







Seattle-Tacoma  
International  
Airport

# SEA Airport & North Satellite Modernization

Facilities & Infrastructure

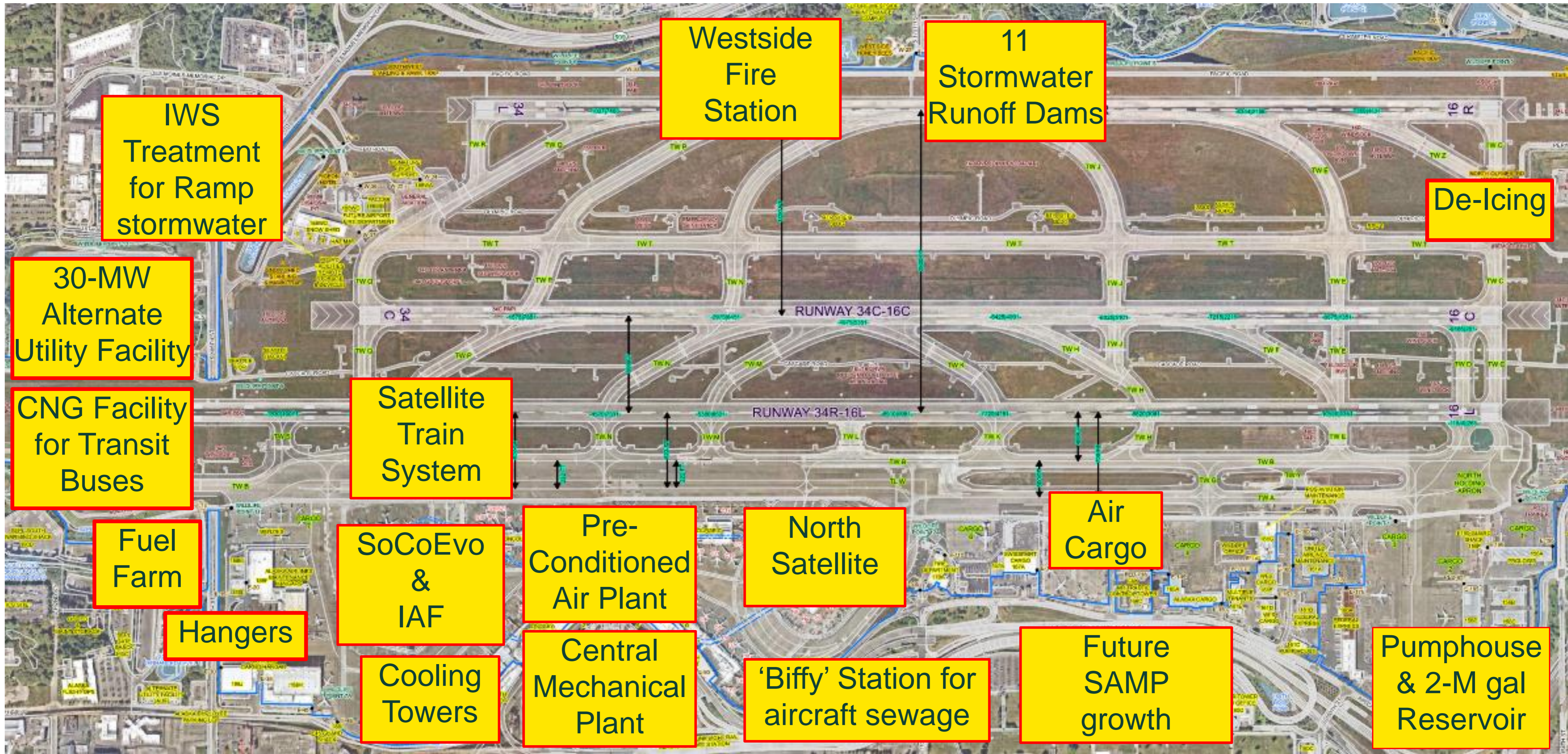
November 9, 2023



# SEA Airport Quick Facts

- 45.9-million passengers in 2022
- 456,000+ metric tons of air cargo in 2022
- 1200 takeoffs and landings each day
- 33 airlines fly to 92 domestic and 28 international destinations
- Small footprint per passenger:  
SEA 2,500 acres / 49.8M   
DEN 33,531 acres / 64M 
- SkyTRAX ‘Best Airport’ in 2022, 2023
- 45+ eateries and 35+ shops as part of Airport Dining & Retail
- 11,500-stall parking garage
- 87,300 direct jobs
- \$5.3-billion capital plan over next 5 years
- SAMP: Sustainable Airport Master Plan





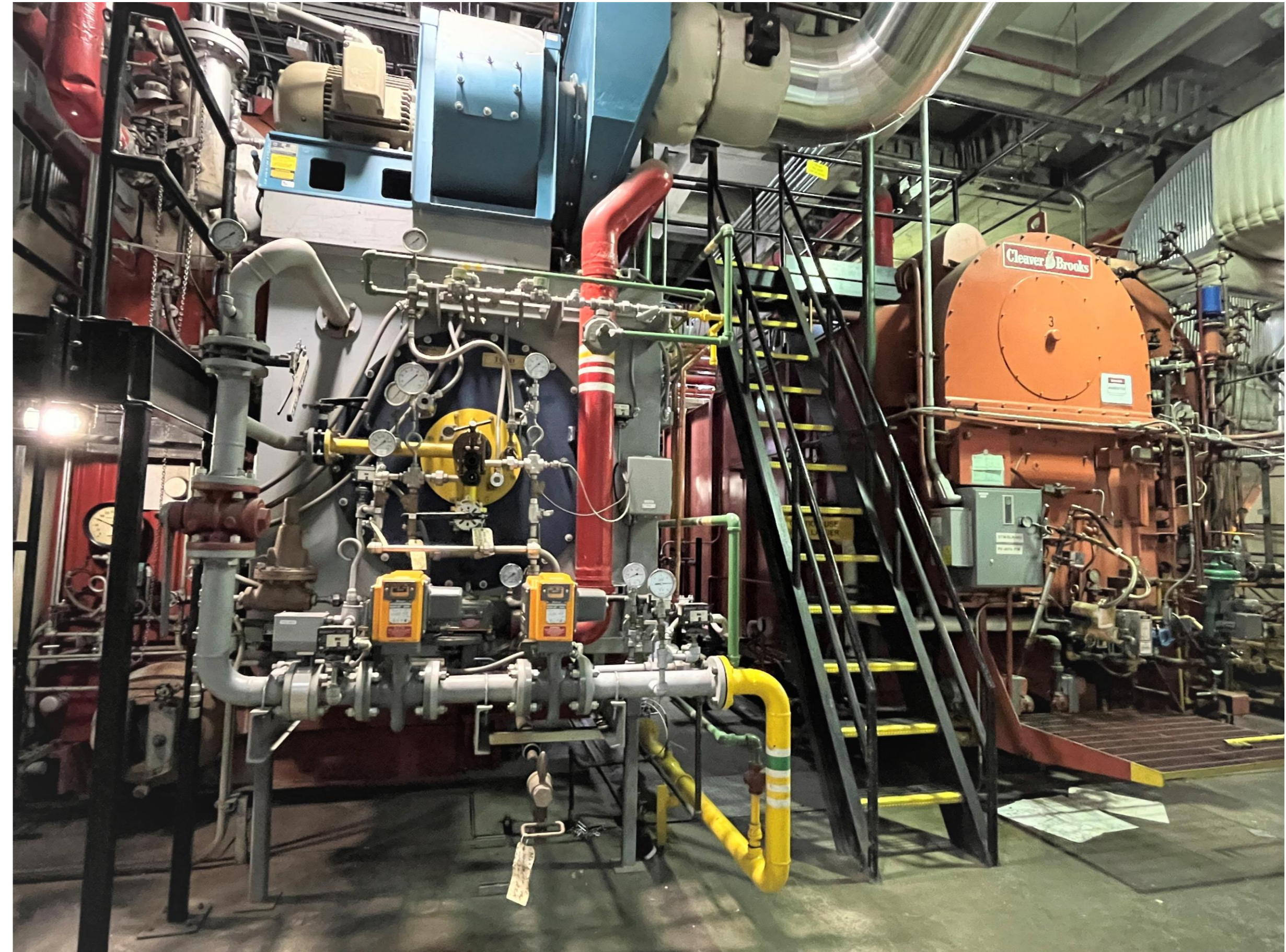


# SEA Airport Mechanical Systems

- CMP: 130,000 #/hr steam boilers and 17,500-tons water-cooled chillers
- Pre-Conditioned Air Plant: 1,200-tons chilled water + 7,750 ton-hours ice storage supplies 30°F glycol chilled water to Pre-Conditioned Air AHUs
- Active Smoke Control in ten areas to lessen chance of evacuating and re-screening passengers on secure side
- 108 Air Handling Units + 2900 air terminal units
- 11+ miles Baggage Handling System
- 105 elevators & 97 escalators
- 84 passenger loading bridges (with 400-Hz electrical, pre-conditioned air, potable water boxes, jet fuel)



# Central Mechanical Plant





# Pre-Conditioned Air Plant





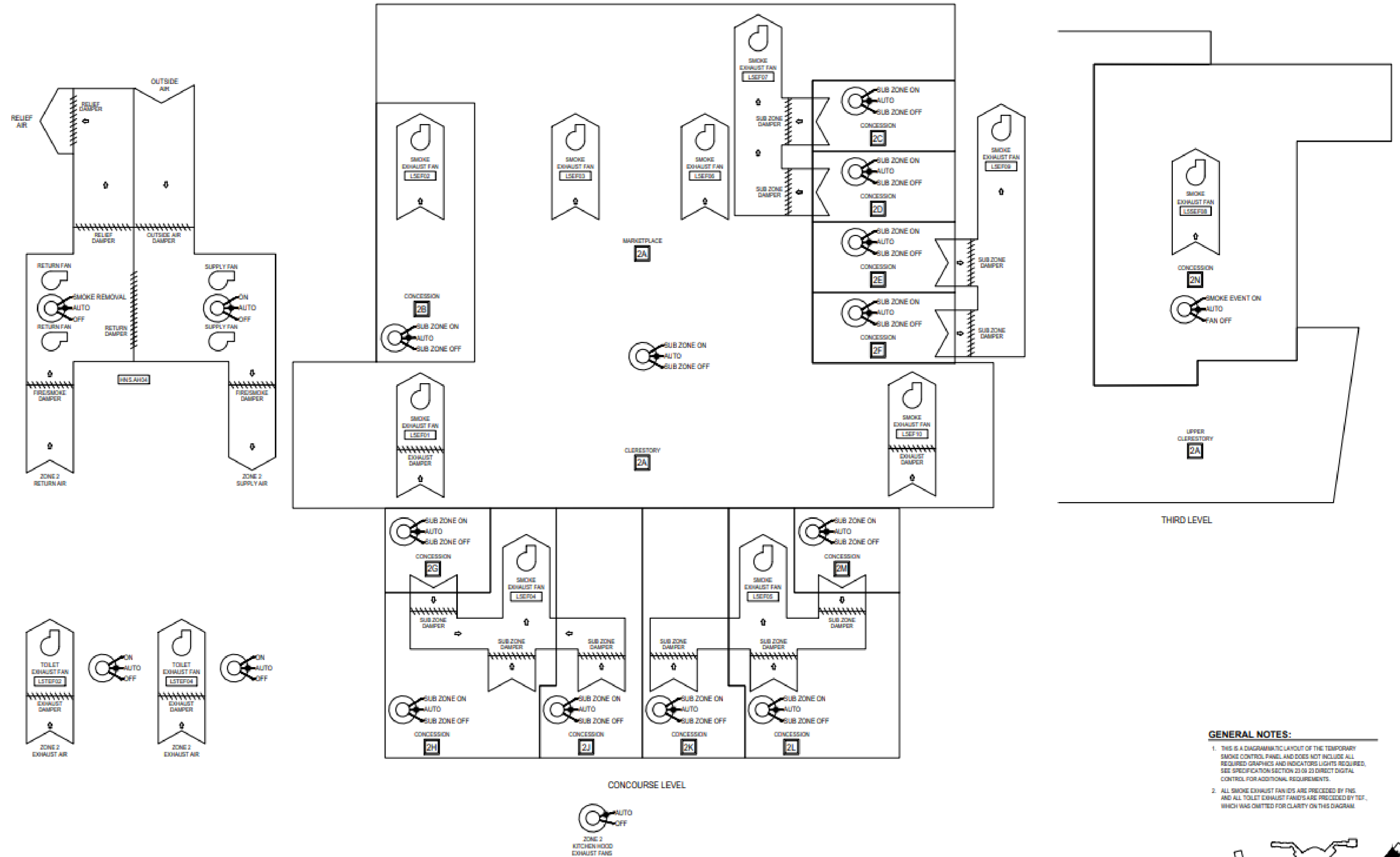
# North Satellite ('NSAT') Modernization

- Renovation completed in 2021
- 468,000 gross square feet
- 20 passenger loading bridges
- Active smoke control
- OA 30% higher than code minimum helps pressurize building. OA intakes on land side, not airfield side.
- 7/21-6/22 data showed 58% energy savings better than code baseline





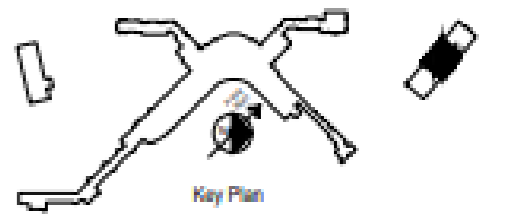
# NSAT Smoke Control



**SMOKE CONTROL - PANEL DIAGRAM - ZONE 2**

SCALE: N/A

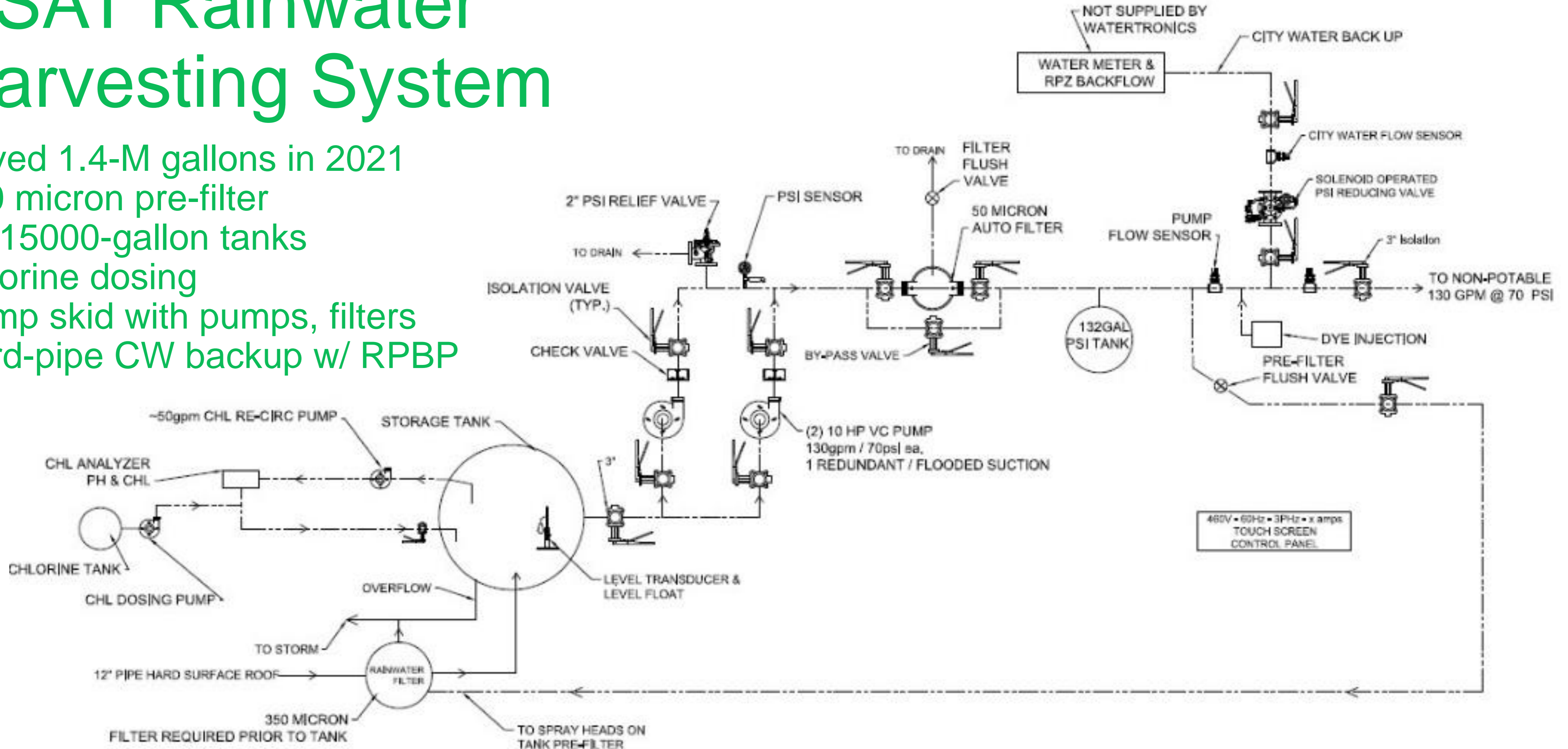
- GENERAL NOTES:**
1. THIS IS A DIAGRAMATIC LAYOUT OF THE TEMPORARY SMOKE CONTROL PANEL AND DOES NOT INCLUDE ALL REQUIRED GRAPHICS AND INDICATORS LIGHTS REQUIRED. SEE SPECIFICATION SECTION 23 09 23 DIRECT DIGITAL CONTROL FOR ADDITIONAL REQUIREMENTS.
  2. ALL SMOKE EXHAUST FAN VIEWS ARE PRECEDED BY FNS AND ALL TOILET EXHAUST FAN VIEWS ARE PRECEDED BY TEF, WHICH WAS OMITTED FOR CLARITY ON THIS DIAGRAM.





# NSAT Rainwater Harvesting System

- Saved 1.4-M gallons in 2021
- 350 micron pre-filter
- (2) 15000-gallon tanks
- Chlorine dosing
- Pump skid with pumps, filters
- Hard-pipe CW backup w/ RPBP





# Port of Seattle Job Openings....!

- SEA F&I Senior Mechanical Engineer – HVAC/Plumbing/Fire
- SEA F&I Energy Manager
- (upcoming late 2023/early 2024) SEA F&I Intermediate Mechanical Engineer – Fire Safety including Smoke Control & Fire Suppression/Sprinklers

The screenshot shows the Port of Seattle job portal interface. At the top left is the Port of Seattle logo with the text "Welcome. You are not signed in." To the right are links for "My Account Options", "Sign In", and "My Job Cart". Below the logo are navigation tabs for "JOB SEARCH" and "MY JOBPAGE". A search bar contains "Basic Search | Advanced Search | All Jobs". A "Back to prior page" link is visible. A pagination bar shows "Job 3 out of 29 Previous | 1 2 3 4 5 | Next". Two buttons are present: "Apply Online" and "Add to My Job Cart". The main content area displays a job listing for "Senior Mechanical Engineer – Aviation Facilities & Infrastructure (002284)".

**Senior Mechanical Engineer – Aviation Facilities & Infrastructure**  
(002284)

**Location :** Seattle Tacoma International Airport::

**Organization :** AV Facilities & Infrastructure

**Employee Status :** Regular

**Schedule :** Full-time

**Posting Expires :** Nov 26, 2023, 11:59:00 PM

**Minimum Salary :** 117,499.00 **MidPoint Salary :** 146,869 **Maximum Salary :** 176,238.00

At the Port of Seattle, we anticipate making salary offers between the minimum and midpoint of the salary range. Offers will be based on experience similar to the Port job being applied for as well as a review of pay rates for Port employees performing similar work. Salary ranges are under review and subject to change.

**Some of what you'll be doing:**



Monday, February 13, 2023 19:12:43

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