

You Did It!

Congratulations on making it to the 2023 Skills Ontario Competition!

Challenge Overview:

This is a 2 part challenge consisting of the following:

Part 1 - “Wall Section Terminology Challenge”

Part 2 - “New Family Cottage”, a Design Challenge where competitors are tasked with creating their new family cottage off Lake Huron.

Six Presentation drawings are required to be submitted digitally on 11x17 size paper to a scale of $\frac{1}{4}''=1'-0''$

Challenge Requirements:

Before you begin, please be sure you have all the listed items below. These are required to complete this challenge successfully.

- Revit/AutoCAD or any design software capable of producing architectural drawings.
- PDF Creation Software - (Adobe, Bluebeam, etc.) You are required to submit a PDF of your New Family Cottage.
- Calculator, Pencil/Pen, Blank Paper (optional for notes/ideas)

Judging Criteria:

Design

Ensure your Family Cottage has both a functional layout as well as an aesthetic appearance from the outside. Also be sure you've checked off all the Wish List items

Technical Knowledge

How well do you know your stuff? See page 2 for the “Wall Section Terminology Challenge”

Overall Presentation

When preparing your plans and drawing sheets, ensure they are neat and thoughtfully laid out so that they read clearly. See Appendix 1 for description/requirements of a presentation drawing

PART 1

20 of 100 points

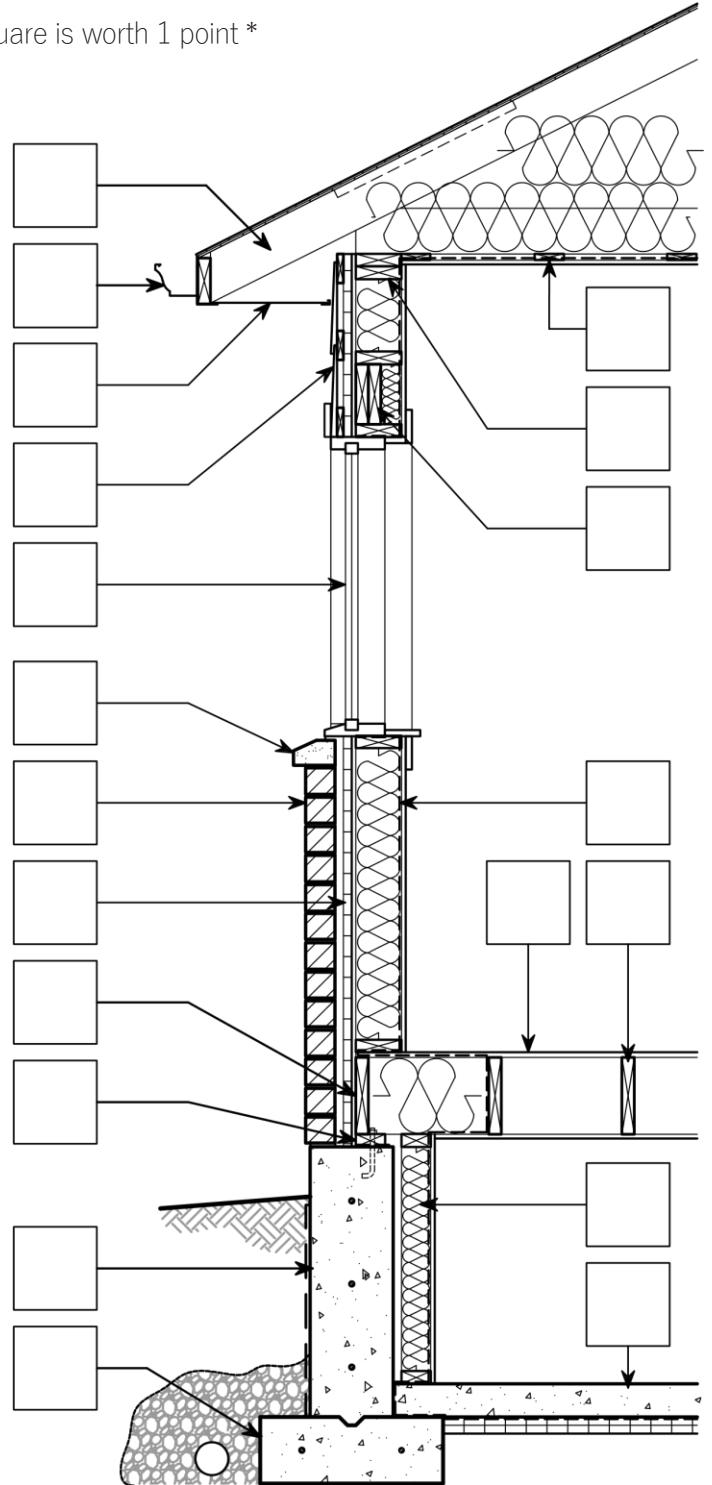
Wall Section Terminology Challenge

Place the LETTER of the building component in the BOX pointing at the correct answer.

* Complete with pencil/pen and hand in at end of day. Each square is worth 1 point *

Building Components

- A Foundation Wall
- B Wood Lintel
- C Brick
- D Batt Insulation
- E Window
- F Roof Truss
- G Footing
- H Floor Joist
- I Wood Sill Plate
- J Sub Flooring
- K Concrete Slab on Grade
- L Soffit
- M Eavestrough
- N Rim Joist
- O Double Top Plate
- P Rigid Cavity Insulation
- Q Horizontal Vinyl Siding
- R Wood Strapping
- S Precast Stone Sill
- T Vapour Barrier



Competitor #: _____

Competitors Full Name: _____

PART 2

80 of 100 points

New Family Cottage

This Challenge is to be completed at 1/4"=1'-0" Scale, printed to 11x17 paper size

Presentation Drawings – See Appendix 1

Your parents just bought a small piece of property on Lake Huron and would like to build a new cottage. The previous land owner had intentions of putting up a cottage of their own, but only got as far as the foundation. Attached is a lot plan that was given to your parents with the existing site conditions. **Design your new summer getaway based on the existing foundation footprint provided and follow your parents wish list below. Remember the view of the lake is everything!**

Wish List

- | | |
|--|--|
| <input type="checkbox"/> Large Windows Facing Lake Huron | <input type="checkbox"/> 'L' Shaped Wrap Around Deck - Facing the Lake! |
| <input type="checkbox"/> Kitchen with Island that Seats 4 | <input type="checkbox"/> Living Room with Vaulted Ceiling - Facing the Lake! |
| <input type="checkbox"/> Wood Fireplace | <input type="checkbox"/> Laundry Room |
| <input type="checkbox"/> Bedroom #1 - 2 Single Size Bunk Beds & Closet | <input type="checkbox"/> Mechanical Closet (3'-6" x 3'-6") |
| <input type="checkbox"/> Bedroom #2 - 2 Single Size Bunk Beds & Closet | <input type="checkbox"/> 3-Piece Bathroom (shower, toilet, sink) |
| <input type="checkbox"/> Bedroom #3 - Queen Size Bed & Walk in Closet-Facing the Lake! | <input type="checkbox"/> Bedroom #3 to have Ensuite 3-Piece Bathroom |

Notes & Specs

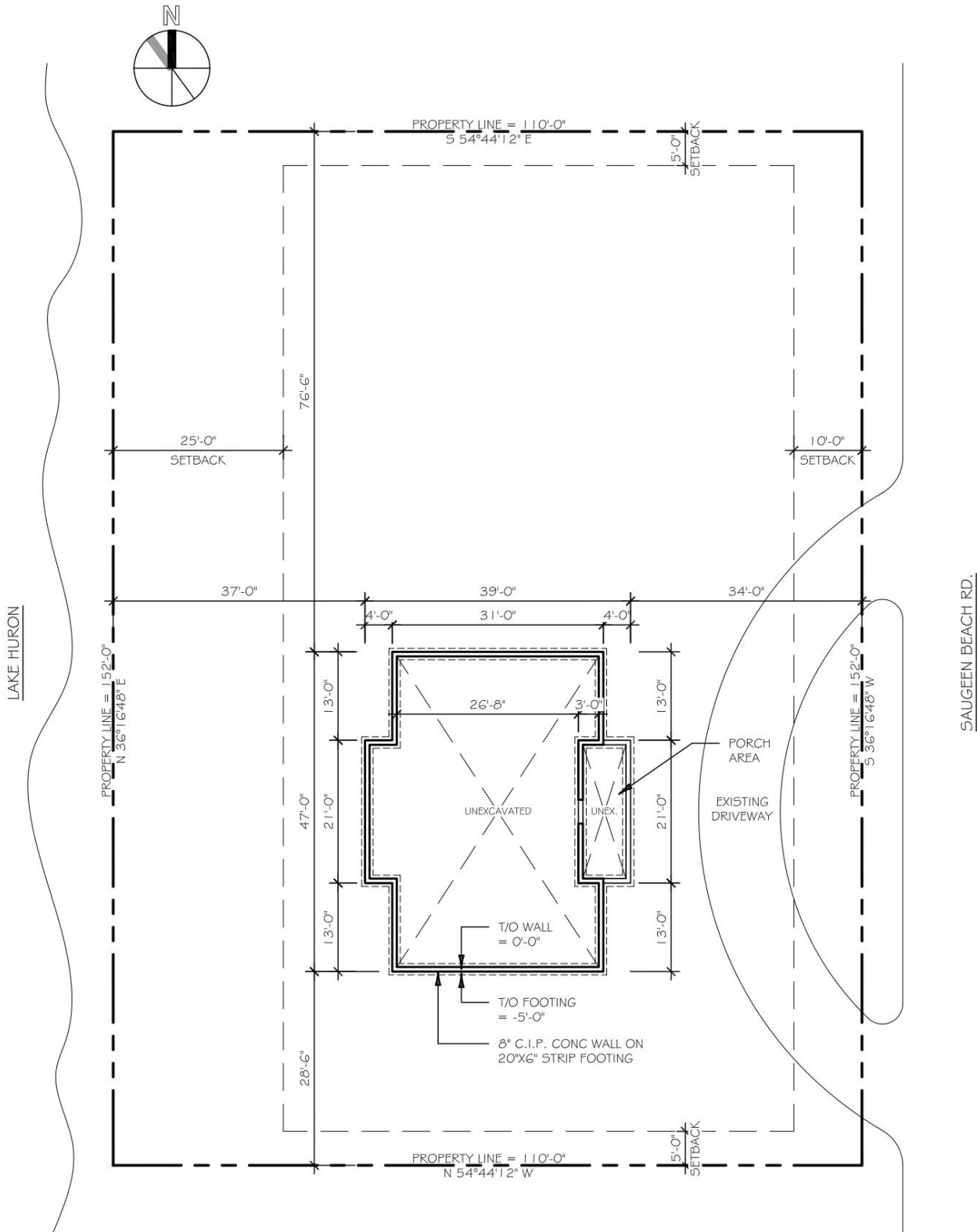
- Ceiling Height = 8'-0" minimum
- **Interior Walls**
 - o 1/2" Gypsum Board
 - o 2x4 Wood Studs @ 16" o/c
 - o 1/2" Gypsum Board
- **Exterior Walls**
 - o Horizontal Wood Siding
 - o Air Barrier
 - o 7/16" OSB Sheathing
 - o 2x6 Wood Studs @ 16" o/c with Batt Insulation
 - o Vapour Barrier
 - o 1/2" Gypsum Board
- **Slab on Grade**
 - o 4" Concrete
 - o Vapour Barrier
 - o 2" Rigid Insulation

Submission Requirements

Presentation Drawings	Points
1. Floor Plan	15
2. East Elevation	15
3. West Elevation	15
4. North Elevation	15
5. South Elevation	15
6. Cross Section – East to West	5
TOTAL	80

* See next page for lot plan *

2023 SOC - ARCHITECTURAL TECHNOLOGY & DESIGN



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SUBMISSION CHECKLIST:

To ensure you have not missed anything, please check off each box to confirm that all items have been submitted as per the document's instructions.

PART 1:

Wall Section Terminology Challenge

- | | |
|---|--|
| <input type="checkbox"/> All boxes have been filled in neatly | <input type="checkbox"/> Full Name and Competitor # has been filled out |
| <input type="checkbox"/> Any other information you think is required or might be important to include | |

PART 2:

New Family Cottage

- | | |
|--|--|
| <input type="checkbox"/> 1/4"=1'-0" Presentation Drawings Printed to 11x17 | <input type="checkbox"/> Title Block is filled out with Project Name, Sheet Number, Drawing Title, Your Name and Competitor # |
| <input type="checkbox"/> Combined PDF file of all 6 Drawings | <input type="checkbox"/> Furniture / Kitchen Cupboards / Washroom Fixtures / etc. has been Shown on the Drawings |
| <input type="checkbox"/> Room Names with Overall Interior Sizes | <input type="checkbox"/> All Exterior Materials have been hatched and labelled using either Notes or a Material Legend |
| <input type="checkbox"/> All Wish List items have been included | <input type="checkbox"/> Any other information you think is required or might be important to include |

Great Work!

Congratulations, you've just completed the 2023 Skills Ontario Competition!

APPENDIX 1 ATTACHED BELOW

Appendix 1 / Appendice 1

The following are examples of line-weights, line types, hatches, and drawing standards that are used in the industry

Voici des exemples d'épaisseurs de ligne, de types de lignes, de hachures et de normes de dessin utilisées dans l'industrie subséquentes pertinentes.

Line Weights/ Épaisseurs de ligne

Architectural line-weights and types are standardized to provide consistent interpretation of architectural drawings. Line-weights indicate importance and hierarchy on drawings, and provide depth to drawings making them easier to understand.

Line weights can be assigned in Revit when you draw detail lines (DL), filled or masked regions, or by changing line weights of an already drawn element by using the command (LW).

Les épaisseurs et les types de lignes architecturales sont normalisés pour fournir une interprétation cohérente des dessins architecturaux. Les épaisseurs de ligne indiquent l'importance et la hiérarchie des dessins et donnent de la profondeur aux dessins, ce qui les rend plus faciles à comprendre.

Les épaisseurs de ligne peuvent être attribuées dans Revit lorsque vous dessinez des lignes de détail (DL), des zones remplies ou masquées, ou en modifiant les épaisseurs de ligne d'un élément déjà dessiné à l'aide de la commande (LW).

	COLOUR	LINE-WEIGHT	LINE-TYPE
ANNOTATION	red	0.25	continuous
SYMBOLS, BREAK LINES, TITLEBLOCK	cyan	0.35	continuous
DIMENSIONS	Blue	0.25	Continuous
HIDDEN LINES	Blue	0.25	Hidden
GRID LINES	Cyan	0.35	Centre line
MATERIAL HATCHES	grey	252 or 8	Continuous
HEAVY LINE	yellow	.50	Continuous
MEDIUM LINE	Green	0.35	Continuous
THIN LINE	Red	0.25	Continuous
SHADING	252	252	Continuous
FURNITURE, APPLIANCES, EQUIPMENT	grey	8	Continuous

Material Hatches/ Trappes matérielles

Material hatches will differ between presentation and working drawings.

Hatches are extremely important as they differentiate materials when viewing a drawings in 2D. At a minimum, hatches should be shown for batt insulation, plywood, OSB, solid wood, concrete, gravel, and earth. On presentation drawings hatches indicate finish materials like flooring in plans or stucco, siding, stone, etc. in elevation.

Les hachures de matériau différeront entre la présentation et les dessins d'exécution.

Les hachures sont extrêmement importantes car elles différencient les matériaux lors de la visualisation d'un dessin en 2D. Au minimum, des hachures doivent être affichées pour l'isolant en matelas, le contreplaqué, les panneaux OSB, le bois massif, le béton, le gravier et la terre. Sur les dessins de présentation, les hachures indiquent les matériaux de finition comme les revêtements de sol dans les plans ou le stuc, le parement, la pierre, etc. en élévation.

Presentation Drawings/ Épaisseurs de ligne

This style of drawing is created to convey a message to a client or member of the public who may NOT require all the information. Material hatches will differ between presentation and working drawings.

The drawings feature strong simple lines for the built structure and lighter lines and hatches to indicate furniture, landscaping, finishes, etc. Presentation drawings typically only have overall dimensions and heights, and the room names list the overall length and width of each room. Annotation is kept minimal, with no technical call-ups.

Ce style de dessin est créé pour transmettre un message à un client ou à un membre du public qui n'a peut-être PAS besoin de toutes les informations sur les hachures de matériau différera entre la présentation et les dessins de travail.

Les dessins comportent des lignes simples et fortes pour la structure construite et des lignes et des hachures plus légères pour indiquer les meubles, l'aménagement paysager, les finitions, etc. Les annotations sont réduites au minimum, sans appel technique

