



#### City Brewery WWTP Reactor Roof Replacement

Schedule Item	Start Date	End Date	Contractor	Comments	Status
Find company that can build a cover for the WWTP Reactor	8/1/2024	1/30/2025	IEC	IEC was found to build an aluminum truss and put a geo-membrane cover on the roof. Initial estimate received 1/30/25 - Actual engineering work needs to be completed	complete
Procure Engineering Services to support the project	1/6/2025	2/4/2025	Foth Engineering	Foth Engineering has been procured for Structural, Gas piping, and odor control review. Foth has a Purchase Order for the project	complete
IEC Engineering Site Visit	2/25/2025	2/25/2025	IEC	IEC to review reactor walls and piping to understand how to design the trusses and cover	complete
Foth WWTP Engineering Site Visit	2/27/2025	2/27/2025	Foth Engineering	Foth to review gas collection piping, scrubber system, safety devices, and collect WWTP drawings	complete
IEC Phase 1 Truss Design	2/25/2025	3/5/2025	IEC	IEC to have proposed framework for the new roof	complete
Kick off weekly project plan review with all contractors	3/6/2025	3/6/2025	IEC/Foth/Ahern		complete
Second engineering site visit with all contractors	3/12/2025	3/12/2025	IEC/Foth/Ahern	Site visit to have Foth Structural Engineer, IEC mechanical engineer, and installation contractor onsite to review the site and develop a plan for the structural framing points off of the reactor.	complete
Scrubber engineering review complete	3/6/2025	3/12/2025	Foth Engineering		Complete
Weekly project meeting	3/13/2025	3/13/2025	IEC/Foth/Ahern		Complete
Finalized structural review	3/13/2025	3/20/2025	Foth Engineering	Structural review uncovered challenges for the truss design. As a result, the scope changed from a rigid cover to a floating cover design. New engineering underway to complete cover design.	Complete
Meet with IEC to move forward with engineering/ design of floating cover	3/24/2025	3/24/2025			Complete
Initial gas collection design with floating cover	3/6/2025	3/19/2025	Foth Engineering	Working through pipe tie-in's to floating cover.	Complete
Weekly Project Meeting	3/20/2025	3/20/2025	IEC/Foth/Ahern	Review electrical needs.	Complete
Finalize Gas Collection Design	3/19/2025	3/27/2025	Foth Engineering		Complete
Review project with City WWTP Team	4/2/2025	4/2/2025	CBC	Review project to understand temporary loading capabilities while construction is taking place.	Complete
Engineering Review of Current Flare System for Floating Cover	3/31/2025	4/4/2025	Foth	Engineering review of current flare setup showed that there is risk of melting the new cover utilizing the existing spares on the WWTP roof. Need to install new backup flare next to the primary flares.	Complete
Floating Cover Material, Fab, and Install Proposal	3/24/2025	4/4/2025	IEC	Received on 4/3/2025	Complete
Source Flare Manufacturer to provide design and quotes for new backup flare.	4/9/2025	4/11/2025	CBC	John Zink to provide proposal for new permanent flare.	Complete
Review Floating Cover Proposal	4/7/2025	4/18/2025	CBC	Found floating cover design will not tie-in to the scrubber system, all gas (including surface gas) will be sent to the enclosed flares. No further engineering needed on scrubber system.	Complete
Received Initial Proposal for Additional Flare	4/23/2025	4/23/2025	John Zink	Listed lead time for new flare is 34 weeks. Due to this, CBC will need to pursue temporary flare options.	Complete
Source Flare Manufacturer to Provide Lease Options for Temporary Spare Flares	4/23/2025	4/25/2025	John Zink	John Zink's rental division has provided designs and lease options on 4/24. Temporary flare can be ready for a truck within 2-3 days of receipt of PO, pending final checkout. Then 1-2 days of drive time. Looking at 4-5 days total.	Complete
Flare Manufacturer Site Visit to Determine Temporary Flare Location and Gas Piping Requirements	5/8/2025	5/8/2025	Ahern/John Zink	Temporary location confirmed, service/ startup requirements discussed, preliminary piping design to feed temporary flare discussed. Ahern to outline this work in their proposal.	Complete
Site visit to Build a Reactor Perimeter Repair Plan/ Proposal	5/16/2025	5/16/2025	Ahern	Ahern to bring subcontractor on site to walk the reactor perimeter and discuss necessary repair timeline and price.	Complete
Provide PO to IEC for the Floating Cover and Installation	5/21/2025	5/21/2025	CBC	PO sent to IEC on 5/23. Final detailed design of the cover will can now take place. Estimated cover delivery end 8/29 based on lead time	Complete
Pump Out West Reactor to Provide Contractors with Measurements/ Photos of the Internal Structures in the Reactor(s)	5/24/2025	5/24/2025	CBC		Complete
Review Reactor Walls to Ensure Proper Anchoring Points can be Achieved for Floating Cover	5/27/2025	5/27/2025	Ahern/Foth	Need a repair plan to made up for Ahern to pursue bids	Complete
Finalize Permanent Flare Proposal	5/19/2025	5/30/2025	John Zink	Finalized proposal received on 6/3. Lead time is 34 weeks.	Complete
Finalize Reactor Perimeter Repair Recommendations	6/9/2025	6/20/2025	Foth	Provide these recommendations to Ahern for Bidding.	planned
Finalize Cover Design	6/9/2025	6/20/2025	IEC	IEC to recommend solutions to ensure the floating cover will have proper support for intended function in reactors.	planned
Ahern to Collect Perimeter Repair Bids Based on Recommendations	6/23/2025	6/24/2025	Ahern		planned
Ahern to Provide Finalized Proposal	6/9/2025	6/24/2025	Ahern	Scope includes all demolition, install of new gas collection system, and reactor wall repair.	planned
Review Proposal Provided by Ahern and Provide PO	6/20/2025	6/25/2025	CBC/Ahern	Ensure no items are missing, and the all parties are aligned with the plan moving forward.	planned
Finalize project budget	6/20/2025	6/25/2025	CBC	Finalize project budget	planned
Provide PO to John Zink for New Flare	6/27/2025	6/27/2025	CBC		planned
Provide PO to John Zink for Rental Flare	6/27/2025	6/27/2025	CBC		planned
Provide PO to Ahern	6/27/2025	6/27/2025	CBC		planned
Finalize construction plan and timeline	6/30/2025	7/10/2025	CBC/Ahern/IEC		planned
Finalize Structural Design for New Flare Concrete Pad	6/16/2025	7/28/2025	Foth	The new pad will mimic the pads the current enclosed flares sit on, with minimal changes due to weight differences.	planned
Prefabricate New Gas Collection Piping	6/30/2025	8/1/2025	Ahern	Having sections prefabricated will help reduce install time.	planned
Install Gas Blower and Enclosure	7/7/2025	8/8/2025	Ahern	Installing these components ahead of time will help minimize the installation time of the gas collection system.	planned
Piping Prework	7/7/2025	8/29/2025	Ahern	New gas collection piping could be installed without taking any existing pipe out, or having the current cover removed. It would be left capped off until cover install is finished.	planned
Prep site and receive all equipment	8/25/2025	8/29/2025	Ahern	Components can be stored indoors on the WWTP property as they arrive.	planned
Receive Floating Cover	8/29/2025	8/29/2025	IEC	Components can be stored indoors on the WWTP property as they arrive.	planned
Demolition of Current Reactor Roof	9/1/2025	9/3/2025	Ahern	The existing roof needs to be removed before the perimeter can be repaired. Dates may fluctuate based on receipt of cover and gas collection equipment.	planned
Concrete Perimeter Repair	9/4/2025	9/12/2025	Ahern	Dates may fluctuate slightly based on completion of roof demo.	planned
Update Title 5 Permit	6/30/2025	9/12/2025	CBC	Following final design approval.	planned
Temporary Flare Install and Hook Up	9/15/2025	9/19/2025	Ahern/John Zink	Ahern to install gas collection piping to temporary flare and assist in unloading the flare from the truck. John Zink to provide field tech for startup assistance.	planned
Cover Install	9/15/2025	9/24/2025	IEC	There are 9 days allotted for this install in the IEC proposal.	planned
Removal and Disposal of Current Backup Flares	9/19/2025	9/19/2025	Ahern	Dates may fluctuate based on completion and startup of temporary flare.	planned
Existing Gas Pipe Demo and New Pipe Tie-In to Floating Cover	9/24/2025	9/26/2025	Ahern	After the cover is installed, the new gas collection piping can be tied into the cover. Dates may fluctuate based on cover install completion.	planned
Startup Support	9/22/2025	9/26/2025	Ahern/IEC/Foth	Support to ensure all installed components are working as expected and the system will operate as intended.	planned
Prep New Flare Location and Pour New Concrete Pad	2/23/2026	3/6/2026	TBD	Dates may fluctuate based on temperature. Not recommended to pour concrete below 40 °F.	planned
Receive New Flare from John Zink	3/9/2026	3/9/2026	John Zink	Dates may fluctuate.	planned
Install New Flare	3/9/2026	3/13/2026	TBD	Dates may fluctuate based on completion of new pad.	planned
Disconnect Temporary Flare and Return to Supplier	3/16/2026	3/16/2026	TBD	Dates may fluctuate based on installation date of new flare.	planned