

Improving flow and capacity at the Rec/Park Structural Maintenance Yard

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A partnership between the City Performance Lean Team and the Recreation and Parks Department

The Recreation & Parks Department's Structural Maintenance Yard (SMY) is in San Francisco's Golden Gate Park. What once were barns and stables for horses are now shops and working space for the skilled trade staff teams who care for City parks. In the Fall of 2017, 14 team members representing every skilled trade collaborated on ways to improve their physical work spaces.



WHY CHANGE IS NEEDED

The Structural Maintenance Yard had accumulated many unwanted and outdated items that clutter the valuable storage and working spaces, including broken equipment, unused supplies, and scrap materials. Change was needed because:

- (1) Haphazard placement of equipment and materials limits staff capacity to access these items and delays deployment of material, equipment, and personnel;
- (2) Obsolete, damaged, or excess materials are stored in the SMY without a clear policy on disposal. Materials take up available space, prevent staff access, cause additional deterioration, and prevent reorganization;
- (3) Poor use of space creates extra movement, extra tasks, delays to work completion, and underutilized space.



Team members identified and illustrated ownership for all areas of the yard



Representatives from each trade shop mapped a spaghetti diagram of their dispatch routes, indicating the bottleneck at the entrance/exit



The team highlighted major pain point areas for flow in movement or obstructions of space

ROOT CAUSES

The team took inventory walking through every shop and common area in the Yard. They noted where improvements could be made and identified projects to consider adding to an action plan. The team used large maps of the Yard to clarify ownership of each storage space, identify bottlenecks to staff movement, and agree on common frustrations.

The project team used "fishbone" diagrams to analyze the root causes of these issues and brainstormed actions to clean and reorganize the Yard. The team determined that:

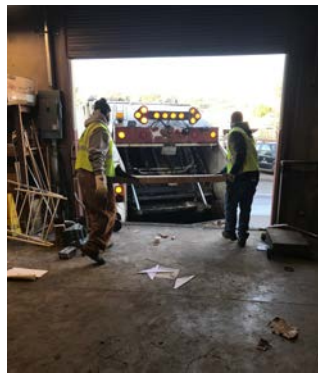
- Past budget issues have made it difficult to purchase what is needed when it is needed and created a culture of buying and holding onto items longer than necessary. Staff keep items that are still in salvageable condition for potential future projects and bring back materials found out in the field back to the Structural Maintenance Yard.
- There was no accountability or proper storage of items due to the lack of a current policy for disposal that gives authority and permission to get rid of unusable materials.

SOLUTIONS

Some of the project team's ideas were small-scale efforts specific to an individual shop, while other larger ideas required support from executives and cooperation between shops. Bigger ideas included:

- A commitment from every trade shop to cleaning up at least one space within the next 3 months to free up an estimated 1868 square footage of space (short-term)
- Scheduling a yard-wide clean-up day within the next two months to do an initial sweep of unwanted items and materials (short-term)
- Moving the Mowing Shop out of the SMY to create better flow or utilize the space for another function (long-term)
- Moving the debris bin to open up parking spaces and avoid garbage trucks blocking yard access (long-term)
- Creating a new yard entrance to reduce traffic bottlenecks and create a safe exit in the event of an emergency

Ryan Jackson (Electric) teaching the team about 5S



SMY Staff cleaning the Warehouse during clean-up day

Bryan Williams (Consolidated Shops) organizing materials



RESULTS

In the months immediately following the event, Rec and Park staff have already made significant progress, including:

- Organizing a yard-wide clean up day on December 14th, 2017. SMY cleared out 74.46 tons of excess materials and recyclable waste, and 10,000 sq. ft of reusable space in the Boneyard
- Developing and implementing a Disposal Policy with standards for items and equipment to be removed from the yard
- Documenting how parking is utilized in the Yard, and by whom
- Turning in old, broken equipment that was taking up valuable storage space in the yard to the auction house to receive credit for future equipment and use the space in another function
- Cleaning out large truck bays and exchanging spaces between shops to use storage space in a more efficient manner

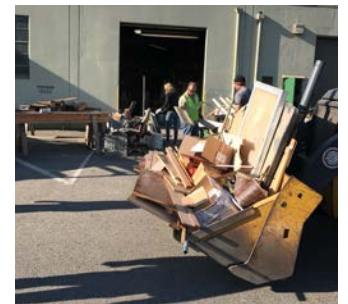


L: Clean-up of the warehouse with a pile of retrieved old toys and materials



L: Historic lamp posts found in the warehouse

R: Carpenter shop removing materials for recycling



Recreation & Parks: Structural Maintenance Division
Controller's Office, City Performance

For questions about this project, contact:
Ryan Hunter (CON) ryan.hunter@sfgov.org
Carlo Celi (REC) carlo.celi@sfgov.org

Project Team:
Structural Maintenance

Carlo Celi
Bryan Williams
Raul Alarcon
Thomas Metrulas
Herbert Catedral
Martine Hickey
John Cunha
Sean McFadden
Jerry Wong
Johnny Wong

Kevin Teahan
Ryan Pieri
John Ascariz

City Performance

Marnie Purciel-Hill
Jenessa Rozier
Ryan Hunter



For more information, visit cityperformancleanprogram.weebly.com