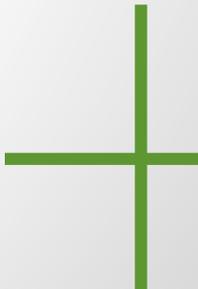




City of Indianola WRRF – Council Work Session

Attendees:
City of Indianola Council, Staff and HR Green

January 9, 2020



Background



- Siting Study completed back in 2014
 - ✓ Reviewed alternatives for Modifications to existing WWTP vs new WWTP at Farm Site
 - ✓ Investigated connecting to Des Moines WRA system
 - ✓ Recommended new WWTP on Farm Site as best economic and non-economic solution

Background



- Completed Facility Plan in 2016
 - ✓ Established Flows and Loads
 - ✓ Nutrient Removal to meet the Iowa Nutrient Strategy
 - ✓ New approach to handling Peak Flows
- AntiDeg submitted
- New WLA issued for Middle River
- Revised Facility Plan for new WLA – April 2018
- Resubmitted AntiDeg – April 2018

Background



- AntiDeg Approved – March 2019
- Facility Plan Approved – October 2019
- Final Plans Submitted to IDNR – Nov 2019
- Construction Permit Issued – December 2019
- SRF Environmental Public Hearing – Dec 16, 2019

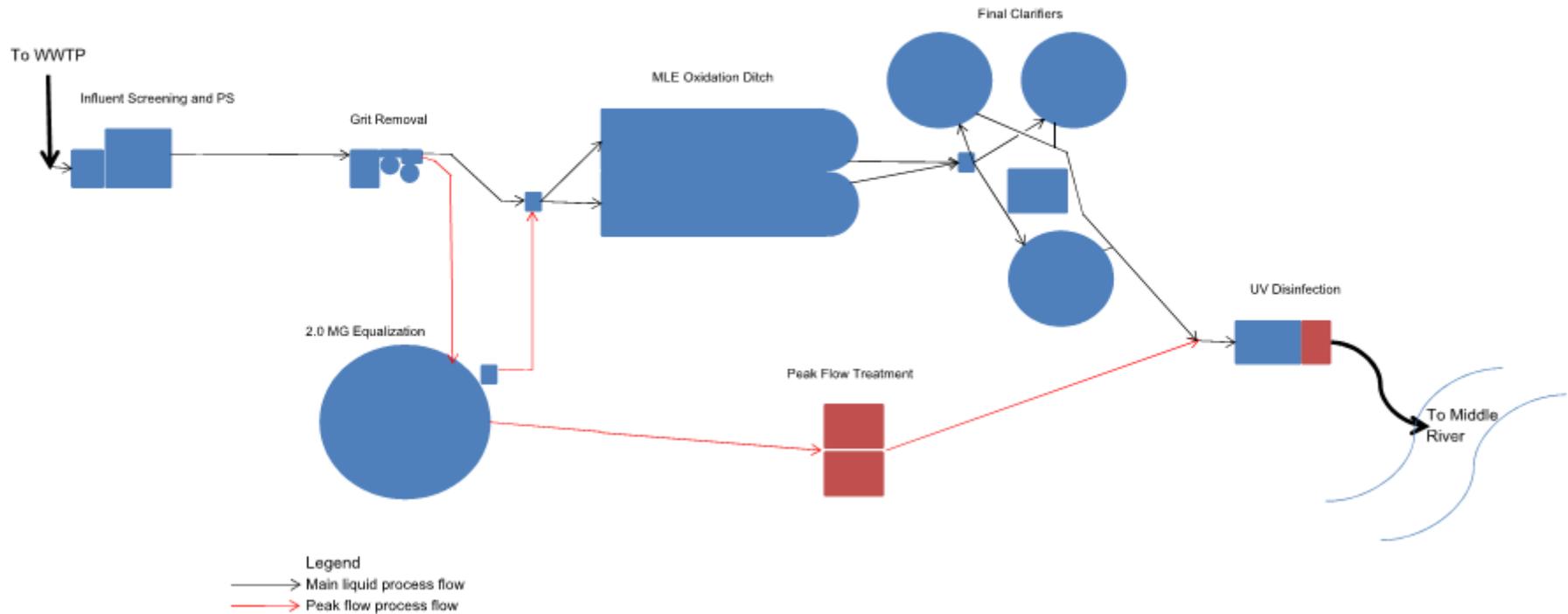
Background



- High Peak Flows during rain events
- Desire to handle Peak Flows in real time
- Selected Peak Flow Treatment technology for treatment of high dilute flows
- Treatment concept new to IDNR
 - ✓ No equalization - \$6M savings
 - ✓ Smaller secondary treatment - \$4M savings
 - ✓ Secondary treatment includes nutrient removal - \$2M savings

Liquid Process Schematic

City of Indianola
Proposed Liquid Process Schematic
Current Design (20 Year Projection)



Fatal Flaw Analysis



- Special Use Permit
- Approval of Facility Plan by IDNR
- Increases in Construction Cost
- Water supply to the site
- Hitting the right bidding environment

Final WRRF – Fly Over Model



Project Schedule



- Bidding – Jan. 16
- Resolution of Award – Feb 4
- Notice to Proceed – Feb 10, 2020
- Substantial Completion – April 1, 2022
- Final Completion – June 10, 2022
- Two year Warranty Period – ending April 1, 2024

Opinion of Probable Construction Cost



- 30% OPC - \$36,144,000
- 60% OPC – \$37,700,000
- 90% OPC - \$37,150,000
- Final OPC - \$38,400,000

*These OPC's do not include costs for the Trunk Sewer project or for Demolition of the existing North WWTF

BY THE NUMBERS



120,000

• Cu Yds of excavation on site

100

• Miles of wire in the project

15,000

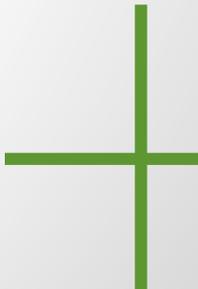
• Total Cu Yds of concrete

875

• No. of staff hours in busiest week

8.1

• Total miles of piping



On-Going Items



- Final Addendums
- FONSI – Waiting on USACE review – Need by Notice to Proceed
- Proposal for natural gas to the site – MidAmerican
- Schedule from MidAmerican for Power to the site
- Bidding

Other Items on the Horizon



- Construction Phase Services Agreement
- Trunk Sewer Design – Final Design
- Demolition design of existing North WWTP

Questions

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