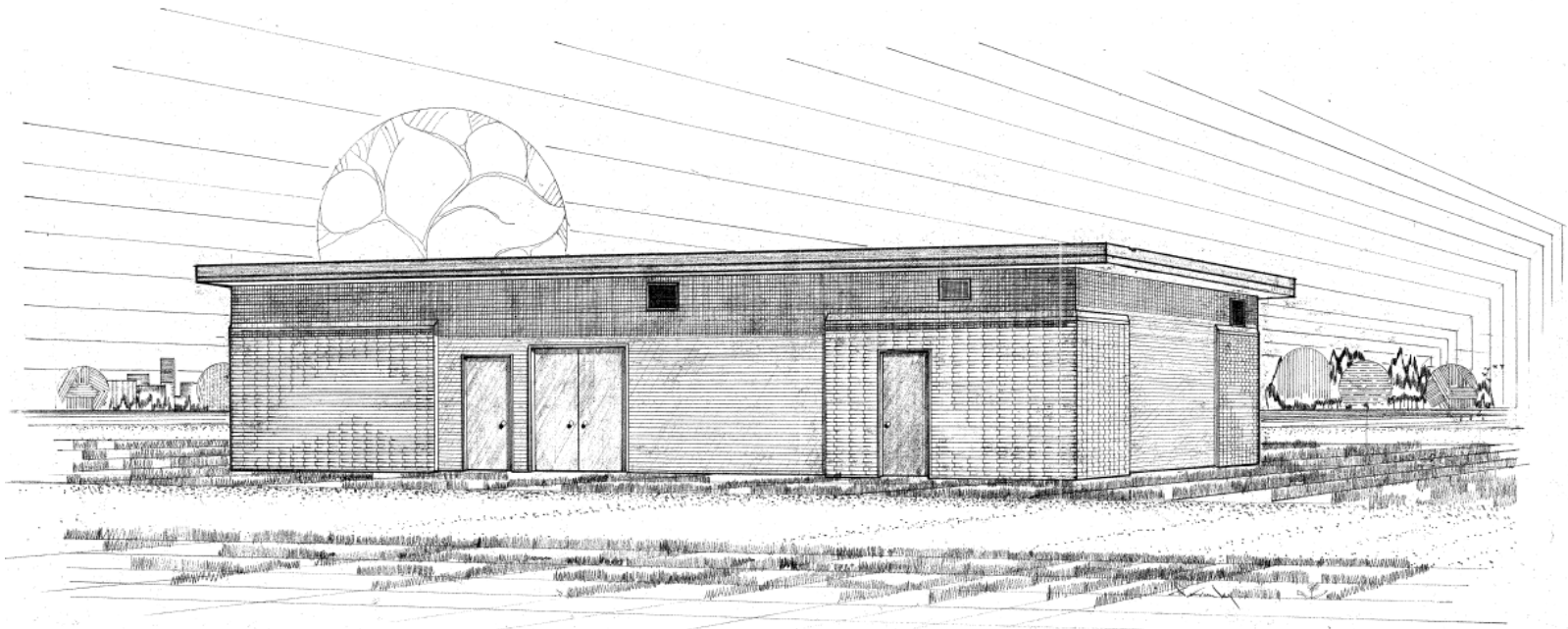


# Project Update:

## Pumping Stations 13 & 14 Rehabilitation

### PUMPING STATION NO. 13



**Pump Station 13 Design - 1969**

Madison Metropolitan Sewerage District



# Project Location

Pumping Station 14



Pumping Station 13



# Project Team

## Strand Associates

- Paul Dries – Project Manager
- Andy Constant
- Dave Gohdes

## MMSD Engineering Staff

- Dave Lundey
- John Bembinster
- Eric Hjellen
- Bruce Borelli

## MMSD Operations and Maintenance Staff

- Erik Rehr & others

## MMSD Health and Safety Staff

- Kayce Board



# Needs

- Additional pumping capacity
- Equipment at the end of its useful life
- Increase in power system reliability
- Safety concerns (wetwell structure and grating)
- Electrical and control equipment outdated and no longer supported
- No HVAC or temperature control
- No major improvements since installation in 1969
- Stations currently rank highest in terms of need



# Project Scope

- Increase peak and firm pumping capacity
- Replacement of pumping equipment, valves, and piping
- Enhancement of power system resiliency (includes permanent indoor diesel-powered generators at both stations)
- Replacement of major electrical and control equipment
- Installation of new HVAC and odor control equipment
- Installation of new flow metering equipment
- Major wet well repairs
- Site and access improvements



# Project Scope – Power System Resiliency



PS 13

**Existing fence enclosed open type transformers and power transfer switch**



**Typical new electrical service**

**New onsite indoor generator at both sites**

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# Project Scope – Major Electrical Equipment



Existing  
Electrical  
Equipment



Typical new  
pump starters



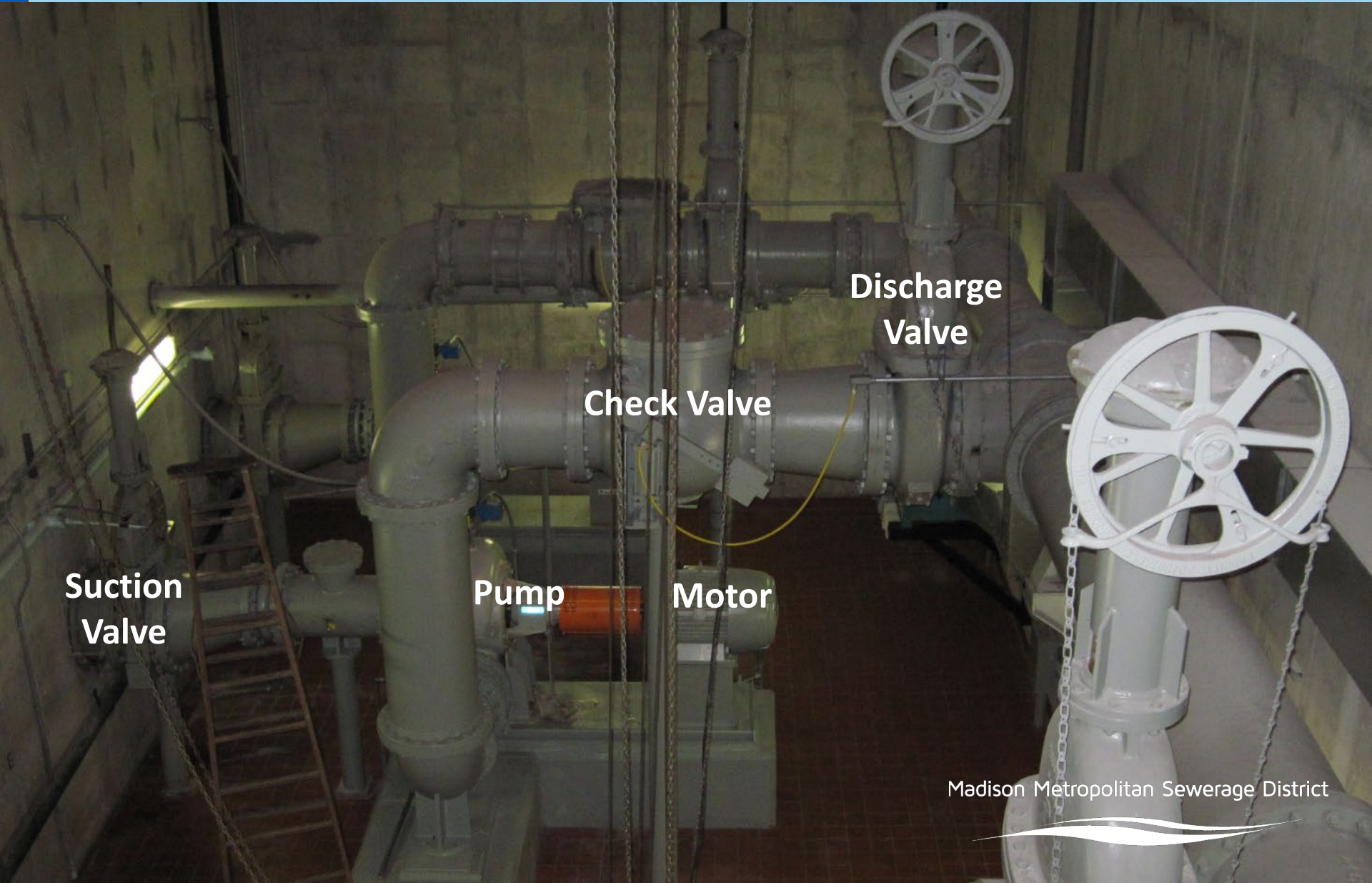
Typical new  
switchgear



Typical new  
motor control  
center and  
controls

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# Project Scope – Pumps, Valves, and Piping



Suction  
Valve

Pump

Motor

Check Valve

Discharge  
Valve

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# Project Scope – HVAC and Odor Control



**Existing  
Supply Fan**

**Typical new  
air handling  
unit**

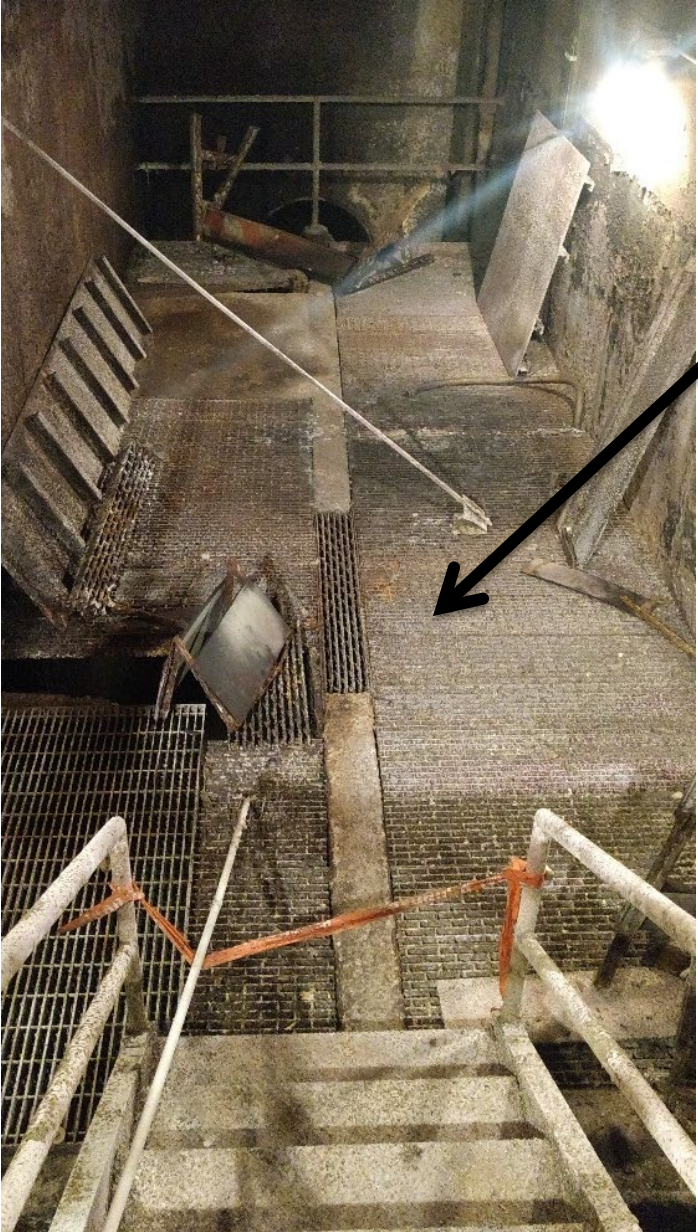


**Typical new  
odor control  
unit**



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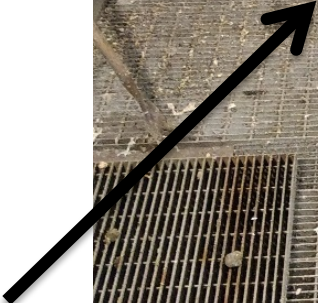
# Project Scope – Major Wet Well Repairs



**Pump  
Station 13**



**Pump  
Station 14**





# Project Schedule

- Advertise in July
- Sewer extension approval July 30, 2020
- Open bids in August
- Commission approval August 27, 2020
- Begin construction late 2020
- Complete construction mid-2022

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# Project Budget

- Construction estimate: \$10,134,600
- Total 2020 budgeted amount: \$11,350,000
- Funded via Clean Water Fund loan



# Questions?

