



# Water Systems Consolidation Project

- DEERFIELD PARK 1 - DEERFIELD PARK 2 -
- HAWLEY HILLS - MARVIN GARDENS -

# Tonight's Agenda

- ▶ Introduce Tonight's Panelists
- ▶ How to Use Zoom
- ▶ Project Background
- ▶ Project Timeline
- ▶ Project Update & Meeting the Design Engineer
- ▶ Consolidation Project Advisory Committee
- ▶ Questions



John  
Weidenfeller  
General  
Manager



# Kim Gubbe

## Director of Planning and Compliance





# Jim Campbell

## Director of Field Operations



Doug Piehl  
Engineering Manager,  
Northwest Water  
Systems, Inc.





Ruth Clemens  
Administrative  
Services Manager,  
Moderator



# Teal Reopelle Planning and Compliance, Moderator



# How to Use Zoom

- ▶ At the end of the presentation we will take questions.
  - ▶ From a computer: click the “Raise Hand” button on your screen.
  - ▶ From a phone: press \*9 to Raise your hand
- ▶ You will be called to speak in the following ways:
  - ▶ From a computer: you will be called on using the name you enter before you entered the meeting.
  - ▶ From a phone: you will be called on using the last four digits of the number from which you called.
- ▶ Please state your name and the water system you live on (if you know it).

DEERFIELD PARK 1  
DEERFIELD PARK 2  
HAWLEY HILLS  
MARVIN GARDENS

# Consolidation Project

# Why Consolidation?

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- ▶ All four systems are already intertied
  - ▶ Interties are used during emergencies
- ▶ Inadequate storage and booster systems at each site resulting in low pressure events
- ▶ Outdated booster technology
- ▶ Aging infrastructure
  - ▶ \$6.9 million forecasted replacements in next 18 years
- ▶ **\*New\*** 100% funded by grant
  - ▶ No impact to ratepayers—Free Money



# Why Consolidation?

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- ▶ Simplify management
- ▶ Increase reliability
  - ▶ Better service quality
  - ▶ Better pressure
  - ▶ Backup power generation
- ▶ Allowing pooling of system resources

# Benefits

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- ▶ Cost savings of \$1.4 million over next 18 years
- ▶ Extended life of well assets
- ▶ Mainline looping
  - ▶ Better quality of water
  - ▶ Better water pressure
- ▶ Larger reservoir
  - ▶ Concrete tank
  - ▶ Increased storage to fit water usage needs

# Consolidation Project Timeline

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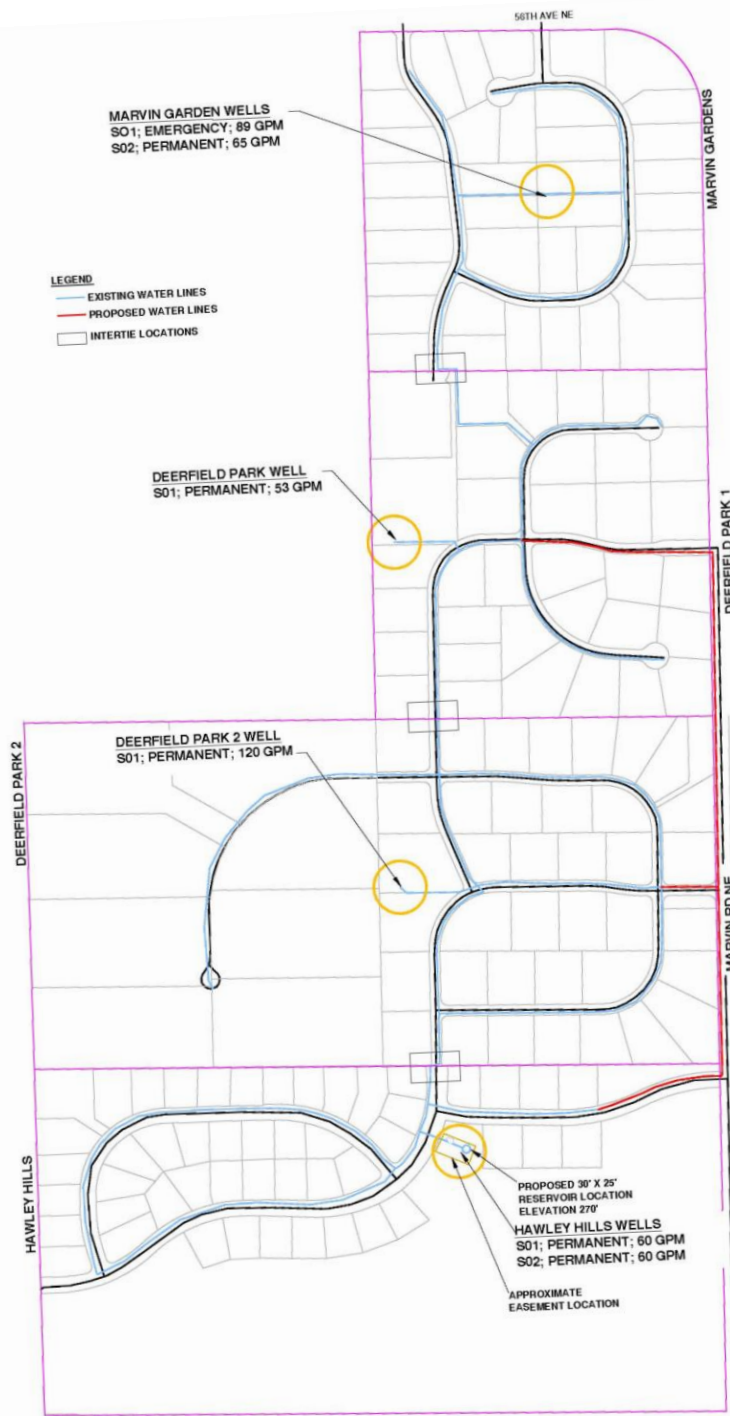


BY DOUG PIEHL,  
PROFESSIONAL  
ENGINEER  
NORTHWEST WATER  
SYSTEMS, INC.

# Project Update

# Current Well Locations

- ▶ One well located in each community, except two in Hawley Hills.
- ▶ Proposed looping (red) to reduce bottle necks and improve pressure during high demand.



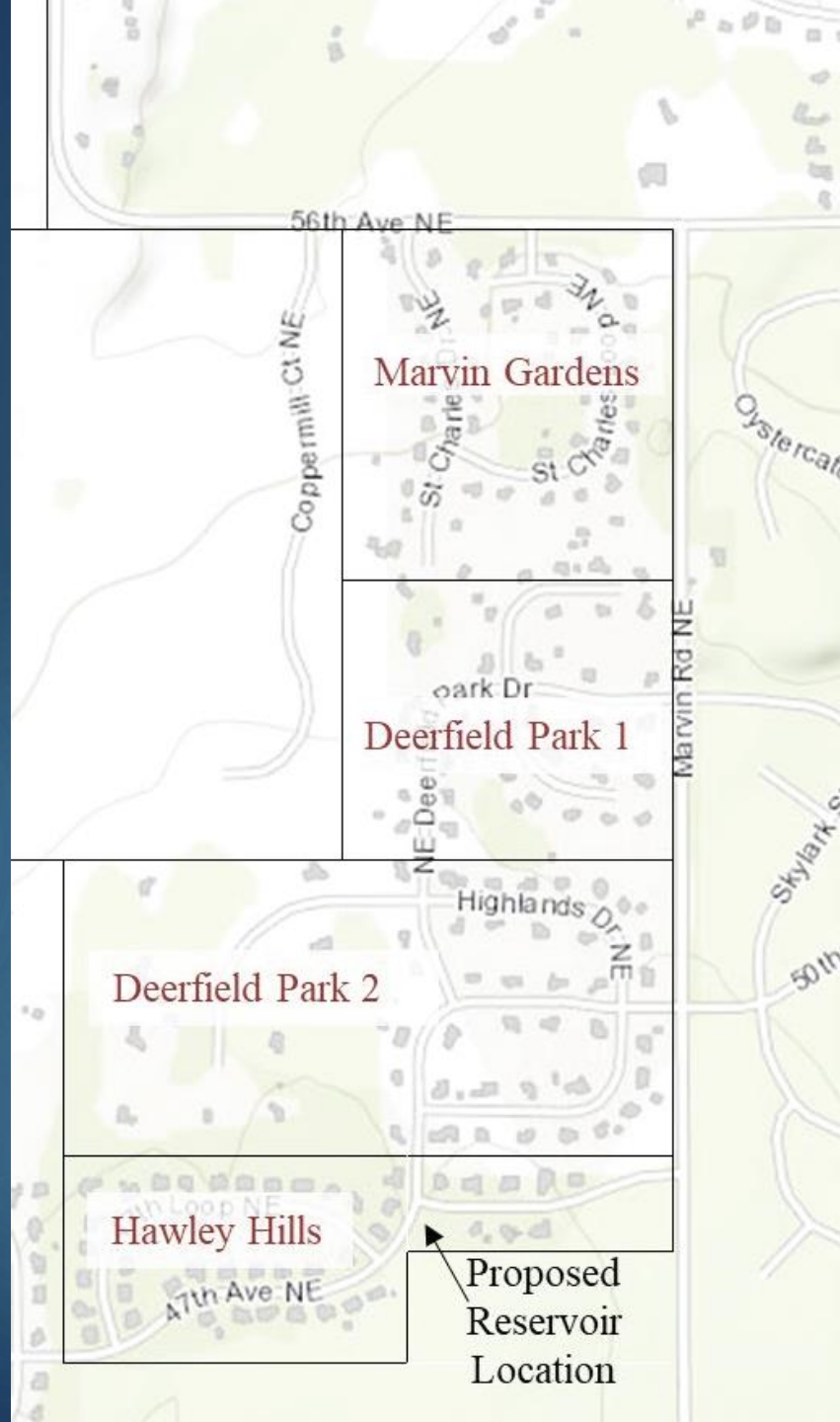
# Proposed Reservoir Placement Requirements:

- ▶ Sizable Easement in order to accommodate reservoir, booster station, and construction (laydown and stockpile areas)
  - ▶ Use existing easements, new lease or purchase, eminent domain
- ▶ Elevation
  - ▶ Higher elevation reduces booster size and energy consumption and may allow for emergency gravity flow
- ▶ Location relative to existing facilities
  - ▶ Mitigate long transmission lines and upsized distribution mains
  - ▶ Mitigate closing and cutting streets to install new mains
- ▶ Access
  - ▶ Limit need for access road construction
- ▶ Aesthetics and Community Values
  - ▶ Minimize aesthetic impact to community (location, screening, reservoir height)
  - ▶ Minimize construction disturbance (reservoir construction, road closure for new mains)



# Proposed Reservoir Location: Hawley Hills

- ▶ All sites and extending easements were looked at, but Hawley Hills met all requirements:
- ▶ Existing easement is of sufficient size
- ▶ Locally highest elevation,
- ▶ Two high-output wells are located in the existing easement
  - ▶ Transmission lines from other wells beneficial but not necessary.
  - ▶ Mainline up-sizing to accommodate high flow rate limited.
  - ▶ Reduces/eliminates road closures within the community (possible impacts to Marvin Rd due to looping)
  - ▶ Best water quality
- ▶ Accessible via existing easement access
- ▶ Must mitigate visual impacts



# Primary Proposed Reservoir Location Within Easement



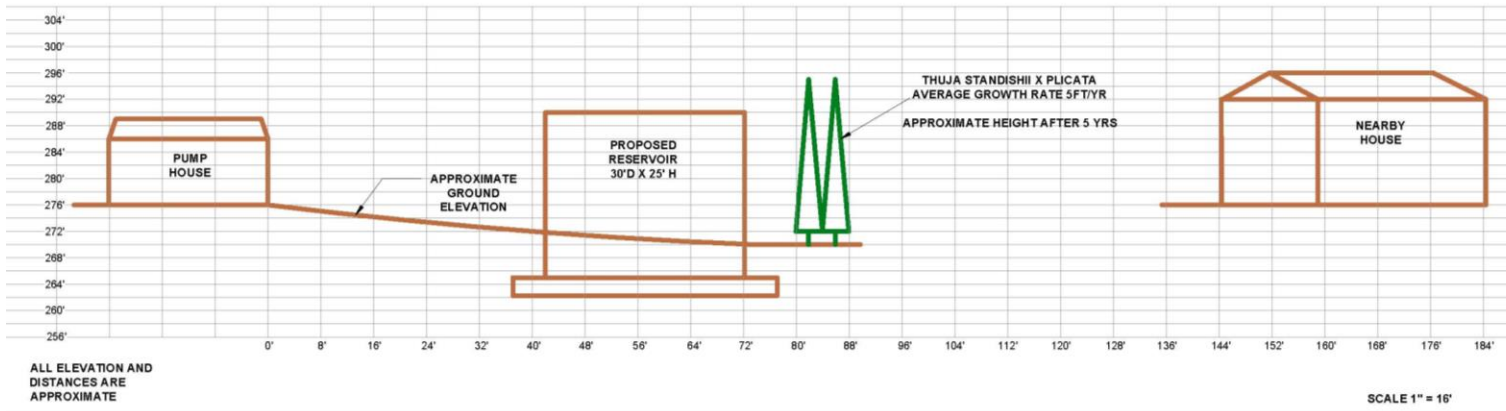
- ▶ Existing well locations impact reservoir placement
- ▶ Other locations within the easement currently infeasible due to inability to extend or obtain easement.
- ▶ Reservoir is 30' diameter, however foundation and foundation prep/grading extends beyond this.
- ▶ Recommended location is the only location (currently) available in Hawley hills



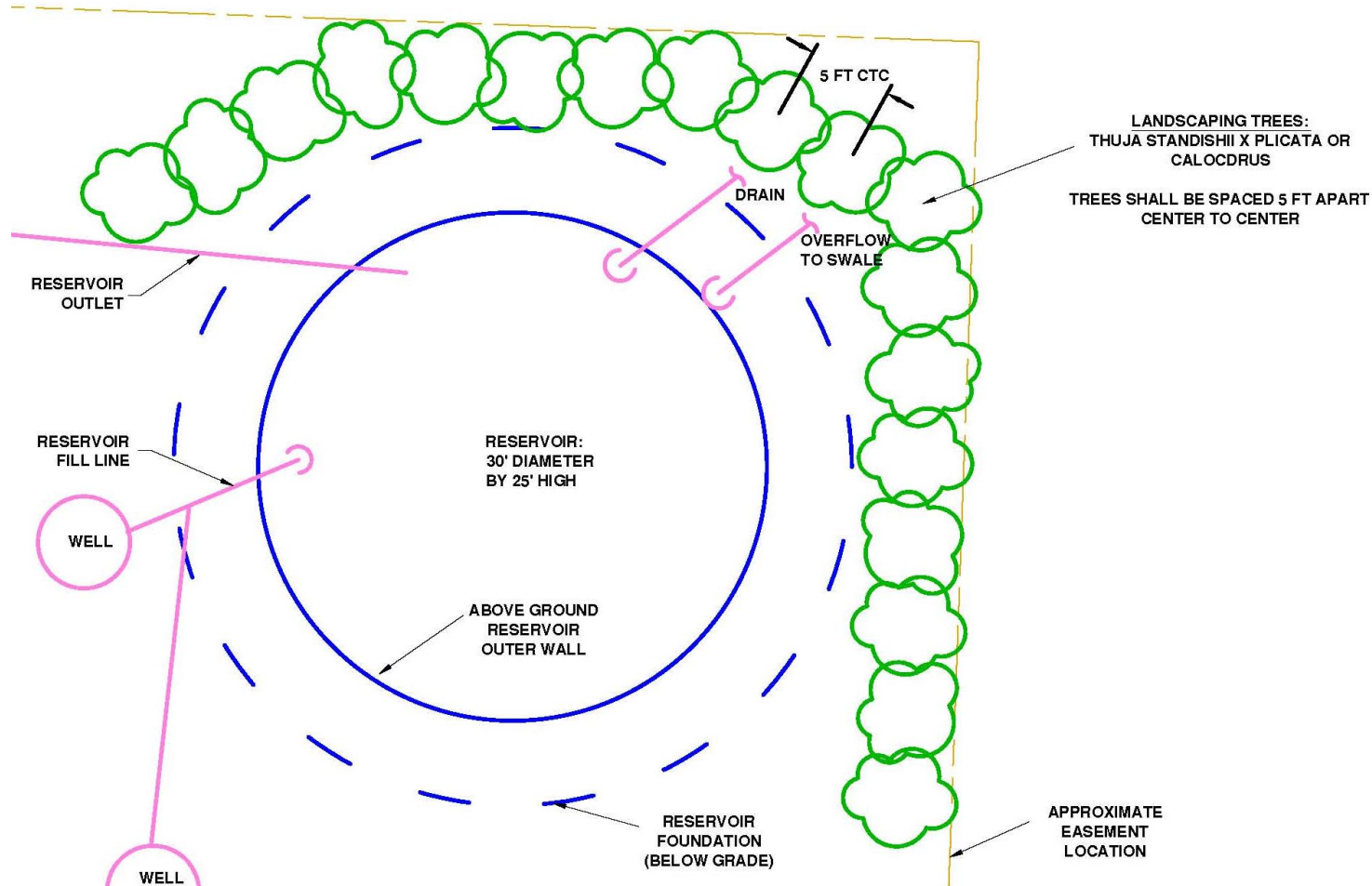


# Visibility Considerations

- ▶ Base recessed into ground as possible to limit above grade height to approximately 20 feet (shorter than surrounding homes)
- ▶ Stain dark green (proposed).
- ▶ Fast growing privacy plantings on street and private residence sides



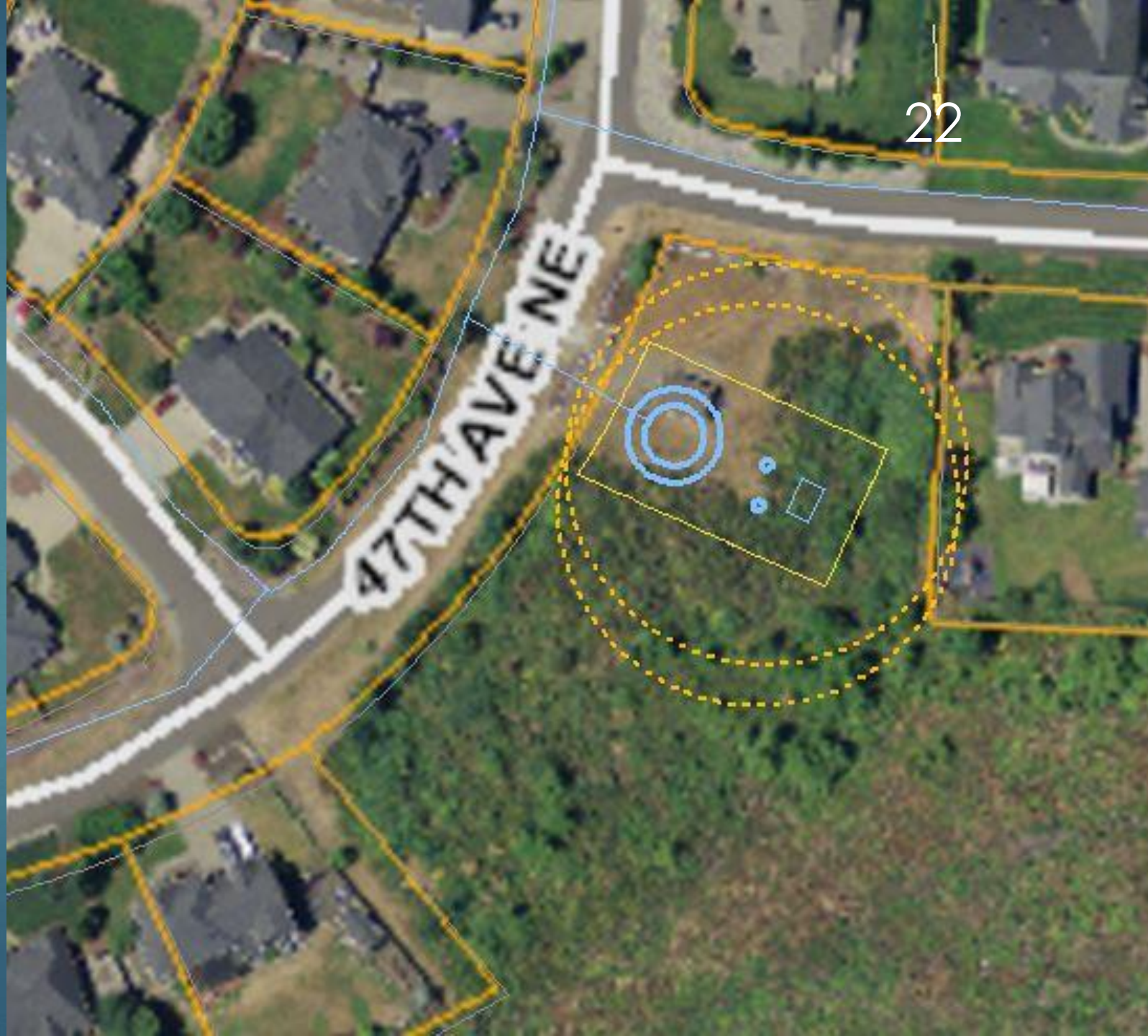




# Preliminary Proposed Landscaping

- ▶ Privacy plantings of fast-growing evergreens with a minimum mature height of 25'.
- ▶ Project will include a stormwater management or landscaping plan directing soil protection, restoration and amendment, planting, and irrigation requirements.

# Secondary Proposed Location





AD HOC COMMITTEE

# Consolidation Project Advisory Committee

# Consolidation Project Advisory Committee

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- ▶ Volunteer group comprised of customers from the consolidating water systems
- ▶ Group will meet for the purpose of the consolidation project only
- ▶ Topics can include
  - ▶ Reservoir color
  - ▶ Vegetation selection
  - ▶ Water System Re-naming
  - ▶ Security



# How to Join the CPAC

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- ▶ Contact Kim Gubbe, Director of Planning and Compliance
  - ▶ 360-357-8783 ext. 125
  - ▶ [kgubbe@thurstonpud.org](mailto:kgubbe@thurstonpud.org)

# Questions