Development of Fiscal Year 2018 Annual Work Plan for Facilities Sustainment, Restoration and Modernization Projects

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Abstract — Planning is an integral part of every aspect in life. This article discusses the development of an annual work plan in a Directorate of Public Works. The goal is to explain the importance of having a plan established and its relationship with funding availability. The annual work plan prepared contains 151 projects, of which 38 were presented for approval to execute in Fiscal Year 2018. With the initial amount of funds available, only the top 6 projects could be funded. Typically, additional funds are received towards the end of the Fiscal Year. the annual work plan facilitates the decision-making process as to what projects to execute when money becomes available.

Key Terms — Annual Work Plan, Funding, Public Works, Validated Project List

INTRODUCTION

This project is developed in the Directorate of Public Works (DPW) of an American military installation in the country of Belgium. One of the main responsibilities of a DPW is to maintain facilities in good working order for soldiers to be able to perform their work effectively. For this reason, every year, the DPW is required to execute sustainment, restoration and modernization projects on installation facilities. Due to the fact that the amount of work that can be done in facilities is tied to a budget, developing an annual work plan is valuable in order to make informed decisions on the projects to be executed as well as to use resources available efficiently.

Having a plan offers many advantages in every aspect of life. The objectives of this project include the following:

 Facilities sustainment, restoration and modernization project list validated by installation tenants: An effective annual work

- plan needs valid requirements with accurate cost estimates.
- Prioritized annual work plan approved by senior leadership: An annual work plan approved by senior leadership will provide guidance to DPW staff to make effective use of available resources by executing projects in accordance with leadership priorities and established policy and regulations.

In order to accomplish these objectives and achieve an effective annual work plan, a methodology is required to lay out a series of steps to follow to get to the end state of the project. The first step is to identify all projects that could possibly be executed during fiscal year 2018. Once projects are identified, these will be validated and prioritized in a collaborative effort by installation tenants and the DPW. Priorities provided by tenants will eventually be combined with senior leadership priorities to compete for funding. A DPW internal project review board will follow with the intent of discussing all validated projects and identify which of them will be submitted for senior leadership approval. In addition, the project review board will ensure cost estimates are accurate, and that methods of execution and funding type are properly identified. Finally, the annual work plan will be briefed to the installation Commander in order to obtain approval to execute. Once annual work plan is approved, it will be communicated to DPW staff and stakeholders involved in the sustainment, restoration and modernization process, implementation of plan will begin.

LITERATURE REVIEW

The following topics were extensively reviewed to have a solid foundation to develop an effective annual work plan.

Importance of Project Planning for Project Success

Planning is an integral part of everything people do on a daily basis. Whether it is preparing a vacation or formulating a multi-million-dollar budget, planning is critical in order to make smart decisions and use available resources efficiently. Research as well as the experience of project and program managers has confirmed the importance of planning and that time spent on planning activities will reduce risk and increase project success [1]. On the other hand, it is safe to assume that lack of planning leads to a high probability of project failure. Failing in a project is something that every person or organization will try not to face. If poor planning has led to failed projects, then perhaps trillions of dollars have been lost globally [1]. A well thought planning phase can make all the difference between a failed and a successful project.

In addition to proper planning, another important element in any construction program is to have standard processes in place to ensure projects are executed the same way every time and ensure that all applicable laws and regulations are followed. Projects of a routine nature and which meet obvious needs are scheduled within the normal budgeting process of a public works agency. On the other side, most major engineering projects must undergo a comprehensive series of studies and approvals before they are authorized and implemented [2]. This applies to almost all the projects in the annual work plan which this article discusses. Most of these projects require technical and financial assistance from other international agencies. Even though this process could be very complex, with standard operating procedures it can be a manageable process.

Managing a Project List with a Constrained Budget in an International Environment

More often than not, a construction program is restricted by the amount of funding available. Given that funding has a direct relationship with the number of projects that can be executed at any given time, it is important to prioritize work in order to use available funds in the most efficient manner. If sufficient funds are available, all needs can be addressed when they occur [3]. In real life, however, and for most public infrastructure programs there is a limited or constrained budget. In such cases, priorities have to be set on what action or work will be undertaken, where, and when. Budget allocation becomes an important tool when facing constrained budgets.

In the American military installation, the employees are a mix of American and European. This mix requires leaders to manage teams of members from different countries. Leaders need to have the ability to use different techniques to effectively manage project teams that are formed with members of different countries. Businesses that extend globally operate in a highly dynamic environment regarding market structure, suppliers, and regulations [4]. Managers have to deal with differences in languages, time zones, organizational and personal cultures, policies, regulations, business processes, and political climate. These complexities call for specialized work processes, new concepts of technology and knowledge transfer, and more sophisticated management skills and project leadership.

DEVELOPING THE ANNUAL WORK PLAN

The following methodology was used in the development of the annual work plan.

Identify projects for possible execution in Fiscal Year 2018

The first step in the annual work plan is to determine the current status of the projects submitted to the DPW. All the projects received by DPW are tracked in a software that serves as the

system of record for the organization. If a project is not available in this system, it does not exist. The purpose of this action is to obtain a list with all the projects that are possible candidates for execution in Fiscal Year 2018.

Once the list was pulled from the system of record, a total of 562 projects was obtained. From this total, 411 have a status of either completed or in progress. Figure 1 shows the current situation of the project list. As Figure 1 shows, only 27% of the projects from this list will be considered for inclusion in the annual work plan. Projects completed or in-progress will not be considered in the annual work plan for the current year because they have already been funded.

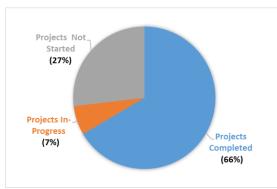


Figure 1
Status of Projects in System of Record

The number of projects for inclusion in the annual work plan is now 151. These projects were grouped by customers, and the project lists were sent for customer review and validation. Figure 2 shows a breakout of projects by customers where it can be seen that approximately 30% of the list is for projects for welfare and recreation.

At this point in the project, meetings were held with all customers shown in Figure 2 with the purpose of discussing all their projects and develop a final list which shows priorities and estimated costs. During these meetings, decisions such as adding and/or deleting projects, changing project scopes and acquisition strategies were made. Once all the meetings were completed, a preliminary annual work plan with a draft project list will was prepared.

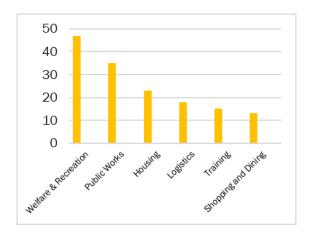


Figure 2 Projects for Inclusion in Annual Work Plan Customer Breakout

Review, Validation and Prioritization of Project List

The validated project lists obtained from meetings with customers is now consolidated into one list that will be used to hold the Directorate of Public Works internal project review board. This board is responsible for the following:

- Prepare Final Project List: Identify projects that are going to be submitted for senior leadership approval,
- Accurate Project Descriptions: Ensure all projects have accurate cost estimates, clear explanation of project scopes and valid justifications.
- Execution and Funding: Determine methods of execution and funding type. In the organization where this project is being developed, there are two options when it comes to ways to execute projects; these are using in-house labor and materials or contracts. In addition, ensuring correct funding type for each project is critical as this will directly impact the amount of work that can be accomplished.

RESULTS

From the list of 151 projects, the DPW internal project review board prepared the final annual work plan to be presented to the installation Commander. The final list contains 38 projects with an estimated

total of approximately \$27 million. Table 1 shows the top 10 projects with estimated costs.

Table 1
FY18 Annual Work Plan Top 10 Projects

Priority	Project Title	Estimated Cost
1	Installation Water Lines Design	\$450,000
2	Perimeter Fence Light Replacement	\$1,750,000
3	Shopping Center Sidewalk Repair	\$81,000
4	Hotel Parking Entrance Barrier Replacement	\$50,000
5	Build Parking Lot Buildings 5 and 120	\$675,000
6	Repurpose Building 147 to Admin Use	\$2,500,000
7	Repair Road in Front of Building 6	\$600,000
8	Replace Roof in Building 104	\$800,000
9	Replace Power Substation Roof	\$45,000
10	Install Sprinkler System in Building 4	\$850,000
	28 Additional Projects	\$19,924,000
	Total:	\$27,725,000

The budget available in Fiscal Year 2018 for Sustainment, Restoration and Modernization projects is \$5,500,000. After developing the annual work plan, the decision is to fund projects 1 - 6 as they are the highest priorities for the DPW internal project review board. Table 1 shows a red line below project 6 to demonstrate the cut line of project funding for Fiscal Year 2018. Typically, additional funds are received towards the end of the Fiscal Year, and by having an annual work plan prepared, quick decisions can be made as far as which projects to fund when additional money is available. At this point is just a matter of going down the priority list.

CONCLUSION

The final list of 38 projects with a total of \$27,725,000 was presented to the installation Commander to obtain his approval for execution. The presentation lasted approximately one hour and

at the end approval was obtained to start executing the plan. Minor changes to the order of priority were result of this briefing, however, no changes were made to the recommended top 10.

After finishing all the activities discussed in the article, it can be concluded that the project objectives were fully met. In addition, the project was completed on time. The first objective, which was to obtain a validated project list from installation tenants was achieved. A list of 151 validated projects was obtained from 6 installation tenants. The second objective, which was to obtain approval from installation senior leadership was also achieved as mentioned in the previous paragraph.

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