

SkillsUSA

2015 Contest Projects

Architectural Drafting

Click the “Print this Section” button above to automatically print the specifications for this contest. Make sure your printer is turned on before pressing the button.



SkillsUSA Design, Inc.

Contestant Number

Employment Application

Applicant Information

Full Name: _____ Date: _____
Last First M.I.

Address: _____
Street Address Apartment/Unit #

City State ZIP Code

Phone: _____ Email: _____

Date Available: _____ Social Security No.: _____ Desired Salary: \$ _____

Position Applied for: _____

Are you a citizen of the United States? YES ☐ NO ☐ If no, are you authorized to work in the U.S.? YES ☐ NO ☐

Have you ever worked for this company? YES ☐ NO ☐ If yes, when? _____

Have you ever been convicted of a felony? YES ☐ NO ☐

If yes, explain: _____

Education

High School: _____ Address: _____

From: _____ To: _____ Did you graduate? YES ☐ NO ☐ Diploma: _____

College: _____ Address: _____

From: _____ To: _____ Did you graduate? YES ☐ NO ☐ Degree: _____

References

Please list two professional references.

Full Name: _____ Relationship: _____

Company: _____ Phone: _____

Address: _____

Full Name: _____ Relationship: _____
Company: _____ Phone: _____
Address: _____

Previous Employment

Company: _____ Phone: _____
Address: _____ Supervisor: _____
Job Title: _____ Starting Salary: \$ _____ Ending Salary: \$ _____

Responsibilities: _____

From: _____ To: _____ Reason for Leaving: _____

May we contact your previous supervisor for a reference? YES ☐ NO ☐

Company: _____ Phone: _____
Address: _____ Supervisor: _____
Job Title: _____ Starting Salary: \$ _____ Ending Salary: \$ _____

Responsibilities: _____

From: _____ To: _____ Reason for Leaving: _____

May we contact your previous supervisor for a reference? YES ☐ NO ☐

Military Service

Branch: _____ From: _____ To: _____

Rank at Discharge: _____ Type of Discharge: _____

If other than honorable, explain: _____

Disclaimer and Signature

I certify that my answers are true and complete to the best of my knowledge.

If this application leads to employment, I understand that false or misleading information in my application or interview may result in my release.

Signature: _____ Date: _____



CHAMPIONS AT WORK

Architectural Drafting

June 25, 2015

Handout #2

Congratulations! You received a call last week from Gary Neese at SkillsUSA Design. You are now at his office for the first interview. As he told you on the phone, this interview will be an interactive interview where he will give you a series of tasks to do in order to verify your skills level.

Mr. Neese has given you this packet of information to use during your interview. All drawings required for the interview are fully described in this packet. The specifications needed to complete the drawings are also included herein.

As you try to calm your nerves for this interview, you recall the words of your drafting instructor, Mr. Lee, "No matter what, always read and follow the directions thoroughly."

Your task today is to provide the following drawings plotted onto one sheet of paper:

- Dimensioned Floor Plan based upon the criteria contained in this packet
- Three Exterior Elevations
- Building Section
- Openings Schedule

General Information

- Use good CAD production techniques.
- You are allowed only one plotted sheet to be turned in at the end of the day.
- Dimensioning and all text should vary in size due to importance but must be legible and appropriately sized using standard architectural conventions.
- Include a title and scale for each drawing on all sheets. Include a North arrow where appropriate.
- Lineweights should vary to create an easily-read sheet of information.
- The scale of all required drawings will vary. Utilize wise sheet layout. All required drawings and additional information will fit on one plotted sheet of the size required.
- You will plot your computer-generated drawing on a 24" x 36" sheet. Construct a border of a plotted size of 22" x 34". Place a 1" x 1" square (plotted size) in the bottom, right-hand corner of your sheet. Place your contestant number in this square. Do not include any other type of titleblock or additional

information on your plotted sheet other than as described here.

-Drawings will be printed with black ink for best reproduction.

-Follow all verbal directions given and all written directions in this packet.

-Note that providing additional information not requested in this document could result in lowering your score.

-Do not include your name anywhere on any of the drawings to be judged. If your name appears on any plotted sheet you will be disqualified from the contest.

Construction Materials and Notes

-The house is single story with a hip roof with a 4:12 slope. The overhangs are 18" deep.

-The roof shall have 3/4" plywood sheathing with asphalt shingles.

-The site slopes from the front of the house to the back. The grade at the front of the house is 6" below the finished floor. Note the grade on your elevations appropriately.

-The garage floor is concrete slab-on-grade but the rest of the house has a basement. The basement walls are 8" thick, cast-in-place concrete with a 24" x 12" concrete tee footing. Assume the frost line is 36" below grade.

-All concrete floor slabs are 4" thick, reinforced, concrete on 4" of crushed rock with a vapor barrier. The basement walls are 9'-0" from the top of the slab to the top of the foundation wall.

-The floor joists are 2 x 12's and the rafters are 2 x 10's. The joists and rafters are at 12" o.c.

-Exterior walls are 2 x 4 wood studs at 16" o.c. with batt insulation and treated sill plates with 1/2" x 10" anchor bolts at 48" o.c.

-Exterior walls to be sheathed with 1/2" plywood on the exterior and 1/2" gypsum board on the interior.

-The top of plate height is 9'-1 1/2".

-Interior walls will be 2 x 4's at 16" o.c. with 1/2" gypsum board each side.

-All rooms have vaulted ceilings except the bathrooms. The ceilings in the bathrooms are 8'-0" above the finished floor.

Drawing Requirements

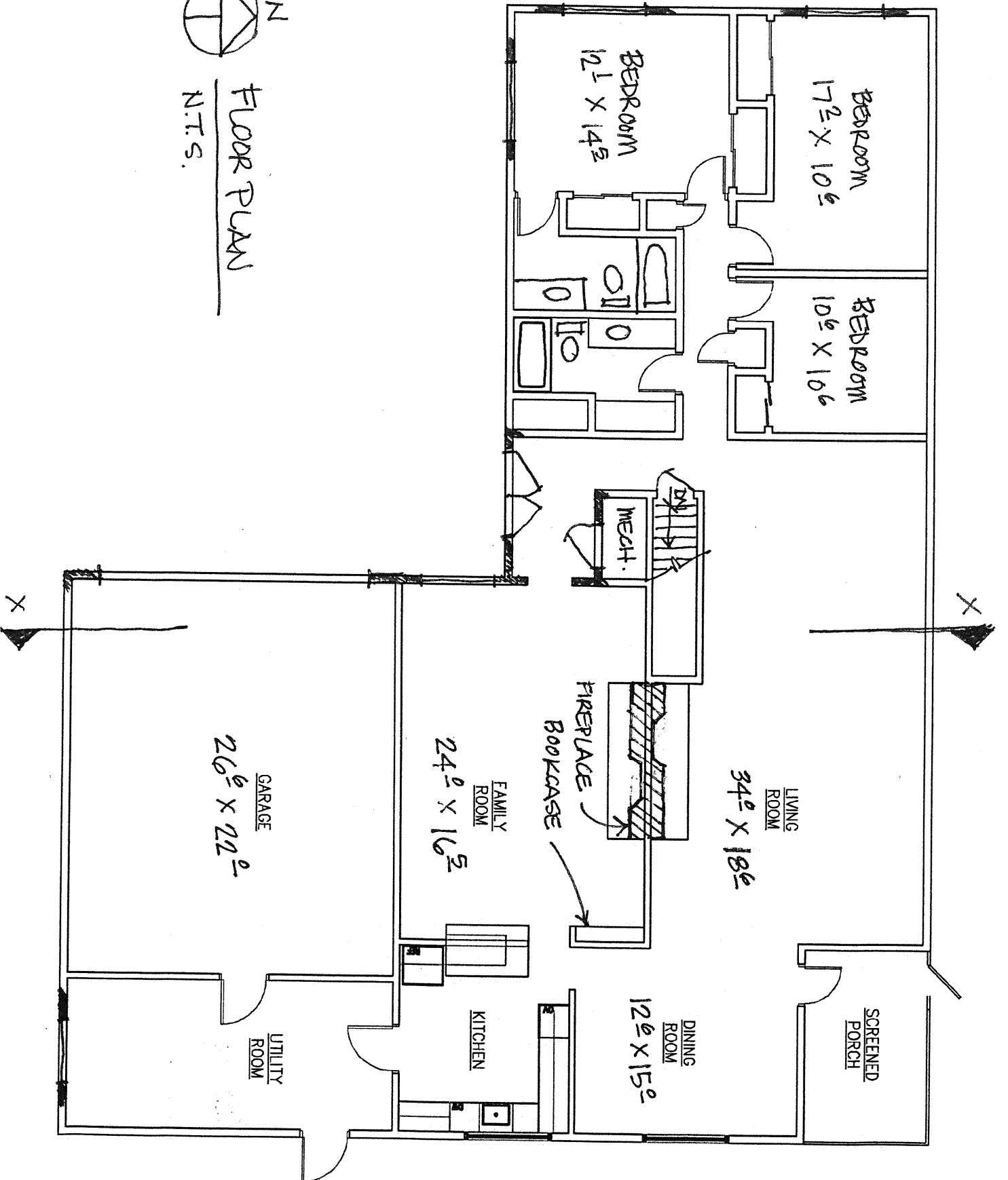
Floor Plan

1. Per the attached sketch.
2. Plot the floor plan at a scale of 1/4" = 1'-0".
3. Show all pertinent information including, but not limited to, casework, appliances and plumbing fixtures. Do not show furniture or electrical information.
4. Provide necessary interior and exterior dimensions for construction.
5. Dimension all exterior windows and doors to their centerlines.
 - a. Windows are casement windows. A few windows are shown on the attached floor plans. You may add windows where you believe they are needed. All windows shall be included in the window schedule.

- ## Exterior Elevations

- ### Building Section

[illegible]



FLOOR PLAN
N.T.S.



CHAMPIONS AT WORK

Handout #3 ADDENDUM

Mr. Neese has asked you to include a few things with your interview drawings. As part of the interview process, this will indicate to him how you react to last-minute changes.

You are to hand-draft a basement/foundation plan with a storm shelter. The drawing shall be drawn to an approximate scale of $1/4" = 1'-0"$ on the sheet of paper provided to you. You may use any tools you have to draft the basement/foundation plan. The judges will not scale the drawings, but will be looking for reasonable overall accuracy, delineations of line weights and completeness of information included.

Include all notes, dimensions, etc. to produce a complete drawing. This drawing is due at 4:00 and should be turned in along with your computer-plotted sheet.

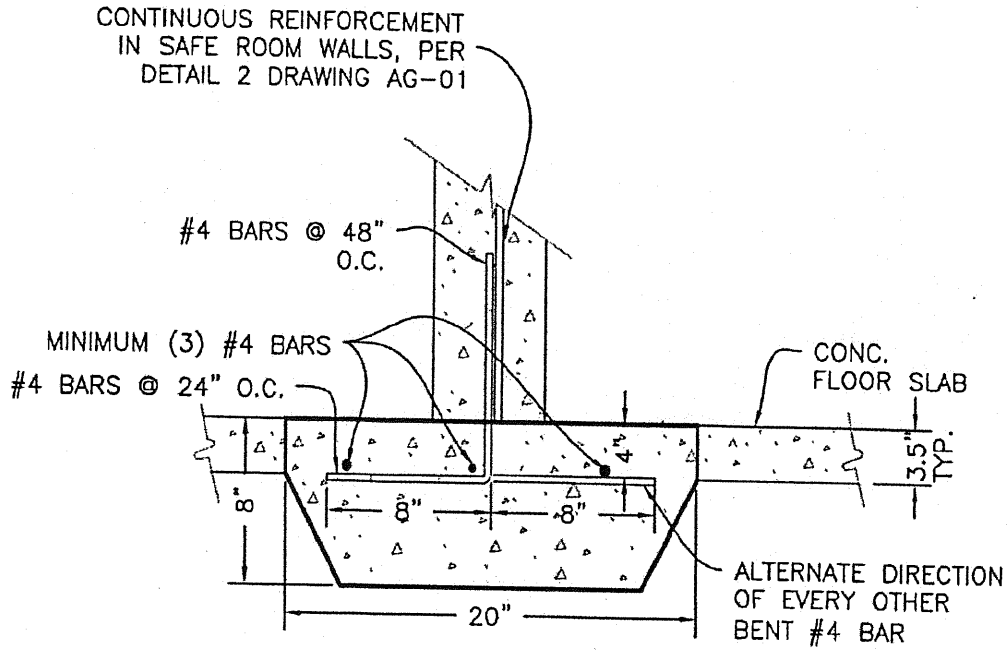
The basement shall be plumbed for a future bathroom, but is otherwise unfinished. The grade of the lot allows the basement to be a walk-out. Include one pair of 36" wide French doors and appropriate windows allowed by the change in grade. The bottom of the stairs shall have a 30" wide door.

In addition to the information provided in the packet your received previously, additional information regarding the storm shelter is as follows:

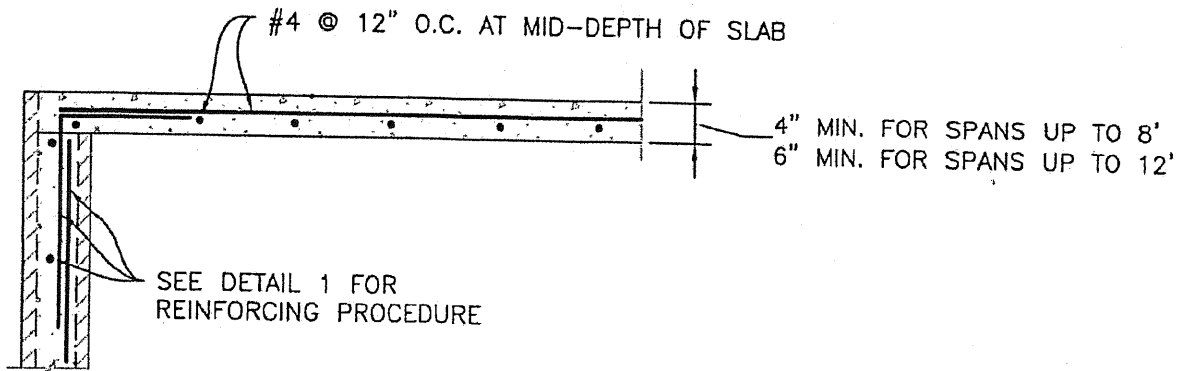
- The storm shelter will be designed and built to comply with the minimum design requirements for tornadoes as identified in the document FEMA 361 "Design and Construction Guidance for Safe Rooms".
- The storm shelter walls are to be 8" thick concrete walls doveled into the floor slab of the basement. All storm shelter walls require thickened slabs per detail 2/AG-02. The storm shelter shall have clear interior dimensions of 8'-0" x 8'-0".
- The lid of the storm shelter shall be per detail 3/AG-09. The minimum clear height of the storm shelter shall be 6'-8" above the basement floor slab.
- The door to the safe room is to be a 36" wide door with 14 gauge steel sheathing. Include this door in the door schedule.

In addition to the basement/foundation plan drawing, Mr. Neese would like you to include two dormers on the roof at the living room.

Draw a 1" x 1" box in the bottom right-hand corner of your sheet and put your contestant number in that box. This is the only identifying marking to be included on your sheet.



2 TYPICAL ANCHOR DETAIL FOR CONCRETE
WALL ON SLAB-ON-GRADE FOUNDATION
AG-02 SCALE: N.T.S.



3 ALTERNATIVE ROOF DETAIL
AG-09 SCALE: 1/2"=1'-0"

