



CURRENT CONDITION, APRIL 2009

REHABILITATE LINCOLN MEMORIAL REFLECTING POOL AND GROUNDS

THE NATIONAL PARK SERVICE

WITH:

SASAKI ASSOCIATES, INC.

RTKL ASSOCIATES, INC.

ROBINSON & ASSOCIATES

DELON HAMPTON & ASSOCIATES

PAUL WADDELOVE & ASSOCIATES, INC.

Section 106 Preparation Discussion

15 September 2008

pool water and filtration options



Goals

Reduce/Eliminate Pool Leakage
Reduce Consumption of Potable City Water
Improve Water Quality and Appearance

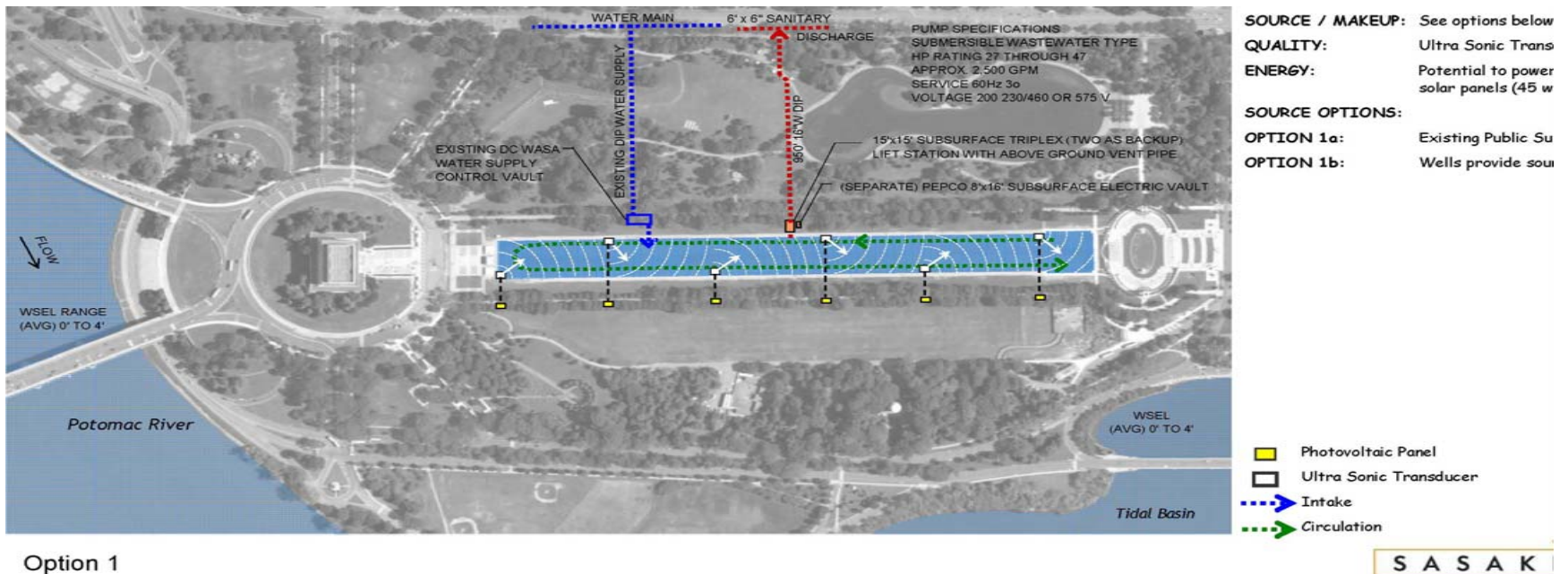
Potential Source for Fill and Makeup Water

Potomac River
Onsite Wells
Rainwater collection
City Potable Water Supply

Water Quality Improvement Options

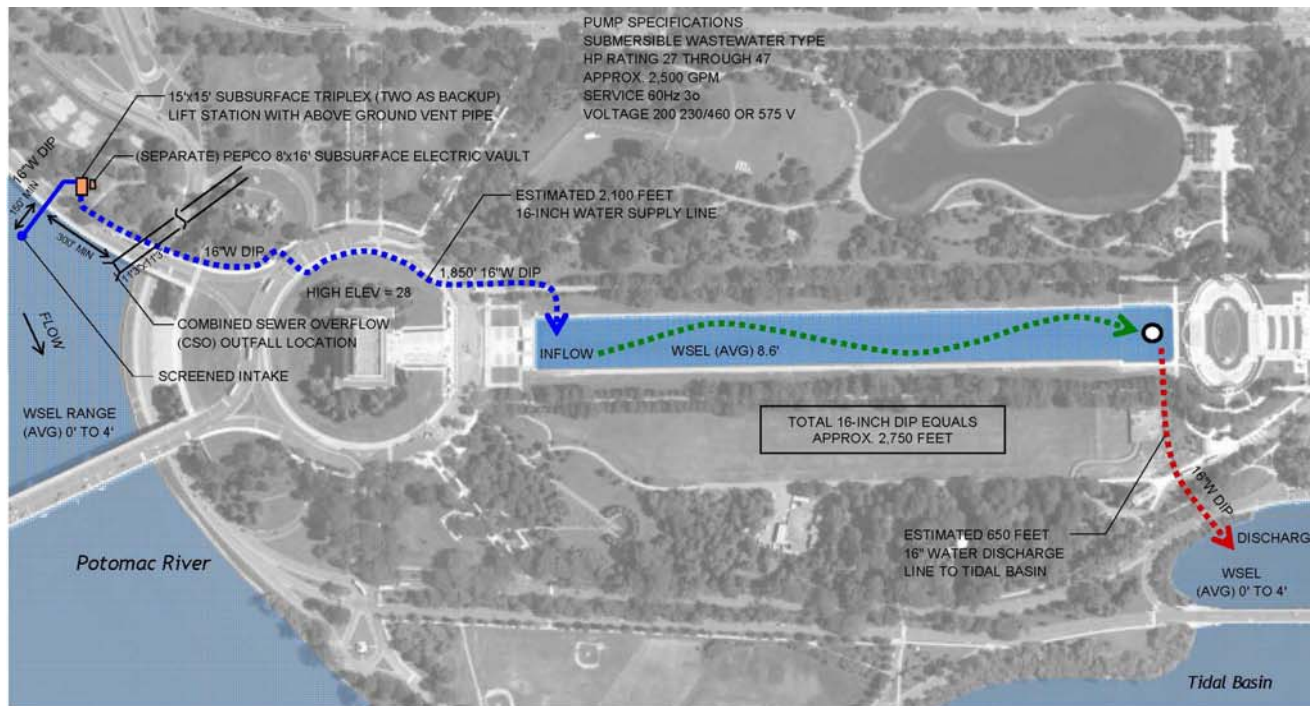
Ultrasonic transducers
Continuous Flow from Potomac River
Circulation and Filtration System





Option 1

Ultra Sonic Transducers
 Potential to power each unit with solar panels (45 watts)
 Existing Public Supply Wells provide source/makeup water



SOURCE / MAKEUP: Potomac River/ Tidal Basin

QUALITY: See options below

ENERGY: 35 hp pump requires 25 kW

Quality Options:

Option 2a: Constant flow from Potomac

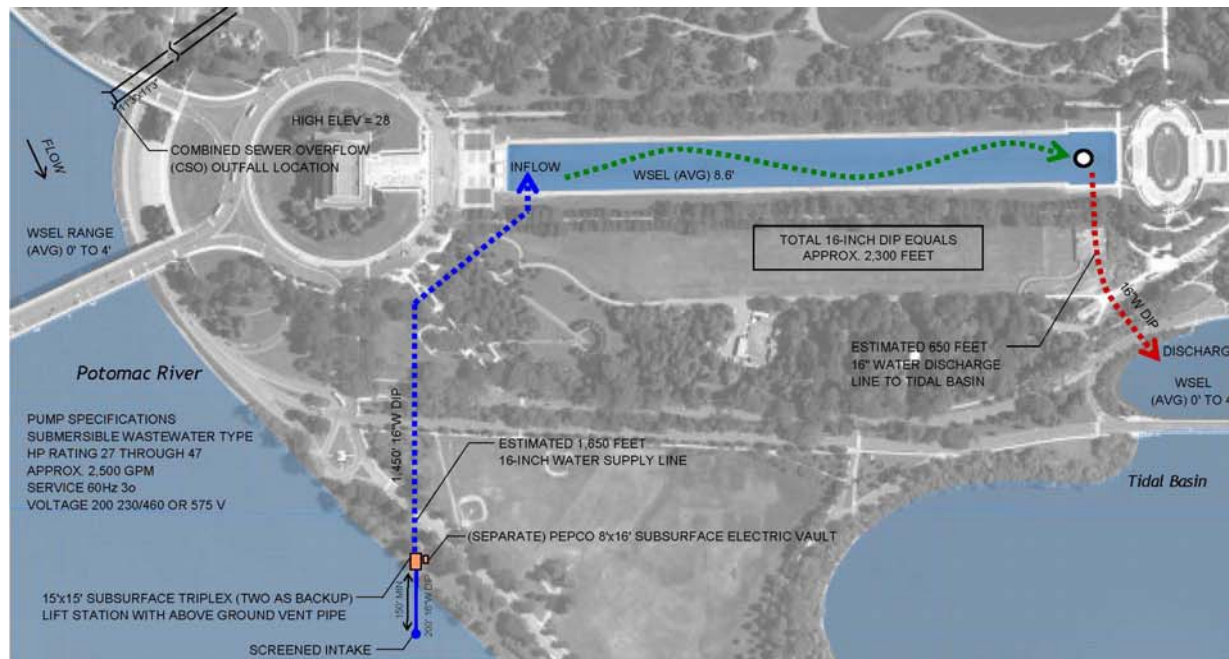
Alternative: Add Ultra Sonic Transducer

-  Pump House
-  Existing Pool Drain
-  Potential Intake Locations
-  Circulation
-  Outflow

Option 2a

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See options below 35 hp pump requires 25 kW/hr
 (+/-)
 Constant flow from Potomac River Add Ultra Sonic
 Transducers



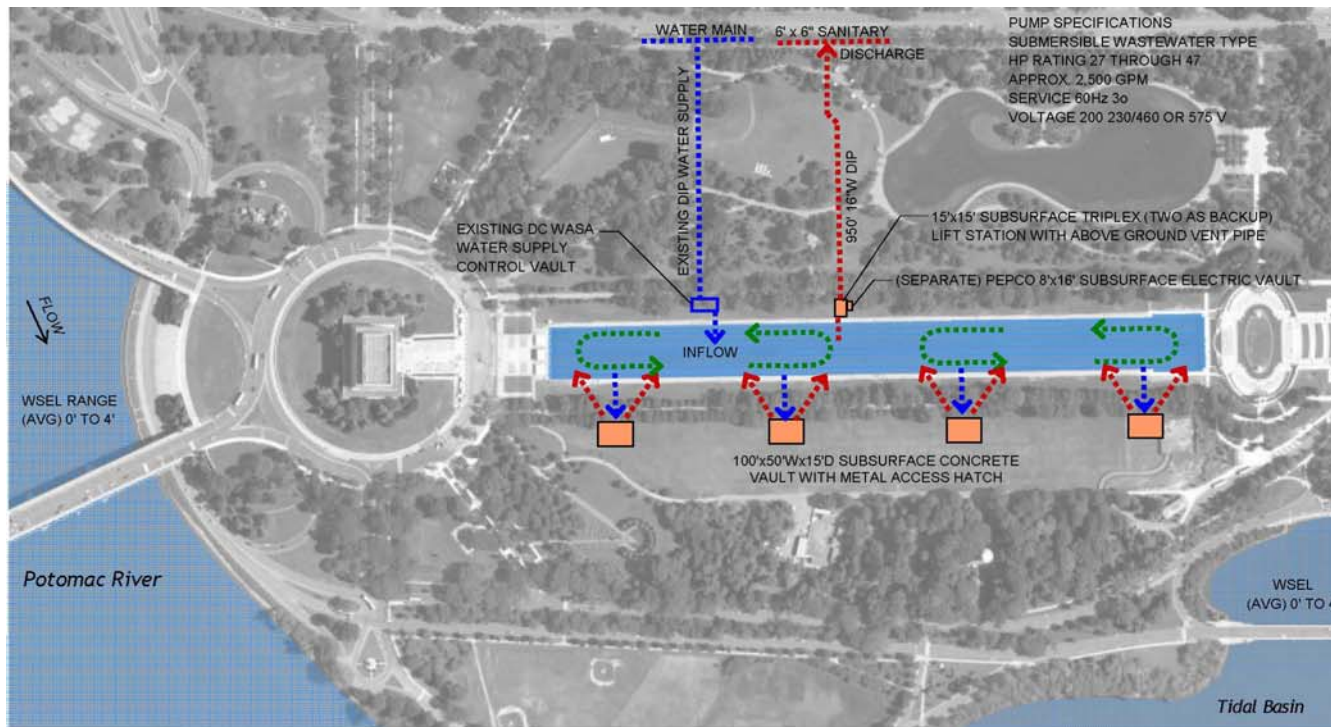
SOURCE / MAKEUP: Potomac River/ Tidal Basin
QUALITY: See options below
ENERGY: 35 hp pump requires 25 kW/hr (+/-)

Quality Options:

Option 2b: Constant flow from Potomac River

Alternative: Add Ultra Sonic Transducers

Option 2b



SOURCE / MAKEUP: Existing Public Supply

QUALITY: Media Filtration, Ozon

POOL OPTIONS:

OPTION 3a: Current configuration

OPTION 3b: Divide pool into four c

 Pump and Filtration Unit

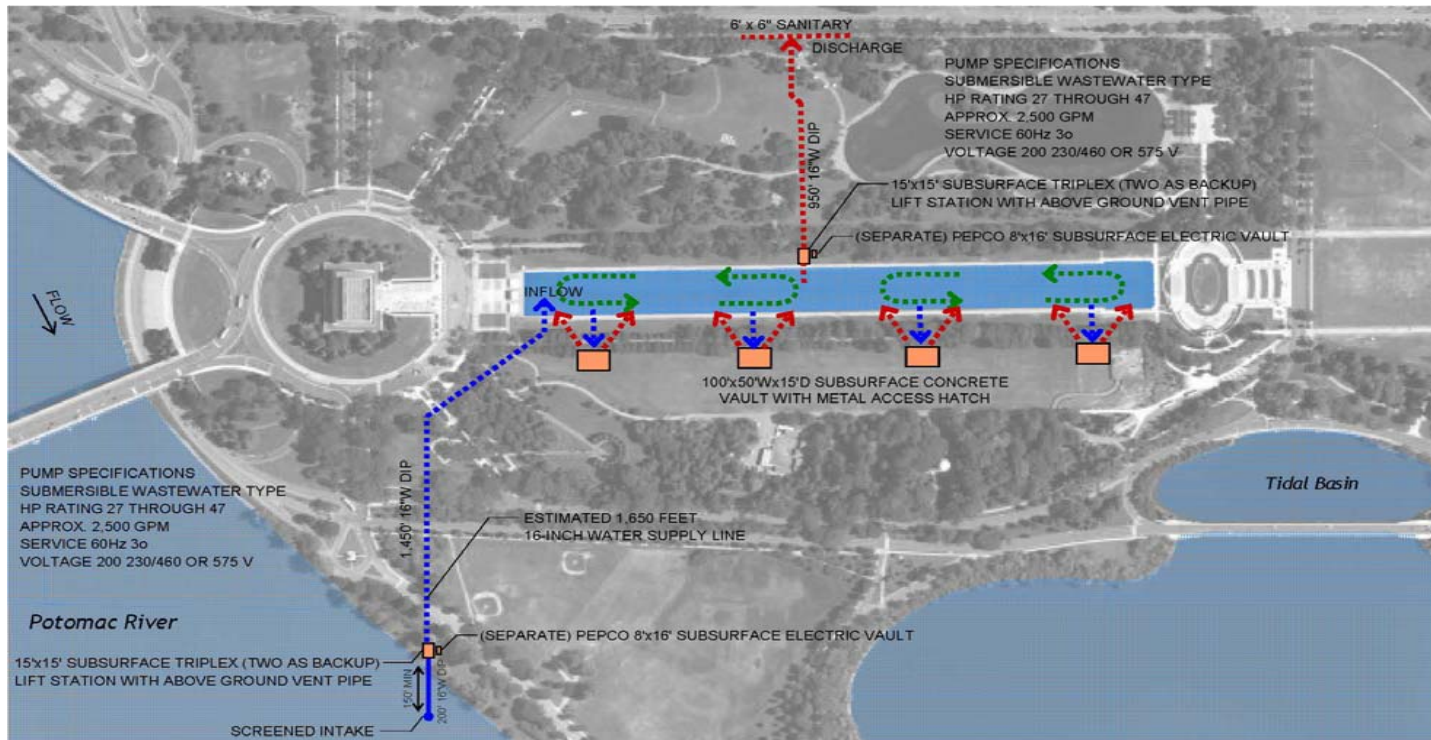
 Supply

 Circulation

 Return

Option 3

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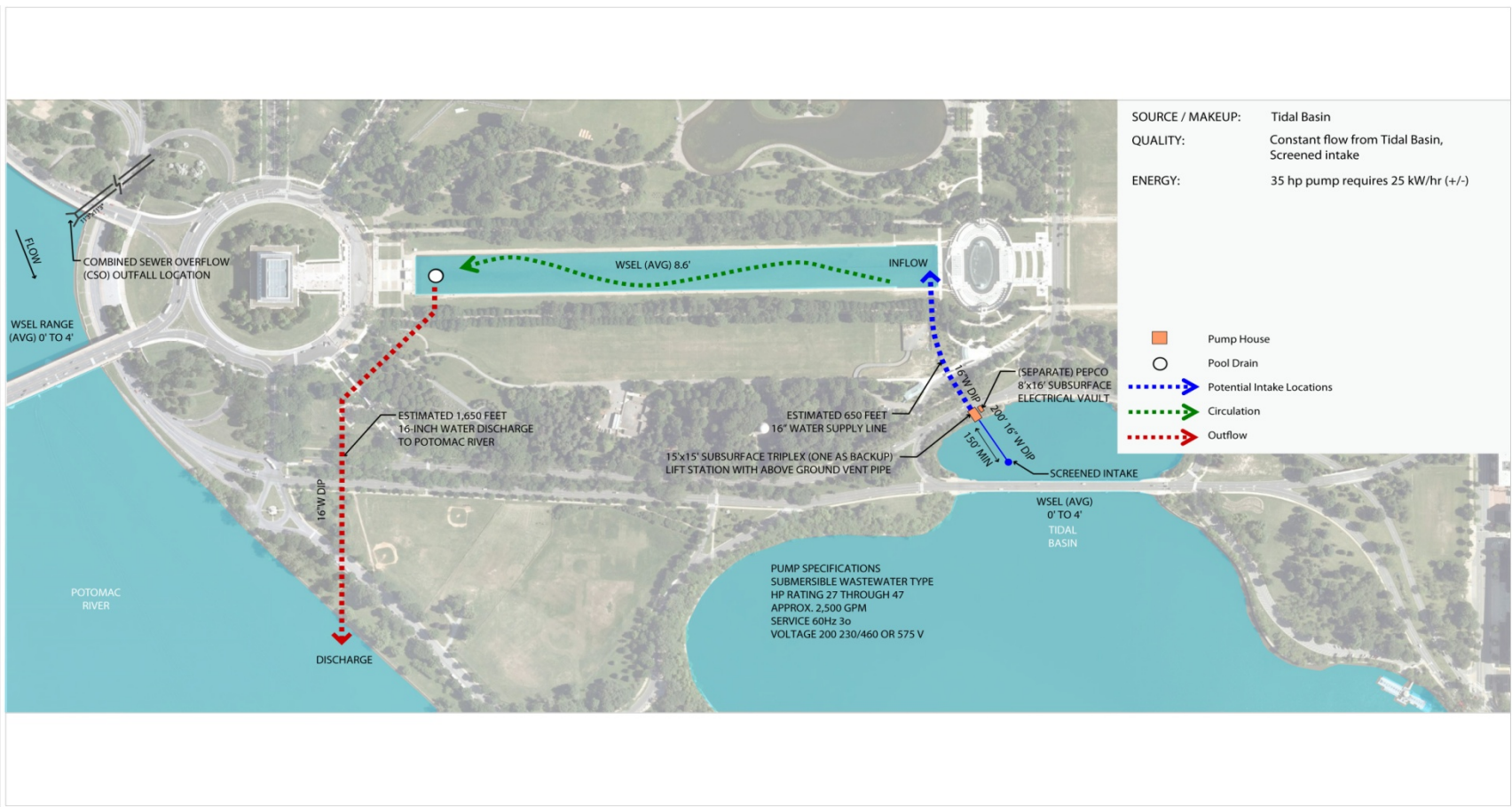


Option 4

SOURCE / MAKEUP: Potomac River/ Tidal Basin

QUALITY: Media Filtration, Ozone

POOL OPTIONS: **OPTION 4a:** Current configuration (one pool) **OPTION 4b:** Divide pool into four cells

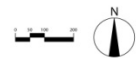


POTOMAC RIVER WATER SUPPLY - OPTION 5

REHABILITATE LINCOLN MEMORIAL REFLECTING POOL AND SURROUNDING AREA
 NATIONAL PARK SERVICE
 NATIONAL MALL 150274

S A S A K I

RTKL



JUNE 29, 2009

