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Tyrone Williams (left) and Will Spence (right), master planners from U.S. Army Corps of Engineers' Savannah District, locate electrical tie-in points while developing plans for the new trigeneration plant at U.S. Army Garrison Natick, Mass. Photo by George Jumara. Page 26

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Embracing planning in the research environment

by Mark L. Gillem

"Master planning," according to Lt. Col. Kari Otto, "is the lynchpin of any organization's strategic plan and vision." As the garrison commander for the Natick Soldier Systems Center, Mass., Otto knows the value of planning. She has made sure that NSSC has a current and compelling plan.

"A good master plan," she said, "excites the work force at all levels. It shows them that leadership acknowledges and is actively addressing infrastructure shortfalls and clearly demonstrates there is a future plan for the installation."

The U.S. Army has numerous labs like NSSC that are on the cutting edge of scientific research in a range of fields. From high-technology weapon systems to longer-lasting pavements, from more effective body armor to more nutritious meals, Army scientists and engineers are using their skills to enhance mission effectiveness.

Over the last year, two of these Army labs, NSSC and the U.S. Army Cold Regions Research and Engineering Laboratory, have embarked on planning processes that will result in new real property master plans that can more effectively guide short- and long-term development. Just as each lab's researchers and scientists need to stay on the leading edge of their career fields, the labs' leaders have recognized that their master plans need to be on the leading edge of sustainability and energy efficiency.

Participants in the NSSC Planning Open House look over a scale model of the installation. Photo by Dustin Capri

Process

At both labs, the approach has integrated intensive user participation in the planning process. Stakeholders at the installation, including Directorate of Public Works engineers, lab leadership, staff and research scientists have been involved in every aspect of plan development. They crafted their planning visions, analyzed their sites, developed and evaluated alternatives, and helped identify preferred alternatives. This type of involvement is a different approach to planning.

On many installations, planning experts are hired generalists who conduct interviews and site assessments, prepare alternatives and make a recommendation to leadership. In some cases, these outside consultants set up shop at the installation and facilitate a charrette, which brings stakeholders into the design process in a more substantive way. But most charrettes are little more than formal review meetings and scheduled interviews that inform the design team as they prepare alternatives while on site. Stakeholders are not generally involved in the actual design.

This process results in plans that may be technically correct but not emotionally connected. In other words, installation personnel rarely take ownership of the plans, regardless of how good they are.

NSSC

NSSC has fully embraced the new approach to master planning. Through a collaborative process, the installation has developed a plan that accommodates significant new development in a sustainable way. Roughly 25 percent of NSSC personnel participated in its first planning open house, and more than 100 participants attended the public planning forum. The plan that was developed makes room for new research space, creates shared community parks and calls for more on-post Family housing to reduce the environmental and economic costs of long commutes.

"From a strategic communication perspective, a good master plan is invaluable as it clearly delineates the true requirements of an installation," Otto said.

Having this information is crucial for the Office of the Assistant Chief of Staff for Installation Management and the Services and Infrastructure Core Enterprise, both of which advocate on behalf of the installations, she said. It demonstrates to all levels of leadership tremendous analysis and validation of legitimate requirements.

CRREL

Located in Hanover, N.H., CRREL is one of the U.S. Army Corps of Engineers' research labs. Scientists at CRREL focus on extreme weather and related research, and they need facilities that can support this unique mission.

The collaborative planning process at CRREL, which started last fall, includes representatives from across the lab, the town of Hanover, the local school district and nearby Dartmouth University. This process is part of Headquarters, USACE's focus on planning education using a practicum model through which stakeholders gain valuable education in the planning process and use their new knowledge to help prepare their own master plans. This approach empowers stakeholders and helps them understand the value of planning on their own installation.

"This master planning process for CRREL represents an essential ➤

Acronyms and Abbreviations	
CRREL	Cold Regions Research and Engineering Laboratory
NSSC	Natick Soldier System Center
USACE	U.S. Army Corps of Engineers

Area development plans: Tools for synchronizing infrastructure

by Jerry Zekert

You have heard the horror stories of Military Construction projects not being built in the same year as their supporting infrastructure projects. Anecdotes abound of mission complexes built without associated community support facilities. How can this happen?

Synchronization of project execution is one of the toughest challenges installations face. No matter how the financial situation is defined, all who are involved in planning, programming designing and constructing facilities for Soldiers must make sure that the comprehensive facilities package is provided.

The area development plan is a critical tool that helps Directorates of Public Works synchronize development of a specific locale on an installation. An ADP is a mini-master plans that identifies the total built-out plan for a particular district and defines a plan for its development.

At Fort Carson, Colo., stakeholders discuss the development of an ADP. Photo by Mark Gillem, Urban Collaborative

Jerry Zekert
Photo by Mary Beth Thompson

The plan is holistic. It enables the installation to consider all of the factors that need to be supported, including such comprehensive issues as sustainability, energy efficiency, low-impact development, environmental stewardship, infrastructure and transportation requirements, and anti-terrorism and force protection criteria.

The ADP creates a built-out plan for the maximum capacity of the district that defines both the short-term mission requirements and the long-term capabilities of the district. The plan also develops a holistic capital investment strategy that identifies by phases the comprehensive suite of projects that need to be executed together to make the plan complete. It provides a map and identifies specific siting of individual projects. This graphic portrayal gives program managers instant identification of all the critical projects that need to be funded as a package to meet the needs at a particular time.

Acronyms and Abbreviations	
ADP	area development plan
AT/FP	anti-terrorism and force protection
MILCON	Military Construction

ADPs can be used as tools not only at the installation but also at higher headquarters. They can help programmers make sure investment decisions are adequately defined to ensure all needs are met.

Advice for ensuring that ADPs are successful, invaluable tools follows.

- Make sure the ADPs focus on the long-term built-out capability of the area rather than just the short-term mission needs. Think of ADPs as mini-master plans that define the long-range development strategy for individual districts. This method allows requirements to be nimbly changed over time.
- Ensure all district stakeholders participate in ADP formulation. The ADP is their roadmap for long-term development of their area, so it is essential they participate from the beginning. These stakeholders include experts from the sustainability, environmental and AT/FP communities.
- Make sure the ADP has a defined vision linked to the installation master plan. ➤

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milestone in sustaining our collaborative culture through learning the importance of planning," said Robert Davis, CRREL's director, "We have all come to better appreciate the potential role participants can play in developing a new vision for our installation through a process that has incorporated input from all levels and functions in our organization, as well as from the outside community."

This input has led to an evolving plan that incorporates the latest global trends in lab design and responds to the local community's needs.

Advantages

"An installation that can clearly and consistently articulate its strategic vision and the infrastructure requirements necessary to meet that vision is more likely to garner the funds necessary to execute their long term requirements," Otto said.

Another benefit of the processes used at NSSC and CRREL is that, because the stakeholders participated in the actual design effort, they have taken active ownership in the process, which will facilitate long-term support for and the relevancy of their master plans.

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