

## CONGRATULATIONS!

You've been selected by Growmore Lumber Co. to be their Architectural Designer. You'll be responsible for helping them create permit/construction drawings for their new wood framed office expansion at their family sawmill. The final design will be up to you, however, Growmore has provided some materials and sketches they'd like you to incorporate.

This project brief will provide you, with all required information and documents needed to complete this challenge. Be sure to read all information. Growmore Lumber Co. has requested the drawings be completed using <u>imperial measurements</u> & the building be built from <u>lumber</u>, produced by their sawmill.

Growmore Lumber Co. has provided you with a schematic room layout and proposed expansion isometric drawings to help aid in your completion of the drawings below:

# DRAWING PACKAGE - Arch D (24x36) PDF Submission

Designer to Choose Appropriate Scale of All Drawings/Submissions

- 1. Floor Plan
- 2. Roof Plan
- 3. Building Elevations
- 4. (1) One Wall Section Location on West Wall of Office @ Window Including Roof Overhang
- 5. (1) Section Detail Typical Foundation @ Wood Sill Plate Connection
- 6. Cast-In-Place (CIP) Concrete Material Take-Off Provide Growmore Lumber Co. with the <u>Cubic Feet</u> of Concrete they'll required for all Foundation & Footing Work.
- 7. Room Schedule with Room <u>Square Footage</u> Noted.



### **BUILDING SPECIFICATIONS:**

Growmore Lumber Co. has requested all wood products be sourced from their sawmill. Listed below, are all the products Growmore Lumber has in-stock. Please select which building materials you'll require to create your wall/roof/floor assemblies.

DIMENSIONAL LUMBER:  2x4 - All Lengths Avaliable between 6'-14'  2x6 - All Lengths Avaliable between 6'-14'  1x4 - All Lengths Avaliable between 6'-14'  6x6 - All Lengths Avaliable between 6'-14'	wood Trusses:  - Any Pitch Between 3/12 - 12/12  · 2x6 Scissor Truss  · 2x6 Fink Truss  · 2x6 Attic Truss
8x8 – All Lengths Avaliable between 6'–14'	· 2x6 Mono Truss (1 slope)
WOOD SHEATHING:	ENGINEERED LUMBER (LVL):
- 4'x8'Sheet Size Only	Laminated Veneer Lumber – Lenghts up to 20'
· 3/4" Birch Veneered Plywood	5 <sup>1/2</sup> " Deep x 1 <sup>1/2</sup> " Thick
· 1/2" Standard Plywood	9 <sup>1/4</sup> " Deep x 1 <sup>1/2</sup> " Thick
· 7/16" OSB	9 <sup>1/2"</sup> Deep x 1 <sup>1/2"</sup> Thick
· 5/8" OSB – T&G	11 <sup>7/8"</sup> Deep x 1 <sup>1/2"</sup> Thick

Growmore Lumber Co. has already purchused all the materials you'll require.

They've requested you propose the building assemblies required for the office addition.

Below you'll find all the <u>pre-purchased materials for your use:</u>

(Excluding: Concrete, Windows & Doors, Exterior Wall Finishes)

- 1. R24 Mineral Wool Batt Insulation
- 2. (R5) 1" Foil Backed Rigid Insulation
- 3. Sill Gasket
- 4. Prefinished Dark Green Steel Roofing
- 5. Prefinished Dark Green Soffit & Fasica
- 6. Air Barrier
- 7. Vapour Barrier
- 8. 1/2" Gypsum Board & 5/8" Type 'x' Gypsum Board
- 9. Drainage Board & Waterproof Membrane
- 10. 4' wide roll of Ice & Water Shield

MISSING BUILDING COMPONETS / MATERIALS TO BE NOTED IN WALL SECTION &/OR ASSEMBLIES

#### REQUIRED BUILDING ASSEMBLIES

Growmore would like a 4' high masonry or stone skirt around base of addition & remainder of wall height to be a siding product.

Interior Walls:

Exterior Wall:

Proposed by Designer (you)

Floor:

Growmore would like an insulated concrete slab on grade.

Windows and Doors:

Proposed by Designer (you)

Roof:

Growmore would like you to propose a roof construction using wood trusses above.

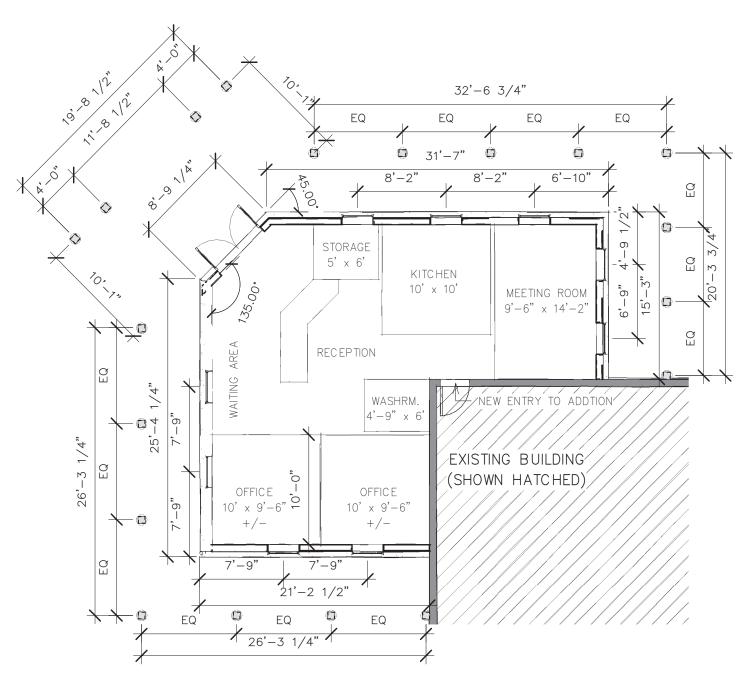
- Roof pitch is your choice.

Growmore Lumber Co. has provided you with a schematic floor plan.

They require the addition to conform to all Ontario Building Code (OBC) requirements.

## PROPOSED FLOOR PLAN:

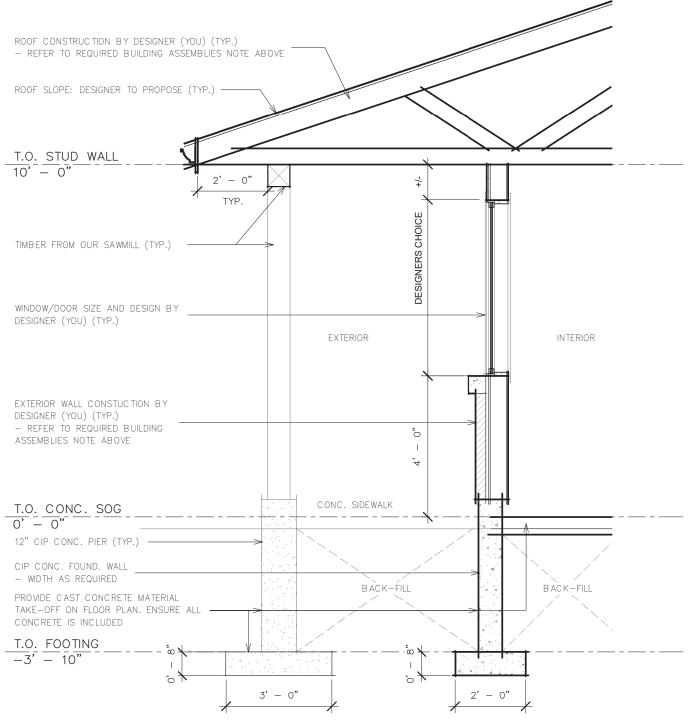




Scale = 1/8" = 1'-0"

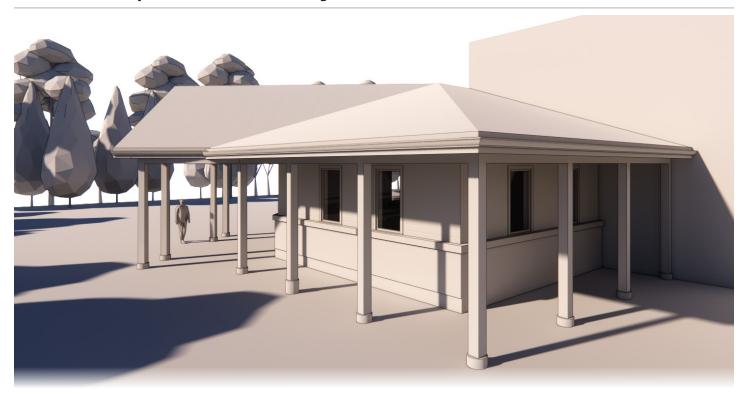
Growmore Lumber Co. has provided you with a schematic wall section. They require the addition to conform to all Ontario Building Code (OBC) requirements.

### PROPOSED WALL SECTION:

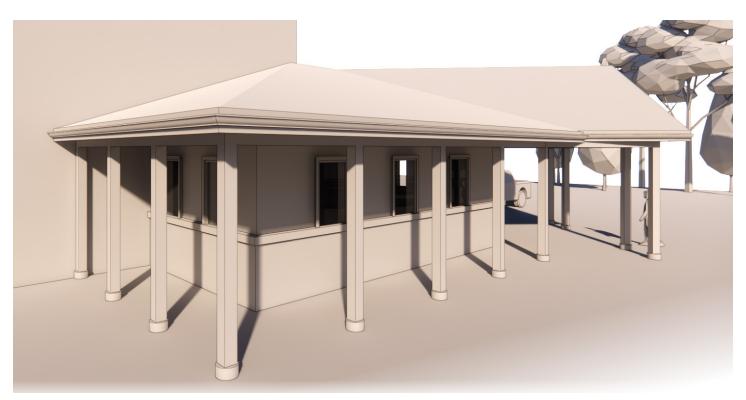


Scale = 1/2" = 1'-0"

Growmore Lumber Co. has provided you with the following massing. This is what they envision the final design of the addition to match.

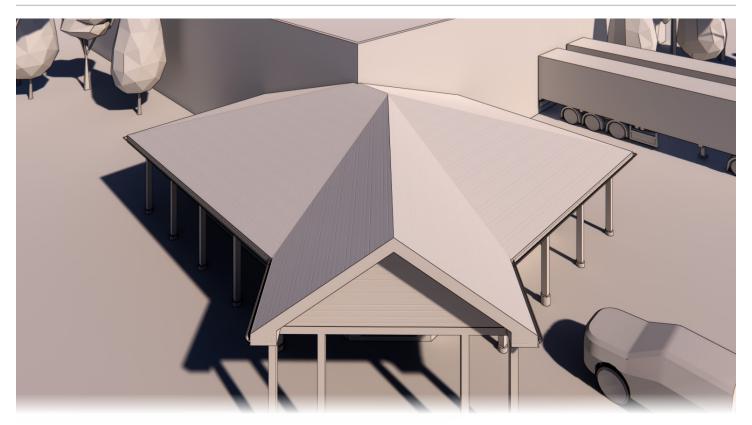


SOUTH WEST ISOMETRIC



NORTH EAST ISOMETRIC

Growmore Lumber Co. has provided you with the following massing. This is what they envision the final design of the addition to match.



#### ROOF ISOMETRIC

JUDGING CRITERIA 50 Total Points

The Judges will evaluate the project based on the following criteria:

<u>Technical Information</u> 25 Points

Technical Information is considered how accurate the drawing package is completed. This includes; understanding the Ontario Building Code, Understanding Construction Methods and Standards, & how clear and concise the information provide is – meeting industry standards

Function 15 Points

Function refers to meeting the purpose of the project. The judges will refer to the challenge description to understand its functional goals and requirements. – Be sure to include all elements requested.

Aesthetics: 10 Points

Aesthetics is the visual language of building. Competitors that demonstrate elegant detailing, well considered spatial transitions and an understanding of materials will score high in this area.

END OF DOCUMENT - SAVE YOUR WORK OFTEN!