

Planning the project

Now that you have “sold” your concept, it is time to develop it into a formal proposal. This is the planning phase. You will do research until you know how to accomplish the project. You will translate the results into a project proposal. Your proposal must “stand alone” to demonstrate to others who are not familiar with your project the benefit to the organization, that you have thoroughly researched and planned your project, and that you understand how to accomplish it. Someone else should be able to pick up your proposal and know how to accomplish your project. In doing this you will develop a clear understanding of all aspects of your project and become conversant about the details. You will plan and propose your project using the *Project Details* section of the Eagle Scout Leadership Service Project Workbook. Again, you are encouraged to prepare for revisions by using the workbook in electronic format.

Planning.

What is a plan? The plan sets your project objectives. It is the design for your project.

Utilize various resources that are available to research your project. Contact local nurserymen or horticultural experts for advice on landscaping. They will have advice and books about appropriate plants for your application and climate, and may suggest several plants to consider. If you are building a footbridge, contact local contractors for advice on construction techniques and size of materials. If your project is an access ramp, you may find sample plans on the Internet or in books at the library. Remember, however, that the plan has to be your plan. You must adapt any plan that you find to your own situation. Make your own sketch to adapt the design to your site. Draw your own scaled or dimensioned site plan, noting your project’s orientation and relationship to other site features. Include information such as existing buildings, distance from roads or parking lots, and boundary lines or other limitations constraining the design. Use photos to illustrate the current conditions. Always use a caption with a photo to explain what it is.

Your design may have to fit within a framework of accessibility or safety requirements. All applicable governmental requirements and permits must be met. This is for the safety of those working on and using your project. If people will stand or walk on it, or occupy it, or if it involves electricity or plumbing, chances are it will require a building permit. If in doubt, contact the Carroll County Bureau of Permits and Inspections (410-386-2674). Ask to speak with Mr. Jay Voight, who is a registered Carroll District Scouter and also a permit inspector. Mr. Voight will conduct an engineering review of proposed structures, such as bridges, playground equipment, or shelters, to make sure they are safe. He can advise on the depth of footings and size of lumber required for a span. He can provide other safety guidelines, such as the need to recess bolts on playground equipment, and can determine if your project requires a permit. The benefiting organization is ultimately responsible for complying with government requirements. As project lead, you will research and inform them of compliance requirements, so they can execute the necessary applications. You must follow the guidelines as you execute the project.

Soliciting ideas and advice is OK; that is part of learning how to do your project. Utilizing someone else’s detailed plan is not. You cannot execute an engineering plan that you find in a book or on the Internet, or that the benefiting organization provides you. You must plan the project. Getting general criteria about what the benefiting organization wants is OK. However, if the benefiting organization is trying to tell you how to do the project, specifying “what and how,” this taints the project so that it is not your plan. You should get another project. There is a

difference between utilizing resources and executing a plan that someone else has developed. Planning is a means of demonstrating leadership. You should be collecting information, suggestions, and advice, then evaluating the alternatives and making the final choices. You should be able to describe the trade-offs you made to arrive at your decision.

Development.

How do I make the plan work? You have described what you wish to accomplish. Now you will develop the project to determine how to accomplish it. You will decide how to implement your plan to achieve your objectives. You will need to consider a number of planning elements:

- What materials will I need? Where will I get them? How much will I need and what will it cost? You will compile a detailed list of materials needed to accomplish the project, using your plan drawing to determine sizes and quantity. You will use this list to figure the cost of materials for your project. The most straightforward way to estimate the cost is to do comparison shopping, listing the lowest prices and best places to buy the materials you need. You might inquire about store policy regarding discounts or donations to Eagle Scout projects, to improve your estimate, but you cannot request donations until your project is approved. You will have to acquire all of the materials on your list, either by purchasing them or through donations. Perhaps the benefiting organization, a business or an individual has offered to donate some materials. You will list the value of donated materials in the Income/Expense report in your Eagle notebook.
- How much will the project cost? The costs for both materials and resources that you must purchase or rent contribute to your overall cost. You need to determine a budget for your project. It should be constructed and presented in a way that shows your understanding of the project. For example:

Materials:	Quantity:	Cost:	Total:	Where Obtained:
6"x6" landscaping timbers, 12 ft.	10	\$25 ea	\$250.	Corner Building Supply
6"x6" landscaping timbers, 8 ft.	8	\$16 ea	\$128.	Corner Building Supply
Metal spikes	36	\$.99 ea	\$36.	Corner Building Supply
Screened topsoil 1" x (15x20) ft	1 cu yd	\$20/cu yd	\$20.	Farm & Home Store
Grand total:			\$434.	

Instead of:

Landscape ties	18	\$360
Dirt	1 yd	\$20

Note: Be careful with your volume conversions. 1 cu yd = 3 ft x 3 ft x 3 ft = 27 cu ft

- How will I pay for the project? Will I ask for donations or do a fundraiser? Your benefiting organization may have set aside funds or materials for the job. If they offer to make those funds or materials available to you, it is OK to accept them, provided that support does not come with specifications on how to use them. You may not solicit

payment from them, nor do the project and present them with a bill. The more likely thing is that you will have to find means of financing your project. Allowing your parents to fund your project demonstrates very little leadership, independence, and initiative on your part. A Scout is thrifty. A Scout works to pay his way. The most common ways to finance a project are by requesting donations and discounts on materials, soliciting donations from individuals, businesses or organizations (other than the benefiting organization), and by doing fundraisers. Don't forget to explore the possibility of grants for environmental conservation or school improvement projects. When requesting donations, present yourself in uniform, with a letter of request. Many businesses must have a letter to process your request, and having one ready creates an impression of courtesy, respect and "professionalism." Be sure to follow up with letters of thanks for donations. Individuals and businesses may need these for tax purposes. You will need them for your Eagle Notebook. If you do a fundraiser, be sure to file a Unit Money-Earning Application with the Baltimore Area Council (form 34427, available at <http://www.scouting.org/filestore/pdf/34427.pdf>). Indicate that the fundraiser is for an Eagle project. The application must be approved before you do your fundraiser; you will include the approved copy of the application in your Eagle notebook. Do not wear your uniform while conducting fundraisers as this creates the impression that BSA is endorsing a product. Raffles or games of chance are not Scout-appropriate means of fundraising. You should have a backup plan in case you do not get enough funds for your project from donations or your initial fundraiser. Develop a "plan B" and include it in your timeline. The letters of request for discounts and donations, grant applications and award letters, and of course the follow-up thank-you letters, should be included in your Eagle notebook. If you generate funds in excess of the cost of your project, you will donate the excess to the benefiting organization.

- What are my manpower needs? When will I need helpers and how many? How will I get help? Do I need adults too? You need to figure how many people are needed to accomplish your project, and for how long. You may find it helpful to make a list or table of tasks, showing the number of workers and time needed for each task. This will help you not only to determine your manpower needs, but also to set your timeline. You don't want to have too few people to accomplish the job, but you want to be able to utilize those who come. Using a sign-up sheet will help you to manage the number of people you have at a given time. You should have designated spaces for phone number and email address on the signup sheet, so that you can contact your helpers if a work day must be rescheduled, or to make reminder calls. Have the signup sheet on site at your project, in case you have to make an emergency phone call. You may need to find persons with special skills for part of your project. You may need adult help to run equipment or use power tools. You may need adults to help with transportation or to serve as technical advisors. You should have youth helpers do as much of the work as possible, because your leadership of youth is more credible than for adults. Adults should not be the major portion of your work force. Avoid having adults do large portions of the work that youth can do. Family members are permitted to help too, but their involvement should be small relative to that of your peers. Consider your troop, school, church, or sports team as sources of helpers. Don't forget the help you may need for your fundraiser.
- What if I need to use power tools for my project? BSA National Council policy now permits the use of most power tools by youth members, with appropriate training and supervision. In accordance with BSA policy on age appropriate activities, Troop 719 has

the following policy on the use of power tools by its youth members: ***Persons under age 18 may use power tools only if:***

[a] they have received a mandatory safety briefing from a person proficient in using the tools immediately before the activity, and
[b] tools are used under supervision of adults who are proficient in using the tools.
Troop 719 permits the use of the following low torque, hand held power tools by youth members after instruction and under supervision of a responsible adult:

- screwdriver
- drill
- sander (other than belt sanders)
- jigsaw
- rotary tools (e.g., Dremel)

Power tools not on the list may be used only by persons age 18 and over at Troop 719 sponsored activities, including Eagle projects. ***Any adult may stop the use of power tools if he or she witnesses what they deem to be unsafe use.***

- Are there other resources I will need, such as tools, electricity, or transportation? How will I obtain them? Many projects require the use of both common and specialized tools. You will have to determine whether you own them, or can get them on loan. Otherwise you may have to rent or purchase them, which will impact your budget. Persons within the Troop or friends of your family who are in the construction trades are often good resources for transportation of heavy items, and also for earth moving or construction equipment. If your project requires the use of power equipment, you may need electricity. Check on the availability of utilities or whether you need a generator.
- What is my timeline? Have I allowed time for project approvals? Have I allowed time to obtain donations and for fundraising? How long will it take to do the project? Do benefiting organization or troop activities conflict with my project dates? What is my backup plan for weather and other delays? Your timeline is not just for project day. It lists the date for each major step of your project from ***approval*** through ***completion***. At first your timeline may be notional, with dates relative to an event such as “project approval.” In your proposal, you must put it on the calendar, using specific dates. The idea behind the timeline is to keep your project “on track.” You need to allow realistic and adequate time for approvals, fundraising, and acquiring materials. If your project requires a person with a special skill, you may need to set aside time for them to complete their job before scheduling a work crew. If a building permit is required, you may have to allow time for inspections. Many timelines slide because inadequate time is allowed for project approval. Requests for revisions are not uncommon. Each revision adds a week or more for review, plus your turn-around time. If revisions are requested, you may need to revise your timeline. Review and approval at the District level may take 1 – 2 months. You can minimize this impact by following these guidelines and attending carefully to the planning details.
- How do I create a safe working environment? Almost every Eagle project contains some potential safety hazards. Anticipate the hazards and develop a plan to keep your helpers safe. This is part of demonstrating leadership. Consider the materials list, the tools list, and the environment of the project. Are heavy materials to be moved? Will cutting or power tools be used? Will I be digging? Is the site slippery or wet, or are there electrical hazards? Plan to have first aid supplies on hand and access to emergency services (e.g., by cell phone). Be sure drinking water is available. Arrange to provide food for the workers (but not at project expense), or have them bring their own. Provide access to rest

rooms if possible. Remind your workers to wear gloves and work boots for most work activities. Plan for adequate numbers of people or use machinery for heavy lifting. Arrange for a safety briefing to be given by a person who is proficient in the use of any approved power tools that will be used by youth members. Have adults on hand to supervise the use of power tools. To locate underground utilities, call Miss Utility (800-257-7777) at least two business days before digging or excavating. Identify the safety issues, and what you will do to mitigate them. Plan and provide a safety briefing to your work crew before commencing work.

- How should I organize my project? How do I demonstrate leadership? After considering all of these elements, you have probably concluded that your project will have at least three phases: planning and development (which you are doing now), fundraising, and doing the project. Depending on your project, you may see other sub-phases, such as obtaining and staging materials, doing site preparation work, or engaging professionals to do specialized jobs (e.g., installing an electrical breaker sub-panel or grading a site). This involves “thinking through” how you will accomplish the project. You need to exercise leadership throughout your project; you are the one who will make it happen. You must demonstrate leadership in
 - planning your project and developing it for implementation;
 - exploring alternative ways to do the job, and deciding how to proceed;
 - researching options for materials
 - comparing costs, and determining what materials you need and how much;
 - determining what tools and other resources you need;
 - determining how many helpers you need, and when;
 - researching and complying with government requirements;
 - developing a financial plan and deciding how to fund the project;
 - setting a realistic timeline for the project;
 - purchasing and arranging for timely delivery of materials;
 - arranging for transportation;
 - planning for the safety and comfort of your helpers;
 - obtaining helpers in the right numbers at the right time;
 - preparing the site and insuring efficient use of your volunteers’ time;
 - directing, instructing, and managing your workers to accomplish the project;
 - dealing with change and unanticipated obstacles.

Document your leadership by keeping records. Record your progress using photos and by keeping a narrative journal. Record trade-offs you made and why you chose your course of action. Keep a daily time log of your activities and activities of others contributing to your project. Record to whom you talked and when. Record the amount of time invested in the project by you and others (to the nearest 15-minute increment). Remember that the hour you spend talking with someone is also an hour spent by that person. Keep receipts to document costs. Keep sign-up sheets, letters soliciting donations and letters of thanks. Photocopy checks you receive. Keep a copy of your approved Unit Money-Earning Application. Keep a photo record of your project. Take *before* and *after* photos of your project site, and photograph youth helping to do your fundraiser and project. ***You will need these records for your report.***

This is the plan. You won’t make a design drawing later, or figure out what materials you need, or come up with a timeline after your proposal is approved. You are not planning to make a plan. This is it!

Review your proposal.

Developing your proposal took a lot of time and hard work. You have attempted to demonstrate your leadership, planning, and organization. Take a moment to review your proposal to be sure you have included all required elements, using the checklist below. Those who must approve your project will. If they cannot find or recognize the required elements, they will ask for explanations and revisions. One of the most important things you can do to expedite the process is to be careful, complete, and organized in writing your proposal.

Project Details: (planning and development of your project)

- I. Provide a description of the present conditions and what you plan to do (Include your own plan. Photos of current conditions, scaled/dimensioned project drawings, and site plan are helpful.)
- II. Methods used to accomplish the project
 - A. Demonstrate your organization, research, decisions you made, and a clear understanding of project details. (Show that you are the authority. Show that you did the planning.)
 - B. Show how you will provide leadership.
- III. Materials required for the project
 - A. List of materials (breakdown of materials and amount of each needed; show how computed)
 - B. Where will you obtain the materials? (retail stores, individuals, organizations, benefiting group)
 - C. Cost (Show how computed. Did you obtain quotes, compare prices? Did you prepare a budget?)
 - D. How will you fund the project? (donations, benefiting organization, fundraiser => application)
- IV. Other resources required for the project
 - A. List of resources (tools, electricity, transportation, etc.)
 - B. Where will you obtain the resources? (self, friends, Scout unit, benefiting organization)
 - C. Is disabled access, building permit or other governmental approval required?
 - D. Was an engineering review conducted for “structures?”
- V. Project helpers
 - A. Number of people needed and when (personnel requirements based on workload; adults needed?)
 - B. Where will you get helpers? (Scout unit, friends, school, church, family; professional needed?)
- VI. Timeline (Check for conflicts – worksite activities and volunteer availability, e.g., troop outing.)
 - A. Set realistic dates. (Use calendar dates. Allow time for approvals and fundraising.)
 - B. Have contingency plans for delays/conflicts. (“Plan B;” inclement weather, second fundraiser)
- VII. Safety considerations
 - A. Hazards involving the worksite, materials, tools, and weather. (slippery/wet conditions, cutting or power tool handling, use of work boots and gloves, provision for heavy lifting, adults needed, Miss Utility, sun/rain protection)
 - B. Availability of first aid supplies and access to emergency services. (cell phone – 911)
 - C. Water and food. (Who will provide? Will workers who neglect to bring their own have access to it?)
 - D. Availability of restroom and wash facilities.
 - E. Plan and provide a safety briefing before commencing work