# SHOP DRAWING TRANSMITTAL

HOBIN
ARCHITECTURE

| | | | |
|---|---|---|---|
| Project: | Turnbull School Music Room Addition | Project No: | 1705 |
| Date: | November 12, 2018 | | |
| To: | TALCO Building Innovations Ltd. | | |
| Attn: | Farah Bano (fbano@tal-co.com) | | |
| From: | Michelle Cataldo | | |

- ☐ Approval
- ☒ Distribution
- ☐ Information and Use
- ☐ Review and Comment
- ☐ Other
- ☐ Courier
- ☐ By Hand
- ☐ Fax
- ☐ To Be Picked Up
- ☒ e-mail

| | |
|---|---|
| Shop Drawing Submittal: | 05 41 00 – Structural Metal Studs |
| Submitted by: | VRIEND Engineering |
| Drawing Title: | S1 General Notes & Partial Ground Floor<br>S2 Wall Sections<br>S3 Sections & Details |
| Revision No. | 0 |
| Dated: | 6/11/18 |

Comments:

Reviewed as noted. Please make note of the offset of steel angle from stud track by 25mm. Angle is intended to provide anchor for curtainwall frame.


**Partners**

Barry J. Hobin
OAA, FRAIC, Hon. Fellow AIA

William A. Davis
OAA, MRAIC, Associate AIA

Gordon Lorimer
OAA, FRAIC, Associate AIA

Wendy Brawley
OAA, MRAIC, Associate AIA

Douglas Brooks
Senior Arch. Tech.

**Directors**

Marc Thivierge
OAA, MRAIC

Reinhard Vogel
Senior Arch. Tech.

**Associates**

Bryan Bonell
OAA, MRAIC, Associate AIA

William Ritcey
MRAIC

Dan Henhoeffer
Senior Arch. Tech.

**Hobin Architecture Incorporated**

63 Pamilla Street
Ottawa, Ontario
Canada K1S 3K7

t 613-238-7200
f 613-235-2005

hobinarc.com

## 1) GENERAL

1. NOTES ON THIS SHEET ARE FOR REFERENCE ONLY AND ARE SUPPLEMENTED BY PROJECT SPECIFICATIONS.
2. STRUCTURAL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ALL RELEVANT CONTRACT DOCUMENTS - INCLUDING ARCHITECTURAL, MECHANICAL, ELECTRICAL AND CIVIL DRAWINGS, GEOTECHNICAL REPORTS AND SPECIFICATIONS.
3. ALL DIMENSIONS ARE IN MILLIMETERS AND ELEVATIONS IN METRES (UNLESS INDICATED OTHERWISE).
4. DO NOT SCALE THESE DRAWINGS.
5. ALL WORK MUST COMPLY WITH THE PROVISIONS OF THE ONTARIO BUILDING CODE (2012), OCCUPATIONAL HEATH & SAFETY ACT, MUNICIPAL BYLAWS AND BEST CODE PRACTICES.
6. DETAILS OF EXISTING CONDITIONS AND CONSTRUCTION ARE SHOWN BASED ON INFORMATION AVAILABLE AT THE TIME OF PREPARING DESIGN DRAWINGS. IF, DURING CONSTRUCTION, CONDITIONS ARE REVEALED THAT DIFFER FROM THE ASSUMED CONDITIONS, ADVISE THE ENGINEER BEFORE PROCEEDING.
7. DO NOT CUT OPENINGS THROUGH STRUCTURAL ELEMENTS UNLESS APPROVED IN WRITING BY THE STRUCTURAL ENGINEER.
8. SPECIFIC NOTES AND DETAILS ON THESE DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS.

## 2) GENERAL DESIGN INFORMATION

1. THE INFORMATION PRESENTED ON THESE DRAWINGS HAS BEEN DESIGNED AND ANALYZED IN ACCORDANCE WITH THE 2012 ONTARIO BUILDING CODE. CONSTRUCTION IS TO BE PERFORMED IN ACCORDANCE WITH THIS AND ALL OTHER APPLICABLE CODES.
   - LIGHTWEIGHT STEEL STRUCTURE IS DESIGNED IN ACCORDANCE WITH CSA S136-07 & A1S1 S200 SERIES.

2. THE SUSPENDED CEILING HAS BEEN DESIGNED IN CONFORMANCE WITH THE ONTARIO BUILDING CODE SECTION 4.1.8.18 CATEGORY 7, ELEMENTS OF STRUCTURES AND NON STRUCTURAL COMPONENTS AND EQUIPMENT.

3. SEISMIC SYSTEM/LOADING DATA
   - 2012 OBC CLAUSE 4.1.8.18 Vp = 0.3FaSa(0.2)IeSpWp
   - SEISMIC IMPORTANCE FACTOR: (2012 OBC CLAUSE 4.1.8.5)
     Ie = 1.0 NORMAL
   - REFERENCE CITY: OTTAWA, ONTARIO
   - SITE CLASS: THE NOTED SITE CLASSIFICATION FOR SEISMIC SITE RESPONSE AND SHEAR STRENGTH PARAMETERS INDICATED ARE ASSUMED BELOW.

☐ A ☐ B ☐ C ■ D ☐ E ☐ F

- PGA: 0.32
- RESPONSE SPECTRUM DATA :
- 5% DAMPED SPECTRAL RESPONSE ACCELERATION VALUES FOR REFERENCE CITY: (2012 OBC SUPPLEMENTARY STANDARD SB-1)

Sa(0.2) = 0.630
Sa(0.5) = 0.310
Sa(1.0) = 0.140
Sa(2.0) = 0.046

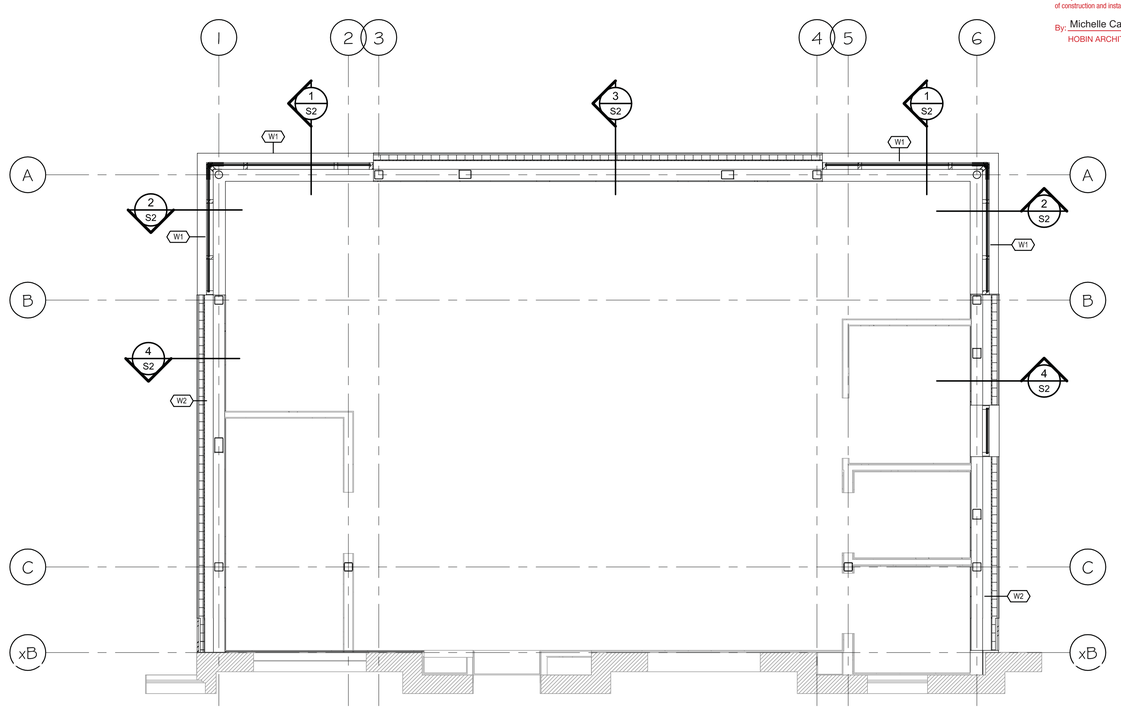
- 2012 OBC CLAUSE 4.1.8.18 CATEGORY 7
  Sp = CpArAx/Rp
  Cp = 1.0
  Ar = 1.0
  Ax = 1+2hx/hn = 2.5
  Rp = 2.5
  Sp = 1.0
- WEIGHT OF SUSPENDED CEILING: Wp = 0.20 kPa
- WEIGHT OF WALL/BULKHEAD: Wp = 0.30 kPa
- WIND LOADING: = 1.00 kPa (EXTERIOR)

## 3) STRUCTURAL METAL STUD FRAMING

1. THESE DRAWINGS INDICATE PRIMARY STRUCTURAL METAL STUD FRAMING ELEMENTS - INCLUDING STUD AND JOIST SIZES AND SPACINGS, CROSS-BRACED WALL PANEL LOCATIONS AND ASSOCIATED FORCES.
2. STEEL SHALL CONFORM TO THE REQUIREMENTS OF CAN/CSA-S136 AND SHALL BE IDENTIFIED AS TO SPECIFICATION, GRADE, MECHANICAL PROPERTIES AND COATING TYPE AND THICKNESS.
3. MINIMUM YIELD STRENGTH OF STEEL SHALL BE AS FOLLOWS:
   - MINIMUM THICKNESSES UP TO 1,146MM (43 MILS): 230MPA
   - MINIMUM THICKNESSES OVER 1,146MM (43 MILS): 345MPA
4. METAL STUD FRAMING ELEMENTS ARE DESIGNATED IN ACCORDANCE WITH THE UNIVERSAL (IMPERIAL) FOUR-PART DESIGNATOR SYSTEM. E.G. 600 S 162 -54
   FIRST PART: MEMBER DEPTH IN 1/100THS OF AN INCH
   SECOND PART: STYLE S = STUD OR JOIST;
   T = TRACK;
   L = ANGLE;
   P = PLATE
   THIRD PART: FLANGE WIDTH IN 1/100THS OF AN INCH
   FOURTH PART: MINIMUM THICKNESS IN 1/1000THS OF AN INCH
5. STANDARD THICKNESSES FOR LIGHTWEIGHT STEEL FRAMING COMPONENTS ARE GIVEN IN MILS. THE FOLLOWING TABLE MAY BE USED FOR CONVERSION:

| DESIGNATION THICKNESS | MINIMUM BASE STEEL THICKNESS | | DESIGN THICKNESS | | STEEL FRAMING GAUGE NO. |
|---|---|---|---|---|---|
| (MILS) | (IN.) | (MM) | (IN.) | (MM) | |
| 43 | 0.0428 | 1.087 | 0.0451 | 1.146 | 18 |
| 54 | 0.0538 | 1.367 | 0.0566 | 1.438 | 16 |
| 68 | 0.0677 | 1.720 | 0.0713 | 1.811 | 14 |
| 97 | 0.0966 | 2.454 | 0.1017 | 2.583 | 12 |

6. PROVIDE BRIDGING AT THE FOLLOWING MAXIMUM SPACINGS, SPACED AT EQUAL INTERVALS OVER THE LENGTH OF THE MEMBER:
   WIND BEARING STUDS: 1524 MM O.C. MAXIMUM;
   AXIAL LOAD BEARING STUDS: 1219 MM O.C. MAXIMUM;
   JOISTS: 2134 MM O.C. MAXIMUM;
7. PROVIDE 40mm STUD OR FURRING CHANNEL SECURED BETWEEN STUDS FOR ATTACHMENT OF FIXTURES INCLUDING LAVATORY BASINS, GRAB BARS, TOWEL RAILS, ELECTRICAL BOXES ETC.
8. TOUCH UP WELDS WITH ZINC RICH PRIMER.




1 S1 SECTION: GROUND FLOOR
SCALE: 1:50

SHOP DRAWING REVIEW
REVIEWED ☑
REVIEWED AS NOTED ☐
REVISE AND RESUBMIT ☐

HOBIN ARCHITECTURE

"This review is for the sole purpose of ascertaining conformance with the general design concept for architectural features only, and does not in any way constitute review of the design of engineering elements which form part of the Contract Documents prepared by others. This review shall not mean that the Architect approves the detail design inherent in the shop drawings. This responsibility shall remain with the Contractor submitting same, and such review shall not relieve the Contractor of his responsibility for errors or omissions in the shop drawings or of his responsibility for meeting all requirements of the Contract Documents. The Contractor is responsible for dimensions to be confirmed and correlated at the job site, for information that pertains solely to fabrication processes, or to techniques of construction and installation and for co-ordination for the work of all trades."

By: Michelle Cataldo Date: Nov. 12, 2018
HOBIN ARCHITECTURE INCORPORATED

IT IS THE RESPONSIBILITY OF THE APPROPRIATE CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS ON SITE AND TO REPORT ALL ERRORS AND/OR OMISSIONS TO THE ENGINEER.

ALL CONTRACTORS MUST COMPLY WITH ALL PERTINENT CODES AND BY-LAWS.

DO NOT SCALE DRAWINGS.



REVIEWED
By Farah Bano at 1:20 pm, Nov 06, 2018

TALCO BUILDINGINNOVATIONS

SHOP DRAWING REVIEW
CUNLIFFE & ASSOCIATES
This review is for the sole purpose of determining general conformance with the Structural Drawings. This review does not mean that Cunliffe & Associates approves the detail design inherent in the shop drawings. The responsibility for which remains with the Contractor submitting the shop drawings. Our review does not relieve the contractor of his responsibility for errors or omissions in the shop drawings or meeting the requirements of the Contract Documents. The Contractor is responsible for dimensions to be confirmed and correlated at the job site and information that pertains solely to fabrication processes or to techniques of construction installation and for co-ordination of the work of all subtrades.
☐ REVIEWED AS NOTED ☒ REVIEWED ☐ RESUBMIT
CHK'D BY NH
DATE 11/06/18

| | | |
|---|---|---|
| 1 | NOV 1/18 | ISSUED FOR REVIEW |

PROFESSIONAL SEAL: LICENSED PROFESSIONAL ENGINEER J. P. VRIEND 100114384 PROVINCE OF ONTARIO

NORTH ARROW:

CLIENT:

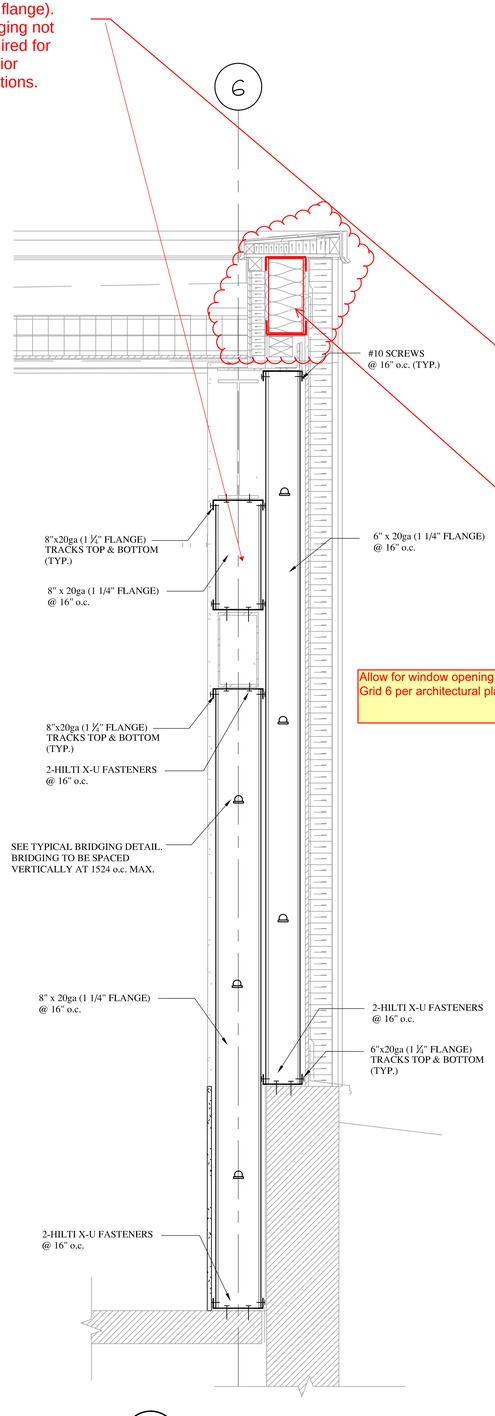
VRIEND ENGINEERING

PROJECT TITLE:
TURNBULL SCHOOL
MUSIC ROOM
ADDITION

SHEET TITLE:
GENERAL NOTES
& PARTIAL
GROUND FLOOR

DRAWN: A.V.
CHECKED: J.V.
SCALE: AS SHOWN
SHEET No. S1
PROJECT No. S301-18

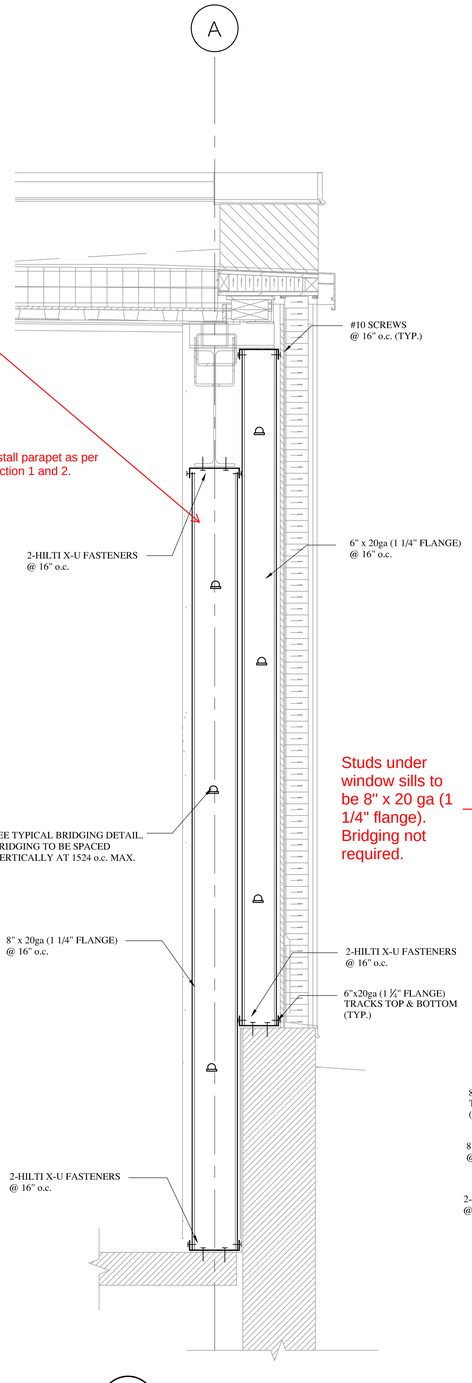
Interior partitions to be 8" x 25 ga (1 1/4" flange). Bridging not required for interior partitions.




Install parapet as per section 1 and 2.

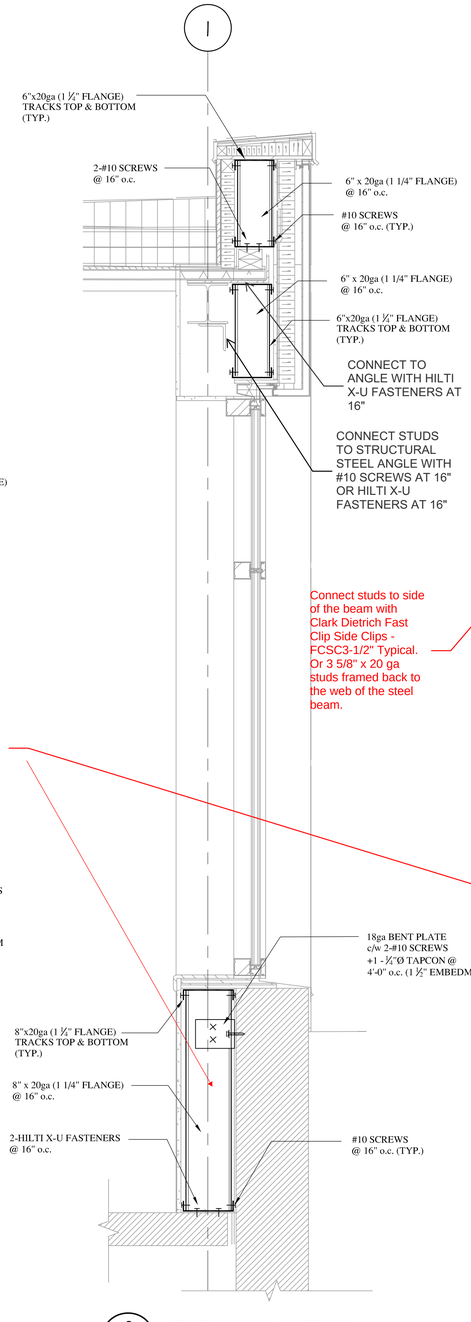
Allow for window opening along Grid 6 per architectural plans.

4 / S2 SECTION: WALL SECTION 4
SCALE: N.T.S.



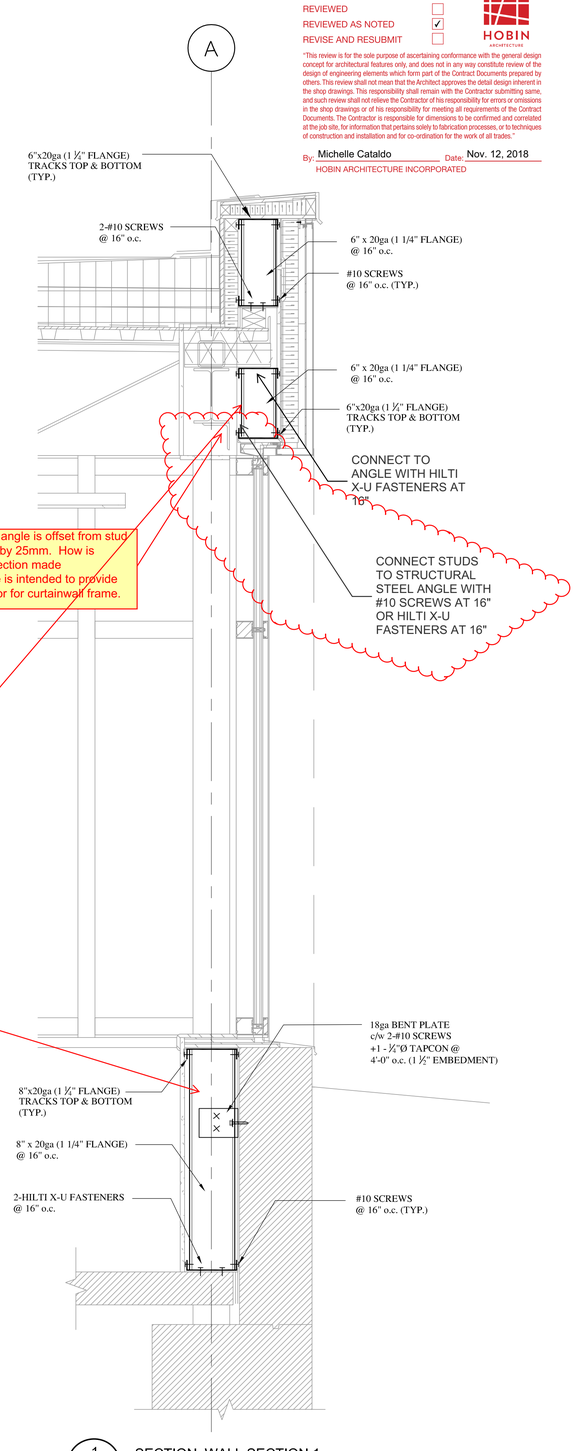

Studs under window sills to be 8" x 20 ga (1 1/4" flange). Bridging not required.

3 / S2 SECTION: WALL SECTION 3
SCALE: N.T.S.




Connect studs to side of the beam with Clark Dietrich Fast Clip Side Clips - FCSC3-1/2" Typical. Or 3 5/8" x 20 ga studs framed back to the web of the steel beam.

2 / S2 SECTION: WALL SECTION 2
SCALE: N.T.S.




Steel angle is offset from stud track by 25mm. How is connection made
Angle is intended to provide anchor for curtainwall frame.

1 / S2 SECTION: WALL SECTION 1
SCALE: N.T.S.

SHOP DRAWING REVIEW
REVIEWED ☐
REVIEWED AS NOTED ☑
REVISE AND RESUBMIT ☐

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By: Michelle Cataldo Date: Nov. 12, 2018
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☐ REVIEWED AS NOTED
☒ REVIEWED
☐ RESUBMIT

CHK'D BY NH
DATE 11/06/18

| | | |
|---|---|---|
| 1 | NOV 1/18 | ISSUED FOR REVIEW |

PROFESSIONAL SEAL:
LICENSED PROFESSIONAL ENGINEER J. P. VRIEND 100114384 PROVINCE OF ONTARIO

NORTH ARROW:

CLIENT:

VRIEND ENGINEERING

PROJECT TITLE:
TURNBULL SCHOOL MUSIC ROOM ADDITION

SHEET TITLE:
WALL SECTIONS

| DRAWN: | CHECKED: |
|---|---|
| A.V. | J.V. |
| SCALE: AS SHOWN | SHEET No. S2 |
| PROJECT No. S301-18 | |

SHOP DRAWING REVIEW

REVIEWED ☑

REVIEWED AS NOTED ☐

REVISE AND RESUBMIT ☐

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By: Michelle Cataldo Date: Nov. 12, 2018

HOBIN ARCHITECTURE INCORPORATED

**SHOP DRAWING REVIEW**

**CUNLIFFE & ASSOCIATES**

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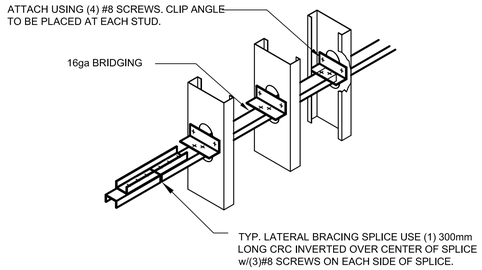
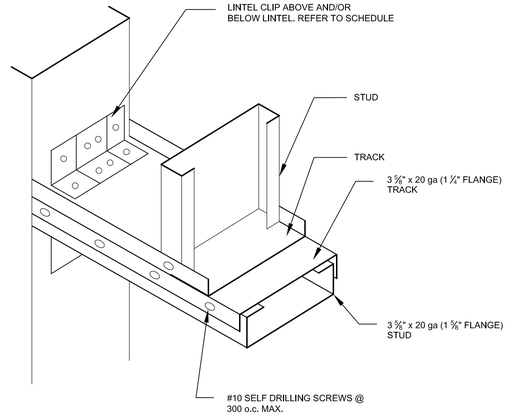
|---|---|
| ☐ REVIEWED AS NOTED | CHK'D BY NH |
| ☒ REVIEWED | DATE 11/06/18 |
| ☐ RESUBMIT | |



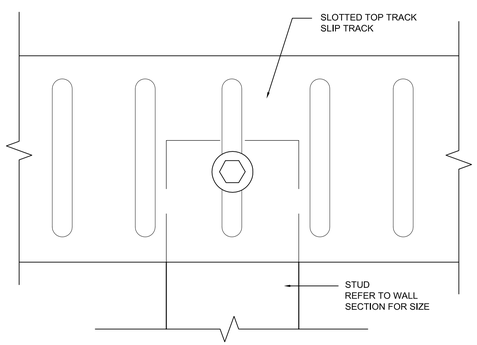

5 / S3 DETAIL: TYPICAL LATERAL BRIDGING

SCALE: N.T.S.



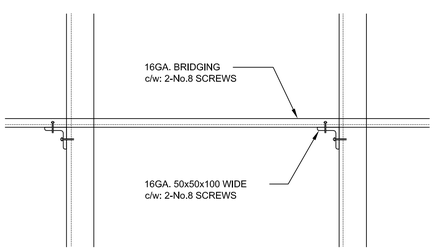

4 / S3 DETAIL: TYP. BEAM ABOVE WINDOW OPENINGS

SCALE: 1:10



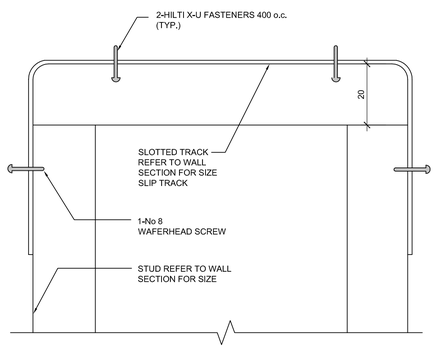

3 / S3 SECTION: TOP TRACK DEFLECTION (SIDE VIEW)

SCALE: 1:1




2 / S3 ELEVATION: BRIDGING DETAIL

SCALE: 1:5




1 / S3 SECTION: TOP TRACK DEFLECTION (FRONT VIEW)

SCALE: 1:1

| | | |
|---|---|---|
| 1 | NOV 1/18 | ISSUED FOR REVIEW |

PROFESSIONAL SEAL: LICENSED PROFESSIONAL ENGINEER J. P. VRIEND 100114384 PROVINCE OF ONTARIO

NORTH ARROW:

CLIENT:

VRIEND ENGINEERING

PROJECT TITLE:

TURNBULL SCHOOL
MUSIC ROOM
ADDITION

SHEET TITLE:

SECTIONS & DETAILS

| | |
|---|---|
| DRAWN: A.V. | CHECKED: J.V. |
| SCALE: AS SHOWN | SHEET No. S3 |
| PROJECT No. S301-18 | |