 mil VAPOUR  
BARRIER, LAP JOINTS 300MM,  
w/ DOUBLE BEAD OF  
ACOUSTIC SEALANT
  - NOTE: PROVIDE SHEET METAL  
FLASHING AT BASE OF  
DORMER-TO-MANSARD ROOF  
JOINT, AS PER  
MANUFACTURER'S TYPICAL  
DETAILS.

22 Ga PRE-FINISHED  
GALVANIZED SHEET METAL  
CAP FLASHING AT JAMB.

SEALANT  
REMOVE AND REINSTATE EXISTING  
FRAMES & REPAIR ALL  
DETERIORATED COMPONENTS.  
PAINT ALL TO MATCH EXISTING

NEW PAINTED INTERIOR  
TRIM w/ INTERIOR GRADE  
LATEX SEALANT AT ALL JOINTS  
SHIM EXISTING WINDOW FRAMES  
NO MORE THAN 12MM. PROVIDE  
NEW CONTINUOUS LOW EXPANDING  
POLYURETHANE FOAM SEALS.

**1** DETAIL: WINDOW JAMB @ DORMER  
S104 SCALE: 1:20