

Eagle Scout Leadership Service Project Workbook

Scout's name: Brad

Address:

Telephone Number:

Unit No.:

District: Kittatinny District

Local council: Keystone Area Council

Unit leader's name:

Address:

Telephone No.:

Unit advancement committee person's name:

Address:

Telephone No.:

PROJECT DESCRIPTION

I plan to build a roof over the sidewalk of the Veterans of Foreign Wars (VFW) Post in Boiling Springs, PA.

What group will benefit from the project? VFW Post

Name of religious institution, school, or community: VFW

Telephone No.:

Street address:

City:

State:

Zip code:

My project will be of benefit to the group because they will have a roof over the sidewalk outside of the building. The roof will protect the sidewalk and visitors from rain, ice, and snow.

This concept was discussed with my unit leader on February 20, 2006

The project concept was discussed with the following representative of the group that will benefit from the project.

Representative's name: Mike

Representative's Title: Member of VFW in charge of project

Phone No.:

Date of meeting: April 2006

PROJECT DETAILS

Present Condition

The current sidewalk has no overhang or roof to cover it. The walkway is very long and people have to walk in and out when it is raining or snowing. Ice creates a problem during the winter because it makes the sidewalk very slippery. Building a roof over the sidewalk would be very helpful in preventing these things.

“Before” Photographs

View from parking lot

View of handicap ramp from front

View of stairs and front door

View of handicap rail from back

Plans and Designs

I plan to build a roof that will cover the sidewalk of the building and install lights in the new structure. See Figure 3 for example of the design. First the siding will be removed from the building where needed. We will measure the area where the trusses will be attached and make sure that all the siding is removed from that area. We will be using hammers and crowbars to get the siding off the building. We will also cut the siding where necessary and unhinge the siding to take off large pieces at a time. We will have to use a step ladder to reach all the siding. I will arrange with the VFW to dispose of the siding that we remove.

VFW Sidewalk Roof Plans

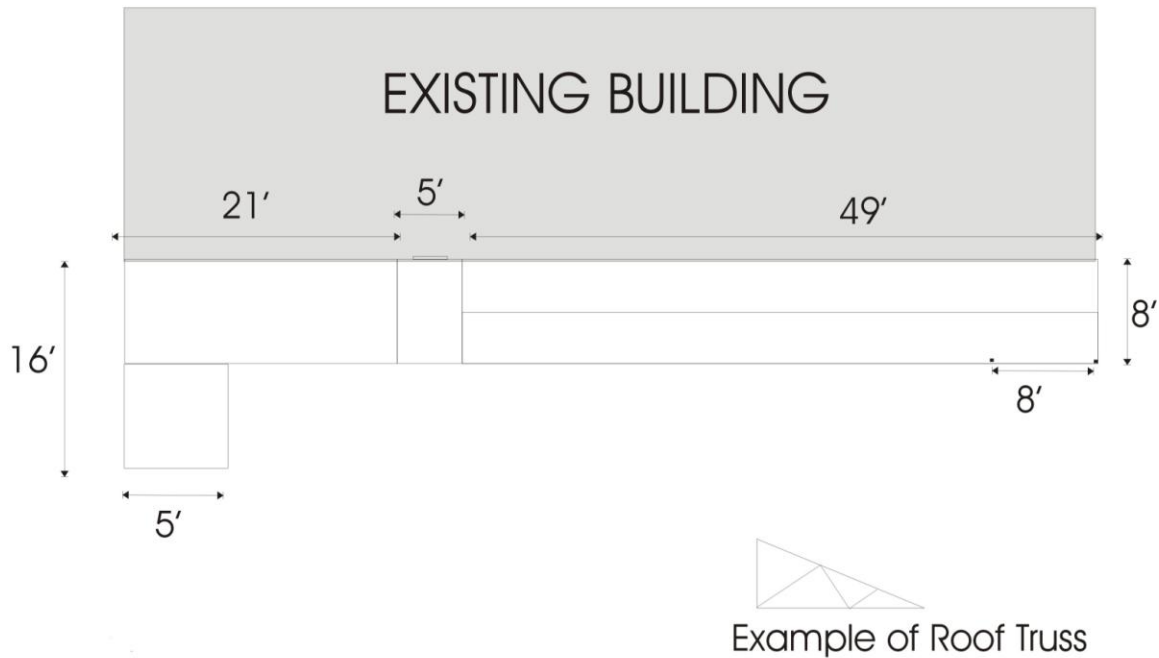


Figure 1 Project Plans

Next we will fasten pieces of wood to the side of the building that will be used as an anchor for the roof. The wood will be 2 x 6 and will be nailed to the existing studs of the building. The wood beams will be nailed level and parallel to each other at approximately eight and ten feet off the ground.

Next we plan to anchor posts into the ground to support the other side of the overhang. I will measure to make sure the posts are eight feet on center. We will drill holes in the concrete and install the post anchor (See figure 1.) with concrete anchor bolts. We will then place the 4x4 post in the post anchor and secure it with wood screws or nails.

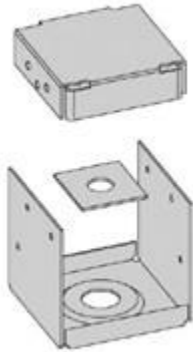


Figure 2

We will attach joist hangers (see figure 2) to the top of the 4x4 post. We will then attach the joist hangers to the 2x6 boards that we previously secured to the wall so that they are directly across from the post.

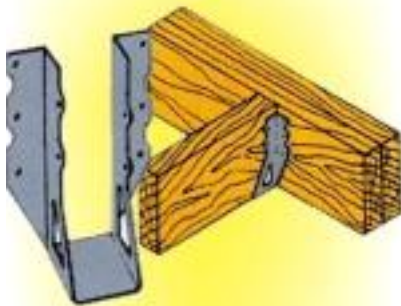


Figure 3

Then the rafters will be attached, which will already be made, to the side and to the posts by nailing them to the joist hangers. We will then attach each pair of rafters together by nailing a 2x6 board across the top of each pair of 4x4 posts. Then we will add two 2x4s between each set of rafter to provide additional support.

The roof of the overhang will be made by nailing 4x8 sheets of plywood to the top of the frame. We will place a strip of flashing against the existing wall and roll the 10x10 sheets of tarpaper out and nail them down to cover the roof. Then we will nail on the shingles to complete the roof.

We will ask the carpenters and electricians to install the soffit and fascia to the structure.

We will use white paint to paint the posts and frame.

Several of the VFW members there are building contractors and are willing to help. I will also get help from any professionals that are willing to help such as carpenters. There are several safety hazards that we will face when doing this project. Using tools, sharp objects, and heavy materials will cause hazards. I plan to have everyone using the tools wearing safety gear such as gloves, glasses, and hardhats. The boy scouts will not be using the power tools but can help with many things such as nailing, holding the rafters in place, putting up posts, painting, and carrying materials.

MATERIALS

The materials I will be using are prefabricated rafters, shingles, flashing, 4x4 posts, post anchors, back studs, plywood, joist hangers, tarpaper, flood lights, supports, electrical box, wire, fascia, nails, and soffit. We will also be using hammers, drills, and levels. I am hoping to have several of the boy scouts in my troop help me with this project. The VFW will be purchasing the materials needed to build the roof. Costs of materials are listed in the table below. We may receive up to a thirty percent discount from the prices listed below from Lowes.

Cost Estimate for Boiling Springs VFW Project			
Item Description	Quantity	Cost	Total
*8ft Prefabed Rafters	16		\$597.24
*16 ft prefabed rafter	2		
8ft 2x6 handicap rail	5	4.72	\$23.60
10x10 shingles	23	19.5	\$448.50
Flashing 14"x50'	2	27.98	\$55.96
4x4 posts	23	12.97	\$298.31
2x6x8 back studs	30	4.72	\$141.60
4.5 post anchor	23	2.99	\$68.77
4x8' plywood	34	18.96	\$644.64
Joist hanger; rafters	32	0.89	\$28.48
10x10 tarpaper	8	37.68	\$301.44
Flood lights	10	20	\$200.00
2x4x10 supports	32	4.1	\$131.20
Joist hanger; supports	64	0.89	\$56.96
Ceiling Electrical Box	10	3.22	\$32.20
Wire 12-2 100ft	1	43.35	\$43.35
Fascia	8	4.48	\$35.84
Roofing nails	2	34.99	\$69.98
Nails -50 lb box	1	27.95	\$27.95
Soffit 12" X 12ft	60	10.98	\$658.80
TOTAL COST ESTIMATE			\$3,864.82

*estimate from Ridge Ply Rafters (including delivery) all other costs from Lowes

Costs determined by Kurt 4/12/2006

TOOLS

The tools I will be using include hammers, drills, ladders, screwdrivers, saws, levels, measuring tape, extension cord, wire cutters, crowbars, chalk-line, shovels, pain, paint brushes, and the safety gear listed above. I plan to use my own tools and borrow tools from people helping me work on the project.

Step by step instructions

I plan to group the workers into several different small groups to do specific tasks.

The first group of workers will be about two people, adults and scouts, and they will rip out the siding of where the rafters will be with hammers and crowbars. The second group will be nailing the horizontal supporting beam to the wall. Then a larger group will be drilling the holes and placing the posts into the surface. Another group will then nail the rafters to the support beam and the posts. I plan to do all of this in the first day.

The second day we will be completing the framework and begin nailing the shingles on. Then we will attach the soffit and fascia to the roof. If there is remaining time we can begin installing the light fixtures and the electric box.

If we do not finish by then I can use a third and fourth day to finish whatever needs to be done to complete the structure. If it is raining or there is another reason that we cannot work on these days the project will be rescheduled for one week later.

August 12

10:00- Arrive at worksite and prepare materials

10:15- Begin stripping shingles off the side and nail support beams on to the side

11:00- Make holes for posts and pour concrete

1:00- Secure posts and begin cutting wood to correct size

2:00- Lunch break

2:30- Attach rafters to posts and side of the building

3:30- Finish assembling the frame and begin to lay shingles

4:00- Clean up worksite and leave

August 13

10:00- Arrive and prepare materials

10:15- Finish nailing shingles

11:00- Install lights and wires

12:00- Nail soffit and fascia to roof and side

1:00- Lunch Break

1:30- Finish soffit and fascia

2:00- Final details of the roof are finished

3:00- Clean up site and leave

Transportation

Several of the Boy Scout leaders have trucks and large SUV's to transport the workers and tools. I can also drive to pick up anyone that can not be picked up at the same times as anyone else. I plan to use about two trucks and two cars to transport all the workers and materials.

Adult Supervision and Assistance

There will be Boy Scout leaders or a minimum of two adults at the worksite at all times when we are working. There will also be adults in every car that is being used to transport materials and workers. I will be supervising the scouts and make sure that they are all taking the correct safety precautions when working. I will also make sure that all the tasks are completed on time. Several members of the VFW are contractors and carpenters and have volunteered to assist with building the structure. They will conduct any work requiring the use of power tools and any technical construction, beyond the skill level of the scouts. I hope to have about twelve workers (six scouts and six adults) at the site each day. There will be a first aid kit at the work site at all times. We will bring lunch and water to the site for all the workers each day and the workers will be allowed to use the restrooms in the VFW.

Permits

The troop is submitting a tour permit to the Keystone Area Council to cover this activity. The VFW has applied for and received a building permit from the South Middleton Township.

Approval Signatures for Project Plan

Project plans were reviewed and approved by:

Religious institution, school, or community representative:

_____ Date: _____

Scoutmaster/Coach/Advisor:

_____ Date: _____

Unit committee member:

_____ Date: _____

Council or district advancement committee member:

_____ Date: _____