
WALSH
IN ASSOCIATION WITH
Brown AND Caldwell
environment LA SANITATION
CITY OF LOS ANGELES
DBIA
WESTERN PACIFIC REGION
DESIGN-BUILD INSTITUTE OF AMERICA
Getting to GMP
for the Hyperion Advanced Water Purification Facility Design Build Project
THE future of water IS HERE
DECEMBER 7, 2021

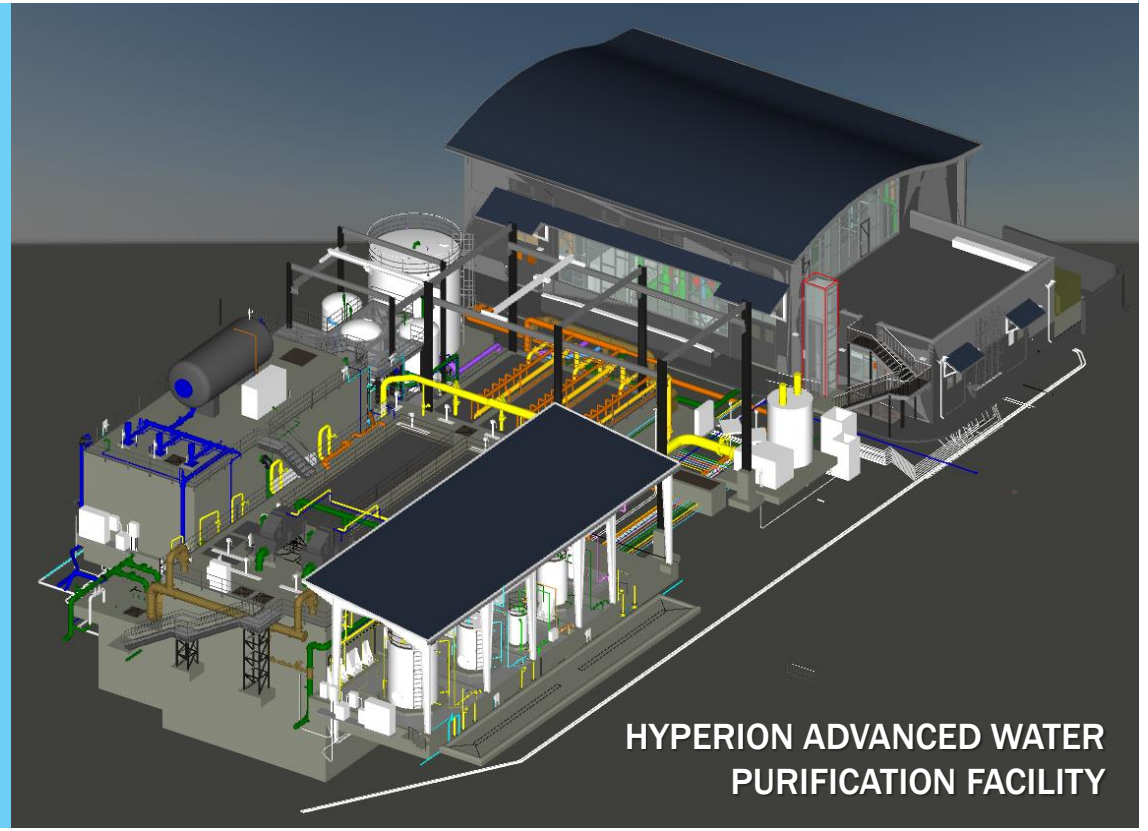
Agenda

01 LASAN vision

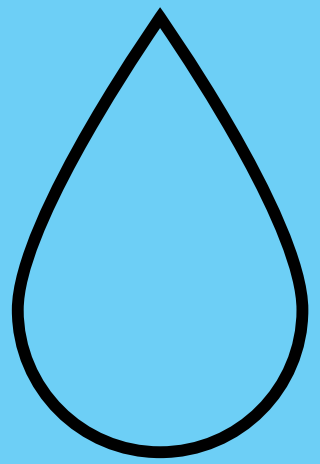
02 HAWPF project introduction and overview

03 GMP development

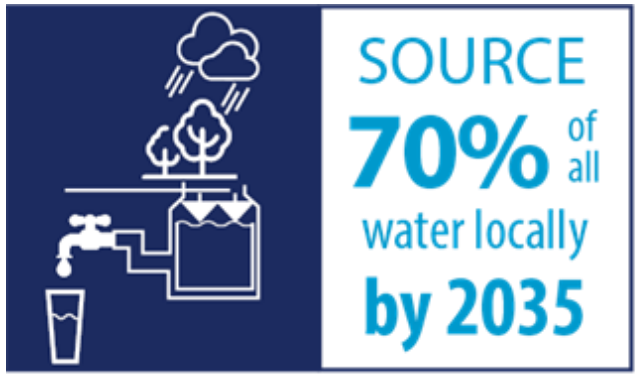
04 Q&A



LASAN Vision



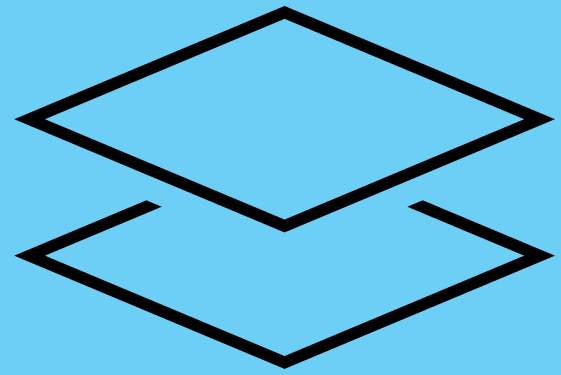
LA's "Green New Deal" Sustainability Plan



Hyperion Advanced Water Purification Facility (HAWPF)

- Goals
  - 1.5 mgd for LAWA and HWRP
  - Proof of concept for 100% water recycling
- Project Partners

HAWPF Project Introduction and Overview



Phased Implementation

Phase 1

- Site preparation
- Site investigations
- Design: BODR through 70 percent
- GMP negotiation *more on this soon!*

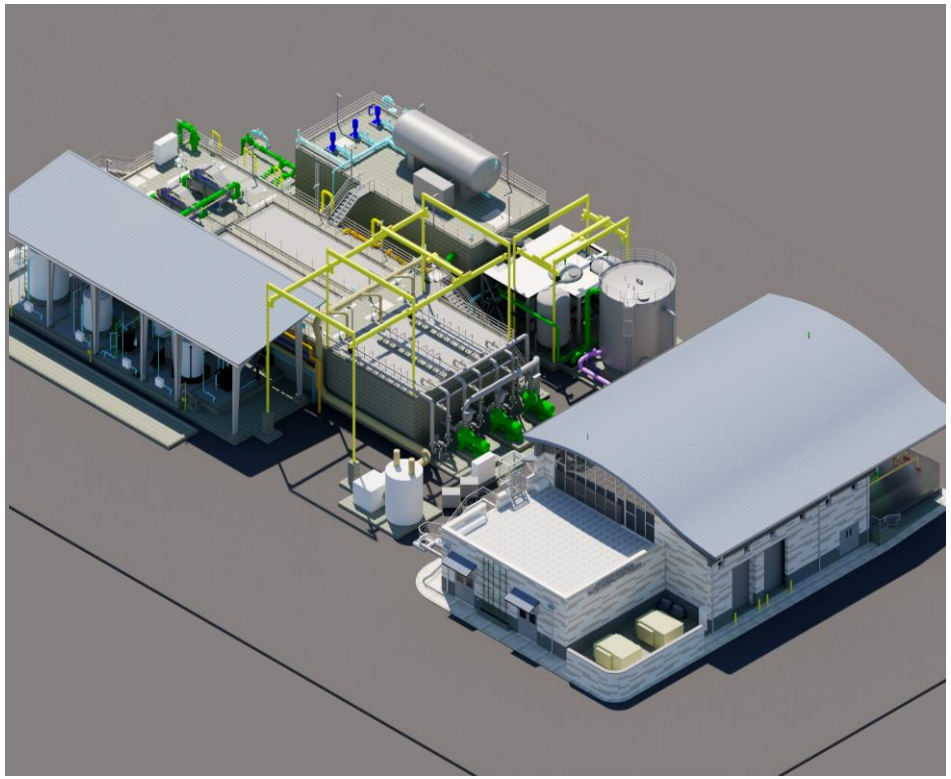
Phase 2

- Complete design
- Obtain permits
- Construction
- Performance validation

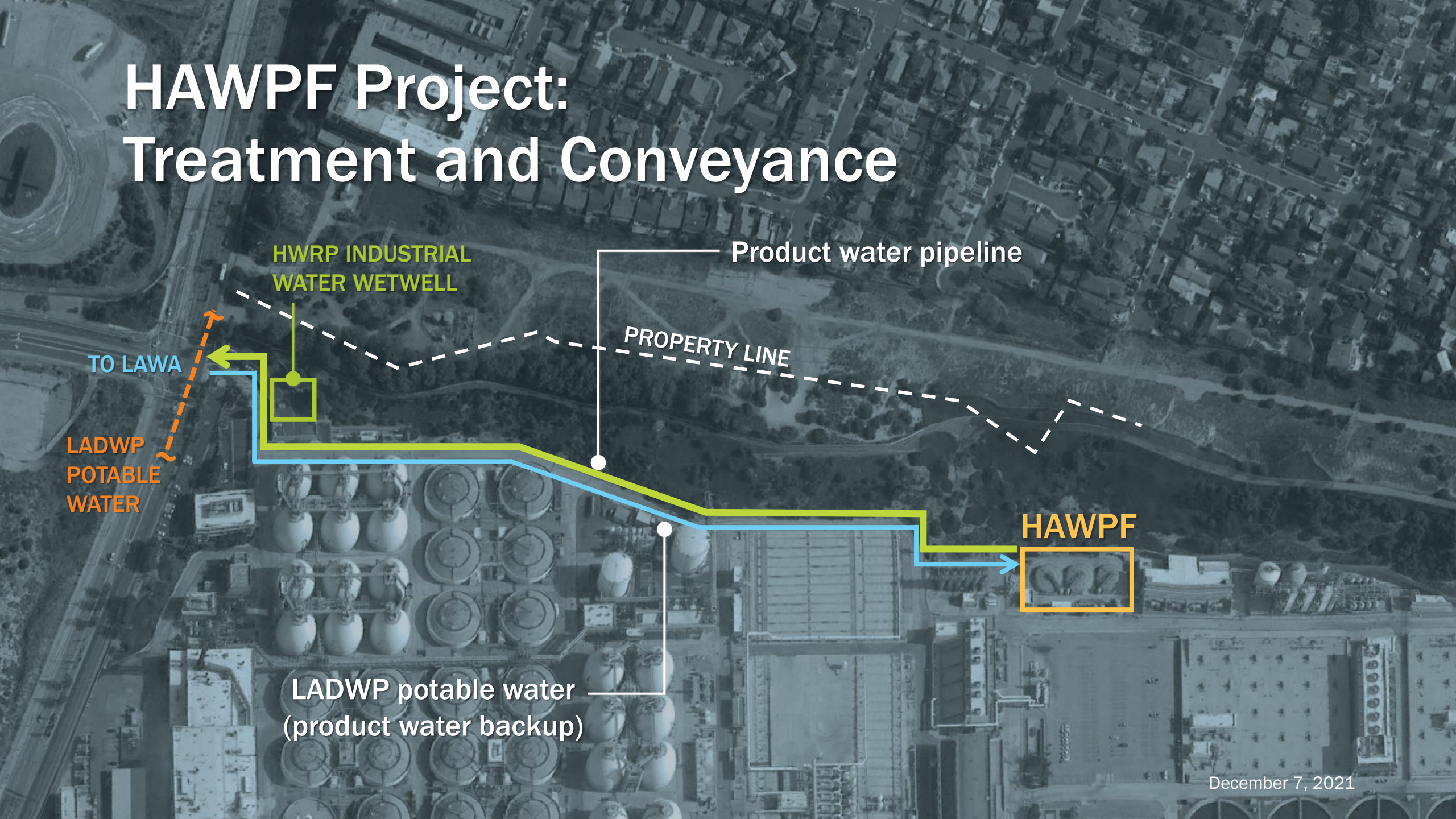
HAWPF Starting Point

HAWPF – Notable Design Features

- 1.5-mgd “poof of concept” facility
  - Permitted for Title 22 non-potable reuse
  - Designed to meet potable reuse requirements with validation
- Multiple end uses
  - Hyperion Water Reclamation Plant (HWRP)
  - Los Angeles World Airports (LAWA)
- Designed for coastal environment
- Spatial constraints

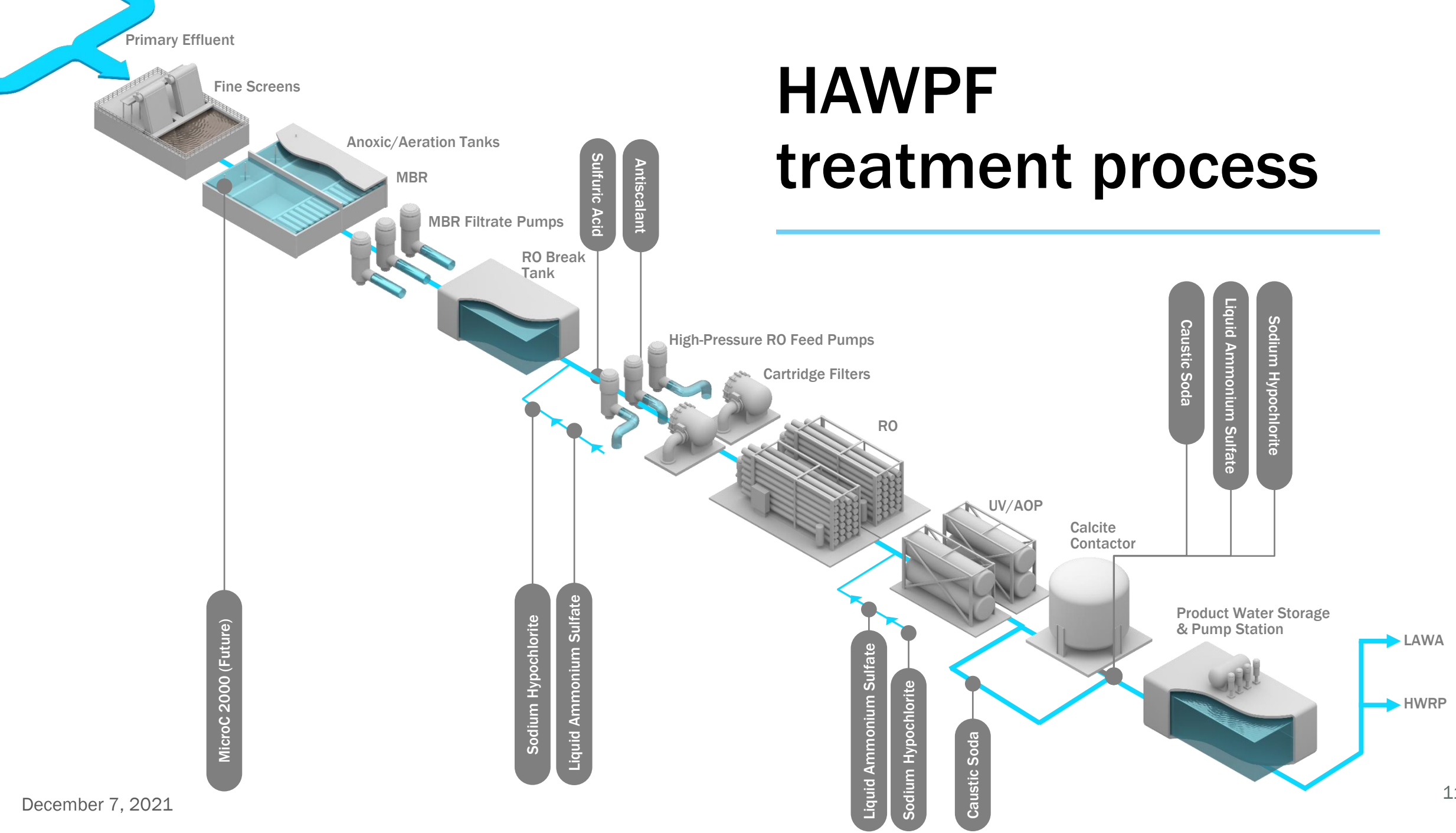


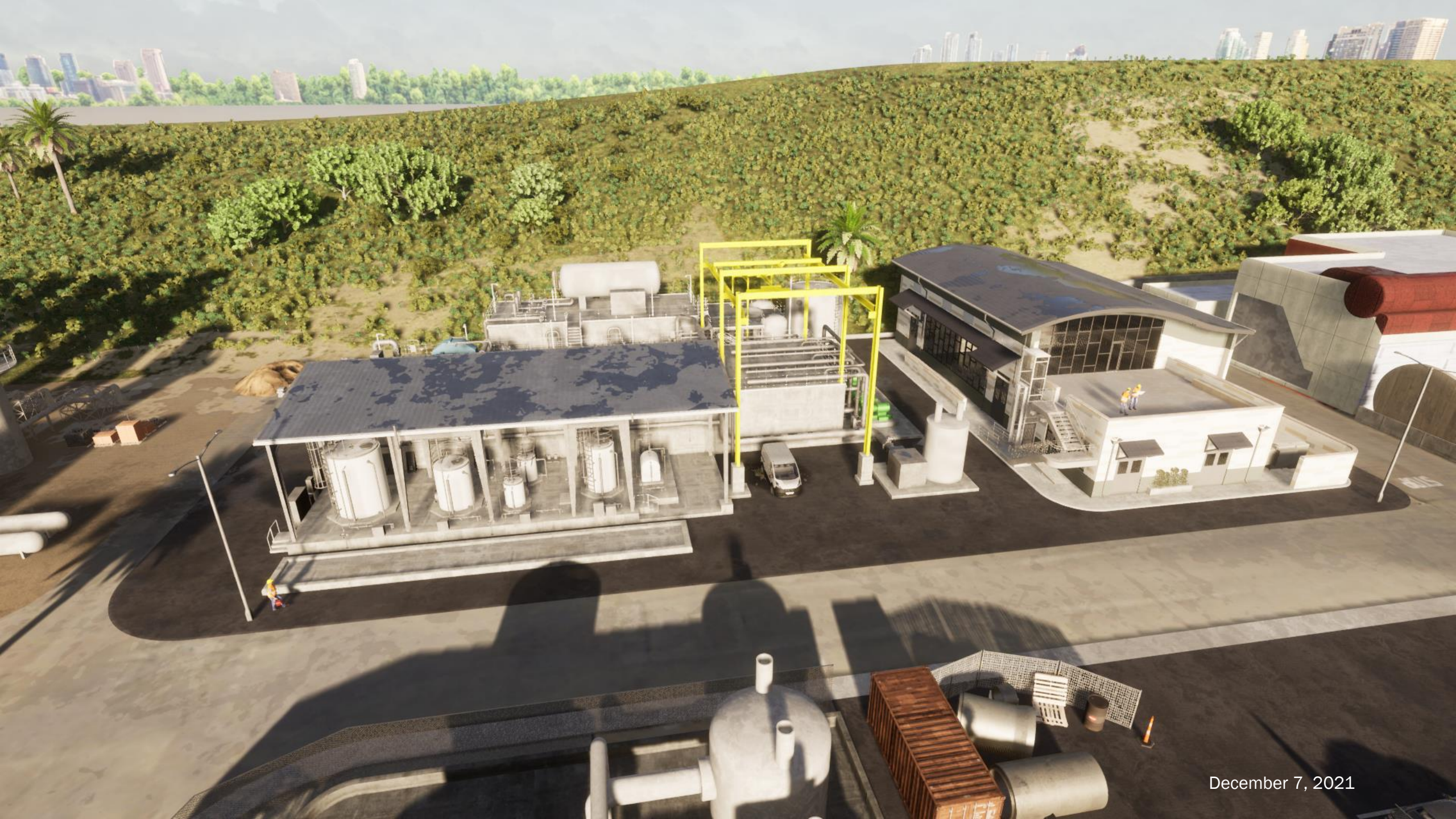
HAWPF Project: Treatment and Conveyance



December 7, 2021

HAWPF treatment process




December 7, 2021


December 7, 2021


December 7, 2021

Collaborative Delivery: Design Perspective

Collaborative workshops

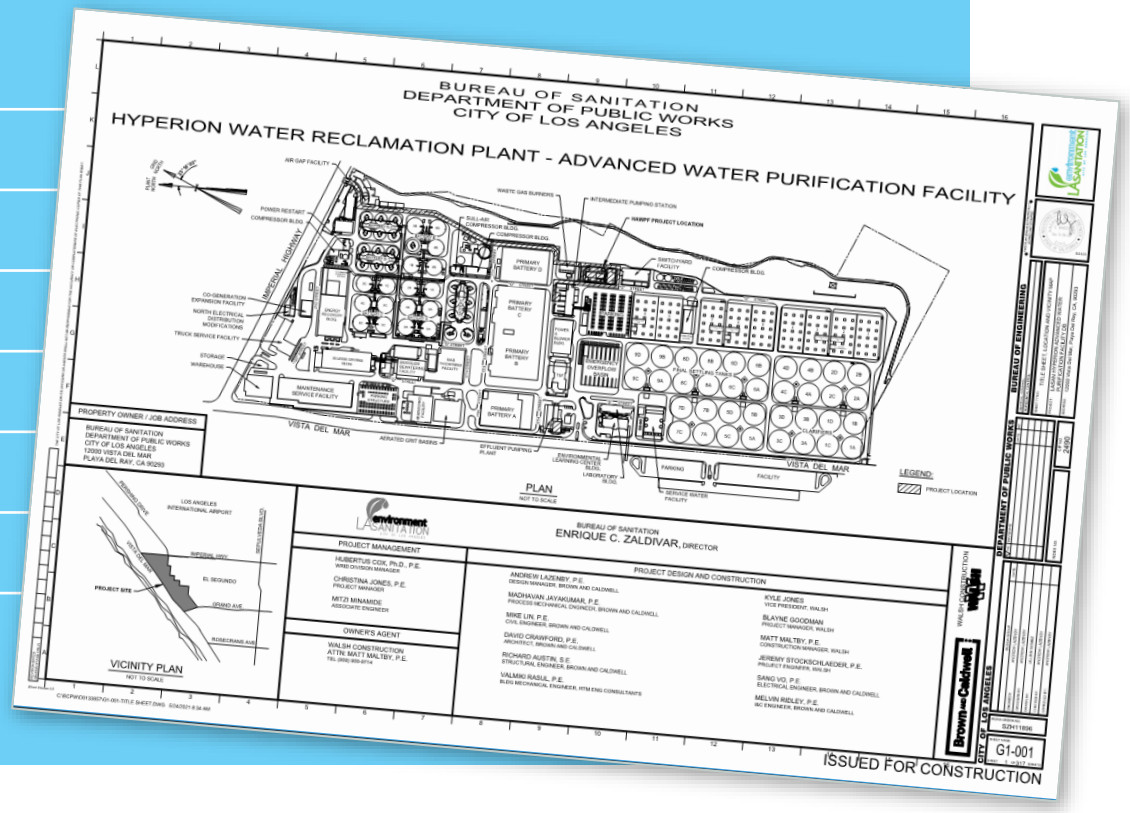
- Decision making and consensus
- Confirm key project drivers
  - Water quality
  - End uses
- Provide overview of treatment technologies
- Example – post treatment

Permitting and stakeholders

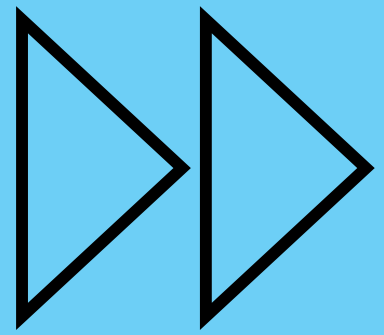
- Integration with LA DWP pipeline
- Title 22 Engineering Report (DDW)
- DPH/DDW Cross Connection Permit
- LA DBS plan check and permits

Seven “Packages” Compiled for 100% Submittal

HAWPF Project Element (Package)
Grading, BNR-MBR and WRPS foundations/structural
Advanced Treatment Building (ATB)
Electrical
RO feed tank, calcite contactors and product water tank
Chemical containment area and odor control
Civil conveyance (not for DBS review)
“Everything else” (not for DBS review)



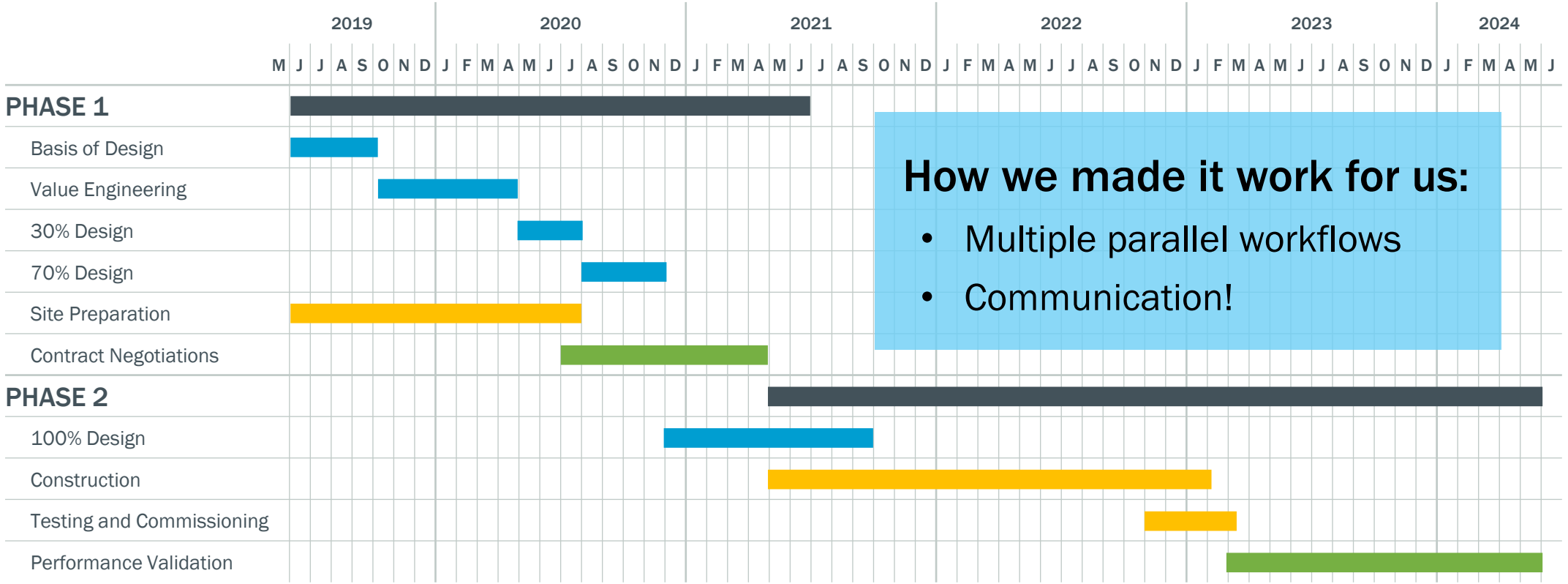
GMP Development



PDB Process


Design/Cost Development
Final Design
Site Demo/Prep
70% Design/GMP Amendment
Construction/Startup
Performance Validation
Phase 1
Phase 2A
Phase 2B

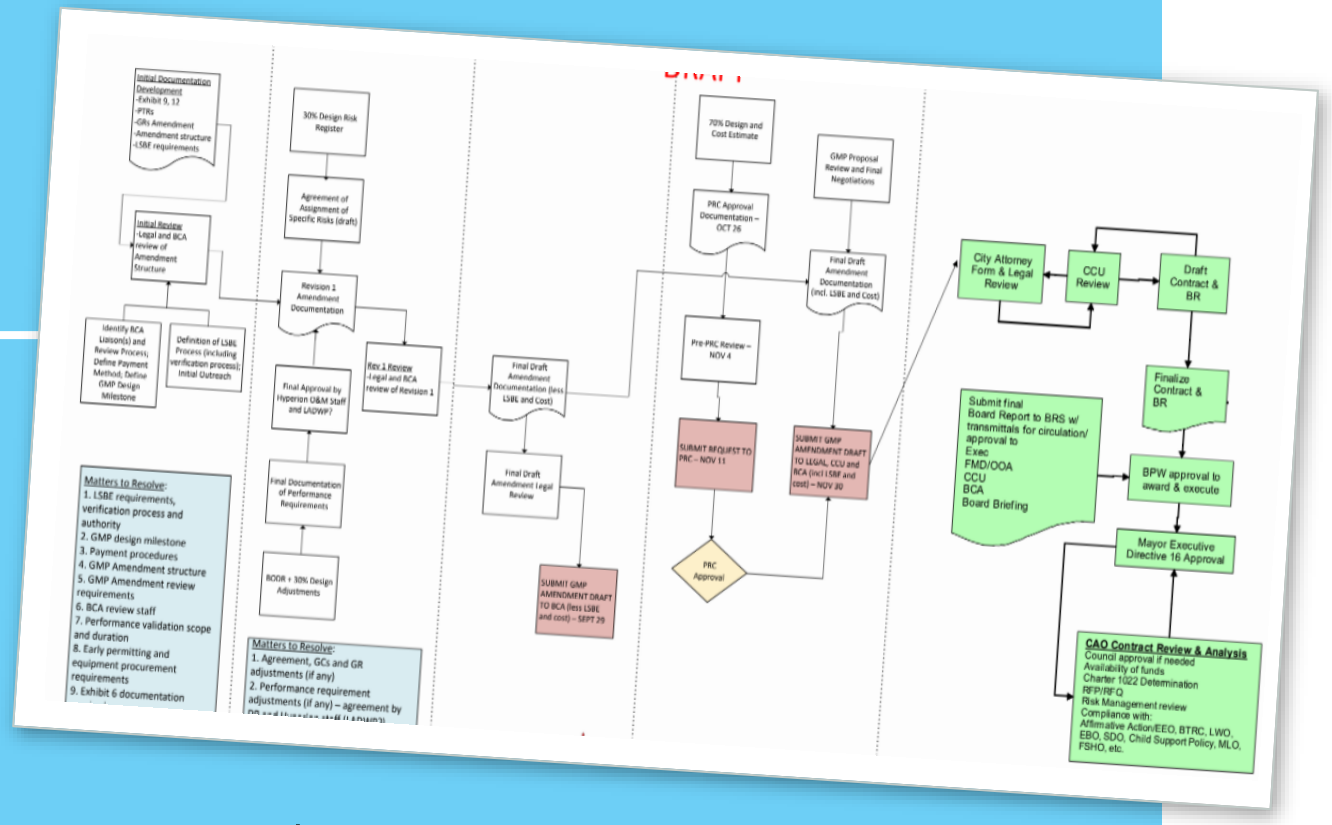
Schedule



How we made it work for us:

- Multiple parallel workflows
- Communication!

Getting to Phase 2



1. Meeting the needs of the owner and partner agencies
2. Controlling the cost and risks
3. Contract Negotiations
4. Obtaining approval from City Officials for a $93Million project during COVID 19
5. Allotting time after GMP submission for Award and NTP

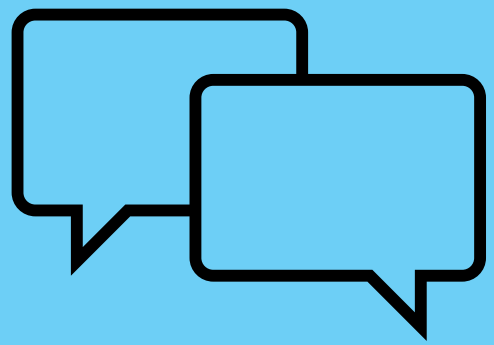
Breaking Down Roadblocks

LESSONS LEARNED

1. Expectations of project cost
   - Original estimate vs. GMP
2. Design changes and reviews
3. COVID 19
4. The unexpected value of allowance money “buckets”

Construction of the BNR-MBR is well underway.

Q&A




WALSH
IN ASSOCIATION WITH
Brown AND Caldwell
environment LA
SANITATION
CITY OF LOS ANGELES
THE future of water IS HERE
December 7, 2021