

HIGH SYSTEM RESERVOIR

SEPTEMBER 2020

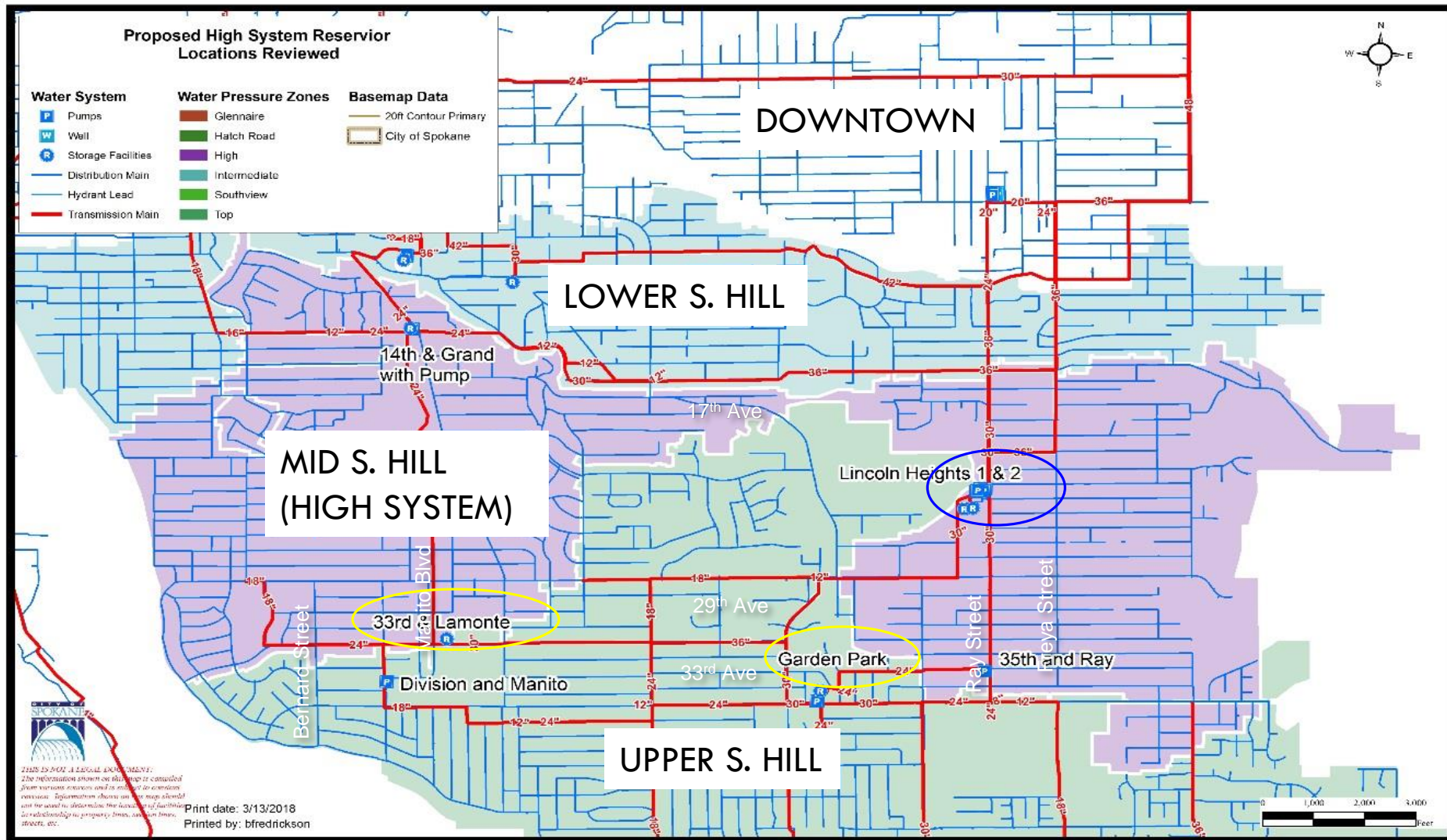


PROJECT OBJECTIVES

A NEW RESERVOIR IS NEEDED IN THE HIGH SYSTEM PRESSURE ZONE:

- TO INCREASE SYSTEM RELIABILITY – FIRE FLOW & PEAK DEMAND SUPPLY DURING THE SUMMER
- TO MEET WASHINGTON STATE DEPARTMENT OF HEALTH REQUIREMENTS (WSP)
- AFFECTS ALL CITY WATER CUSTOMERS SOUTH OF 14TH AVE.

HIGH SYSTEM PRESSURE ZONE



CURRENT RESERVOIRS IN THE HIGH SYSTEM PRESSURE ZONE

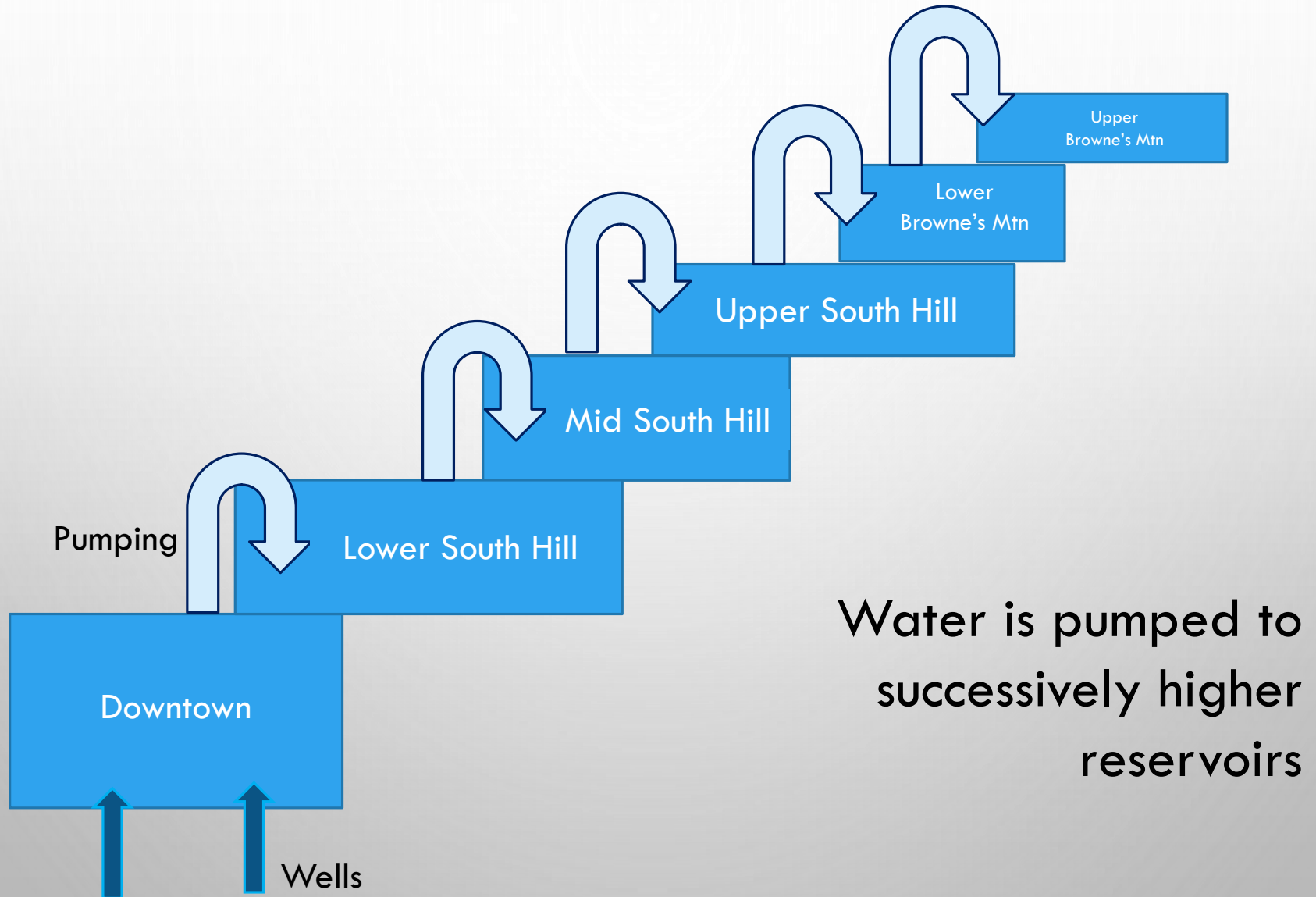


33rd & Lamonte
near Sacajawea



Garden Park at 37th Avenue near Stone Street

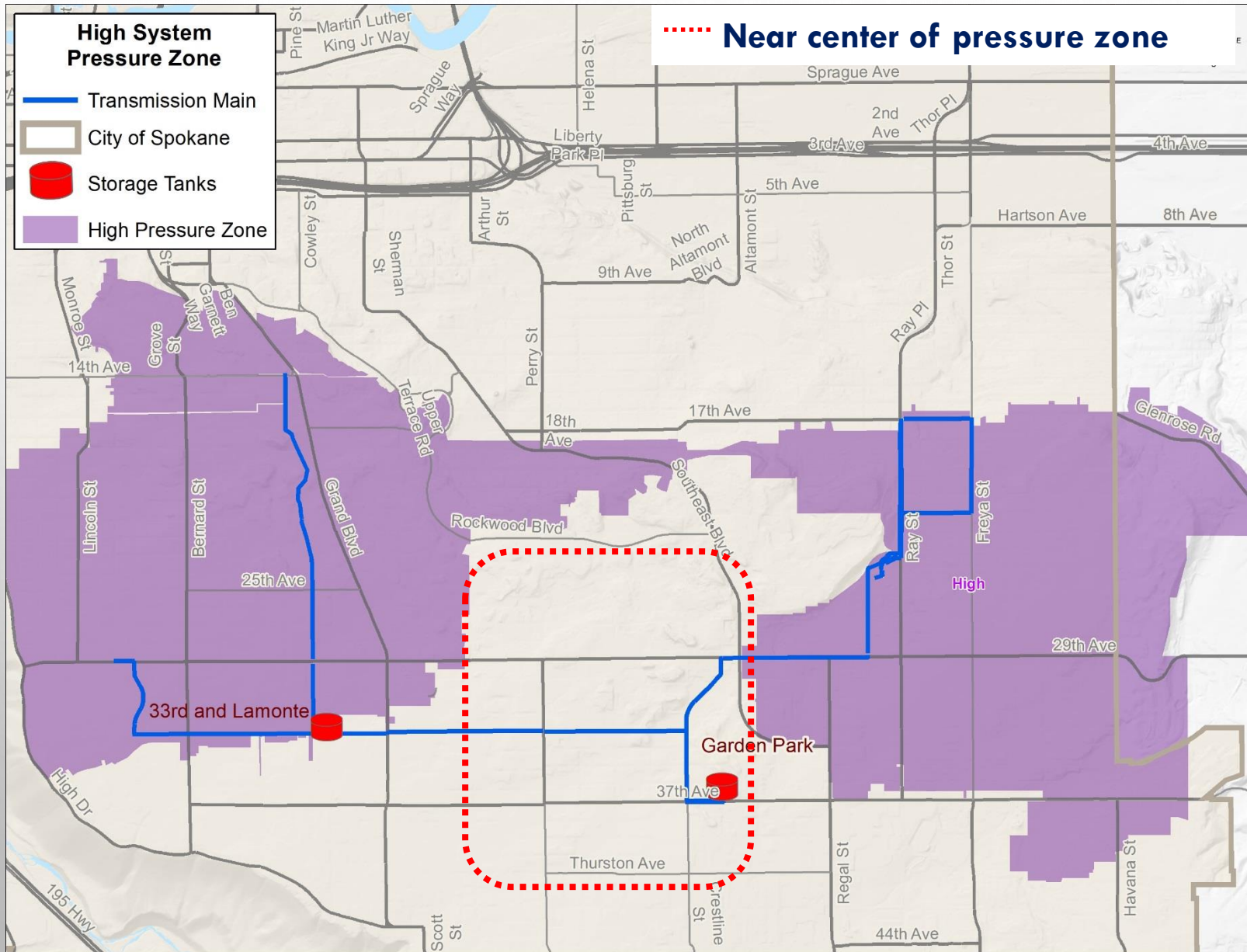
WATER SYSTEM BASICS



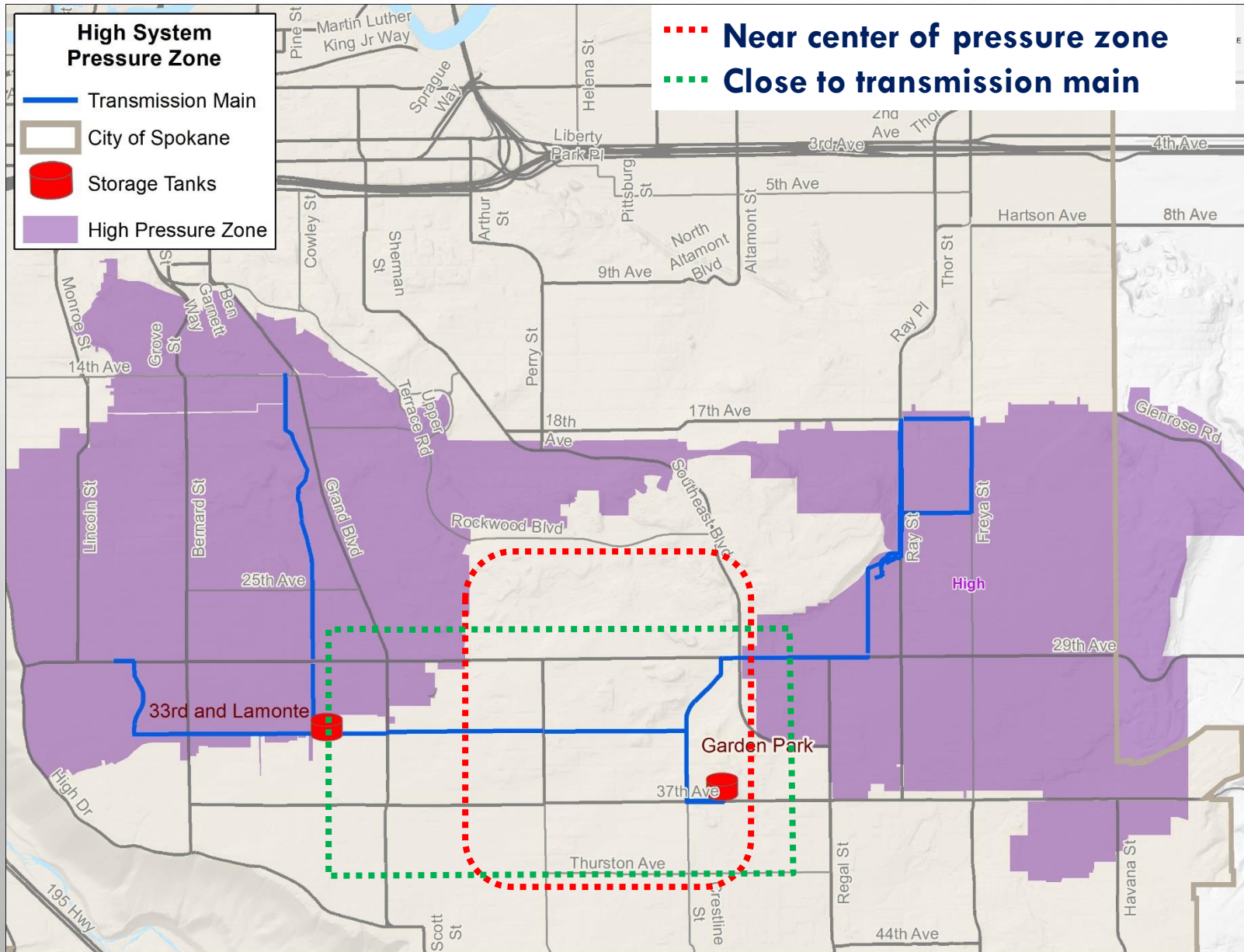
LOCATION SELECTION CRITERIA

- VACANT LAND (MIN 1 AC, IDEALLY 2 AC) AND IDEALLY CITY OWNED
- CLOSE TO TRANSMISSION MAINS – WITHIN 5 OR 6 BLOCKS
- NEAR THE CENTER OF THE PRESSURE ZONE
- ELEVATION OF APPROX. 2380' OR HIGHER TO KEEP RESERVOIR HEIGHT TO 100' OR LESS
- RELATIVELY FLAT
- MAXIMIZE DISTANCE TO ADJACENT HOMES

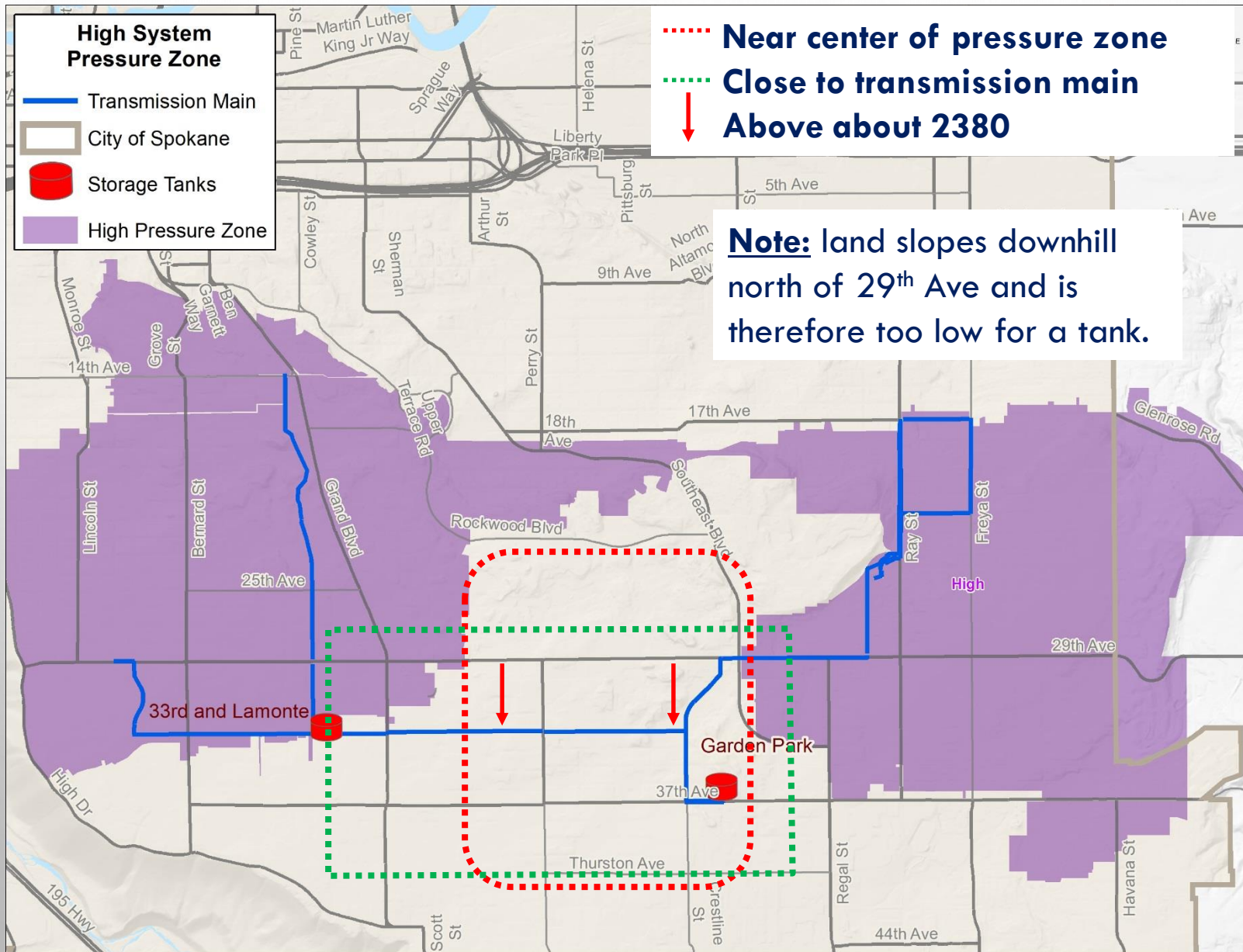
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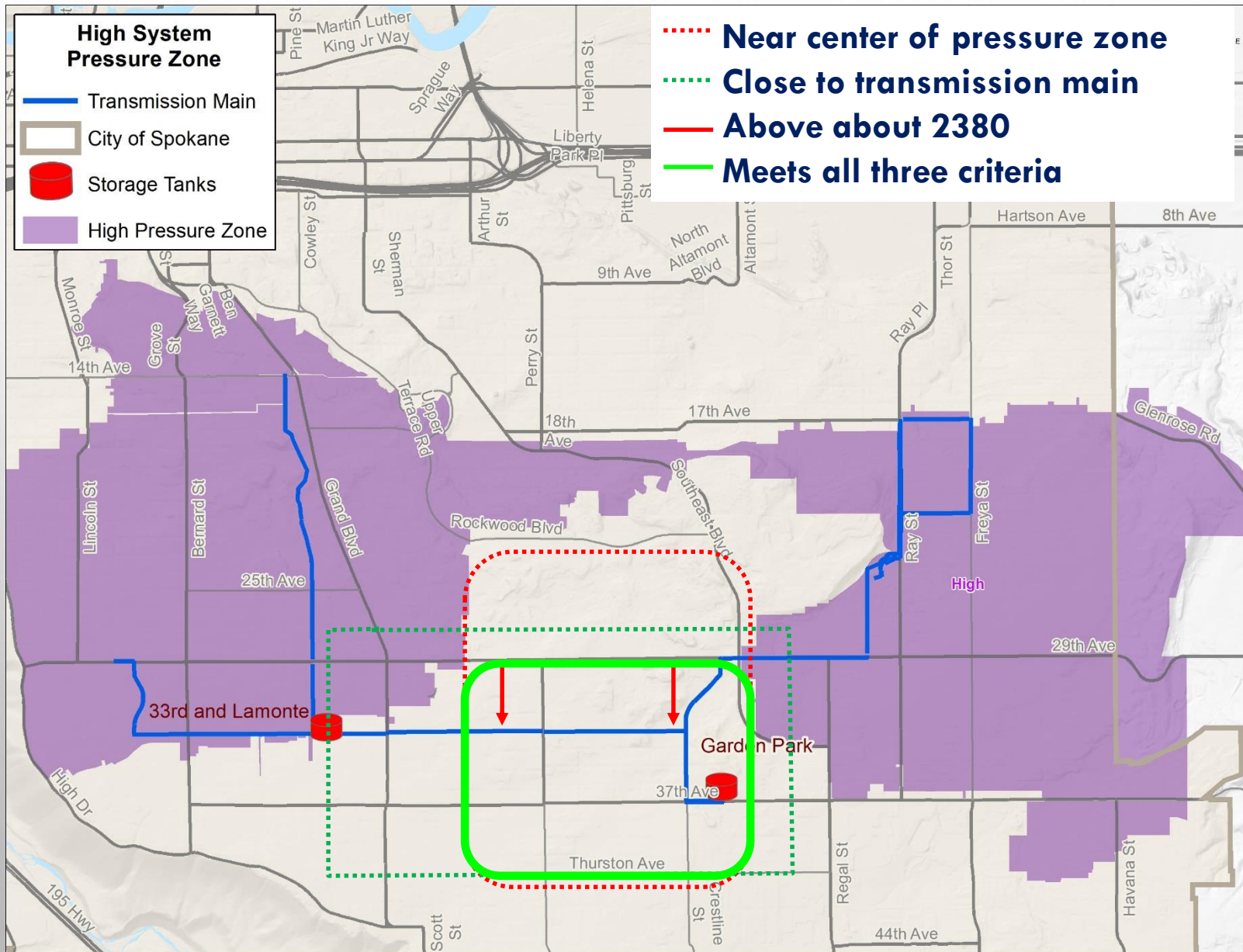
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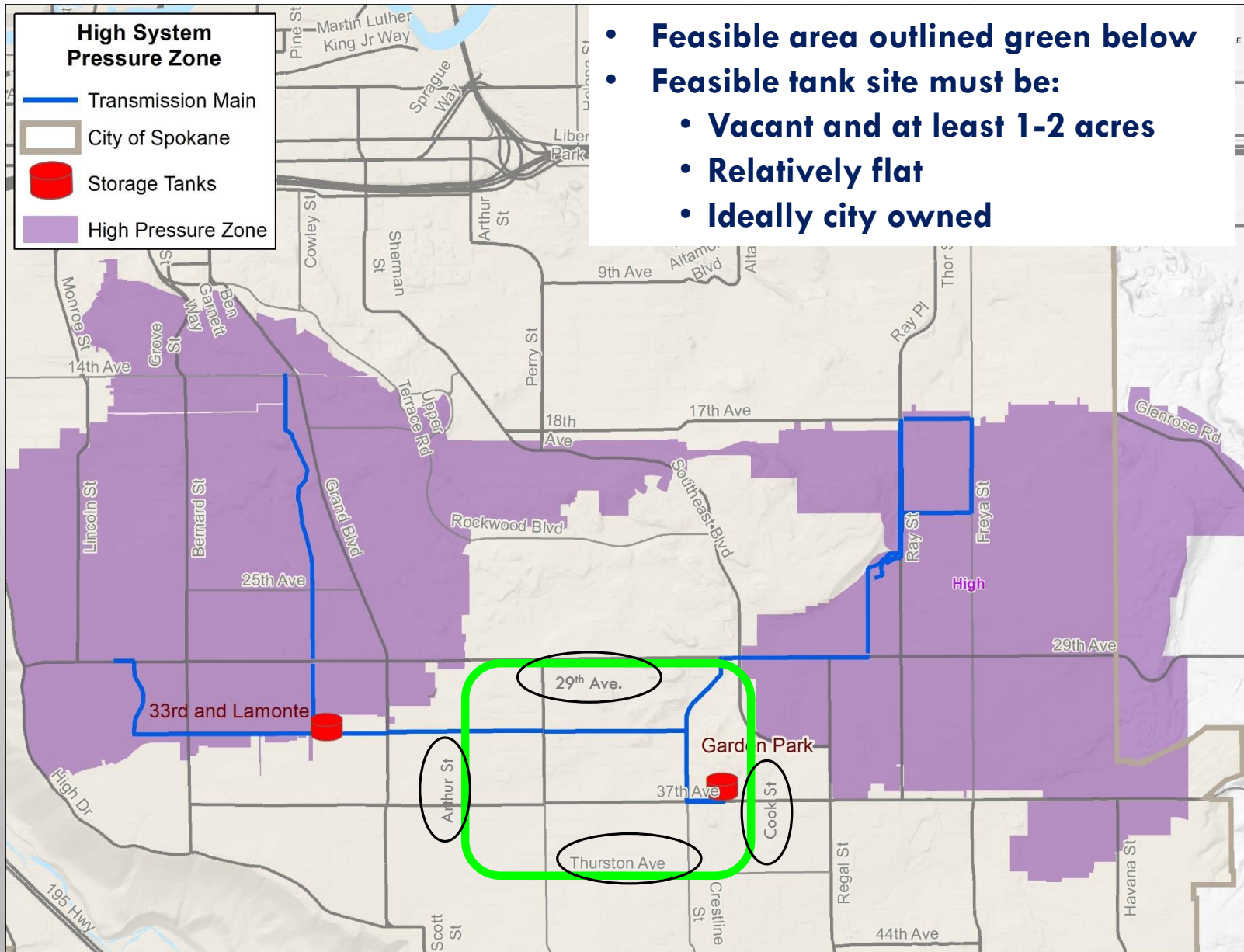
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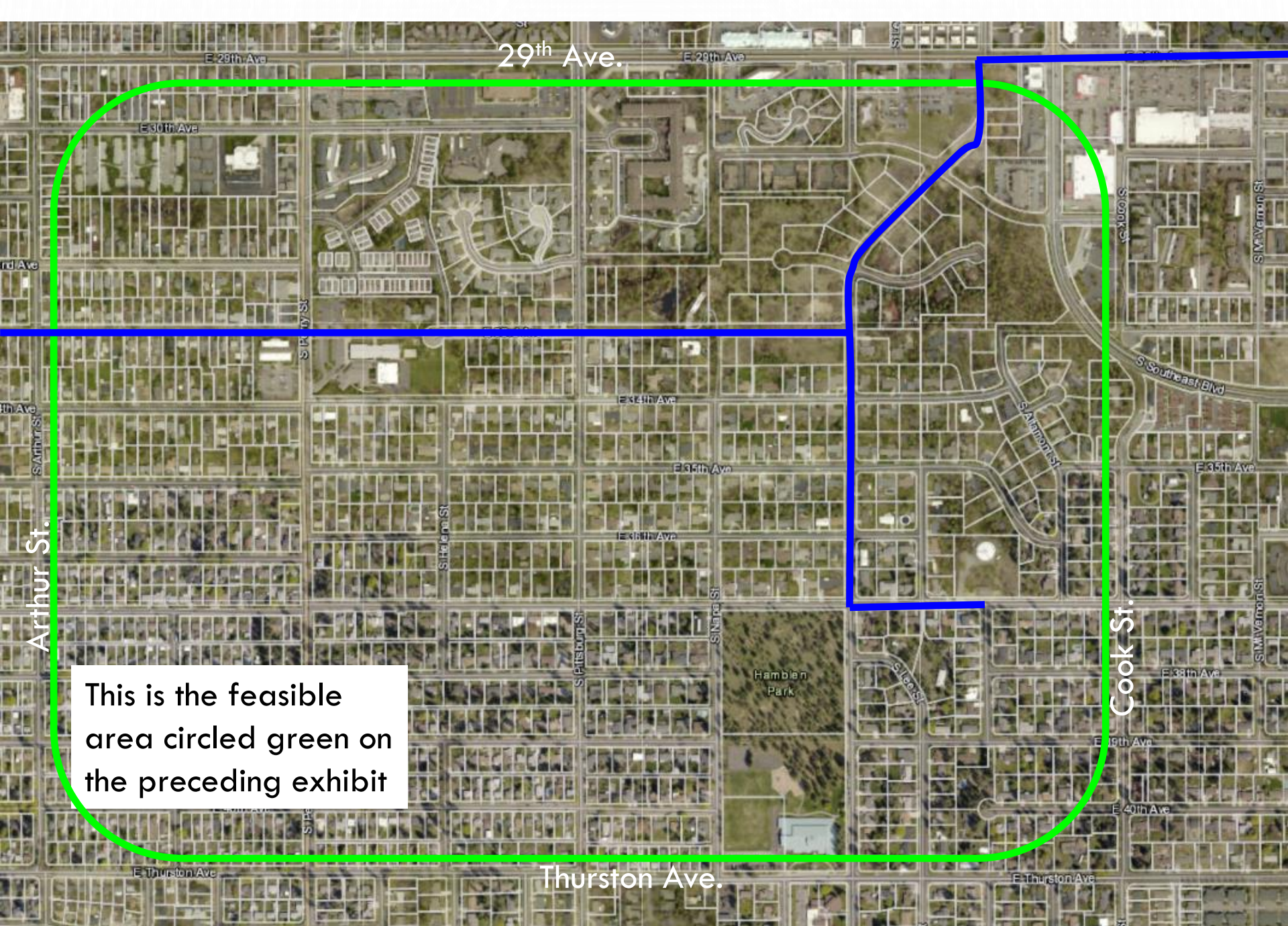


LOCATION SELECTION



LOCATION SELECTION





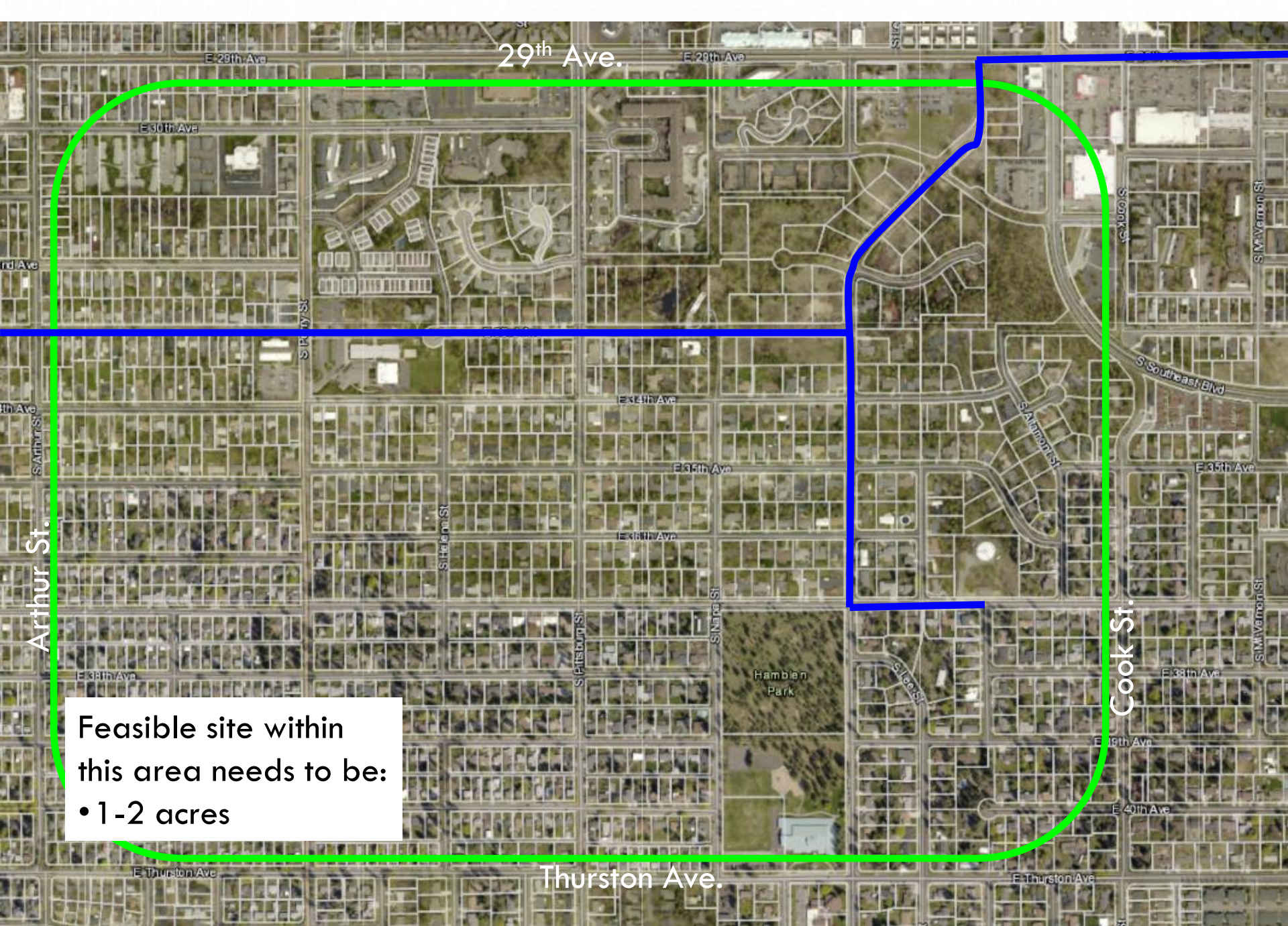
29th Ave.

Arthur St.

Cook St.

Thurston Ave.

This is the feasible
area circled green on
the preceding exhibit



29th Ave.

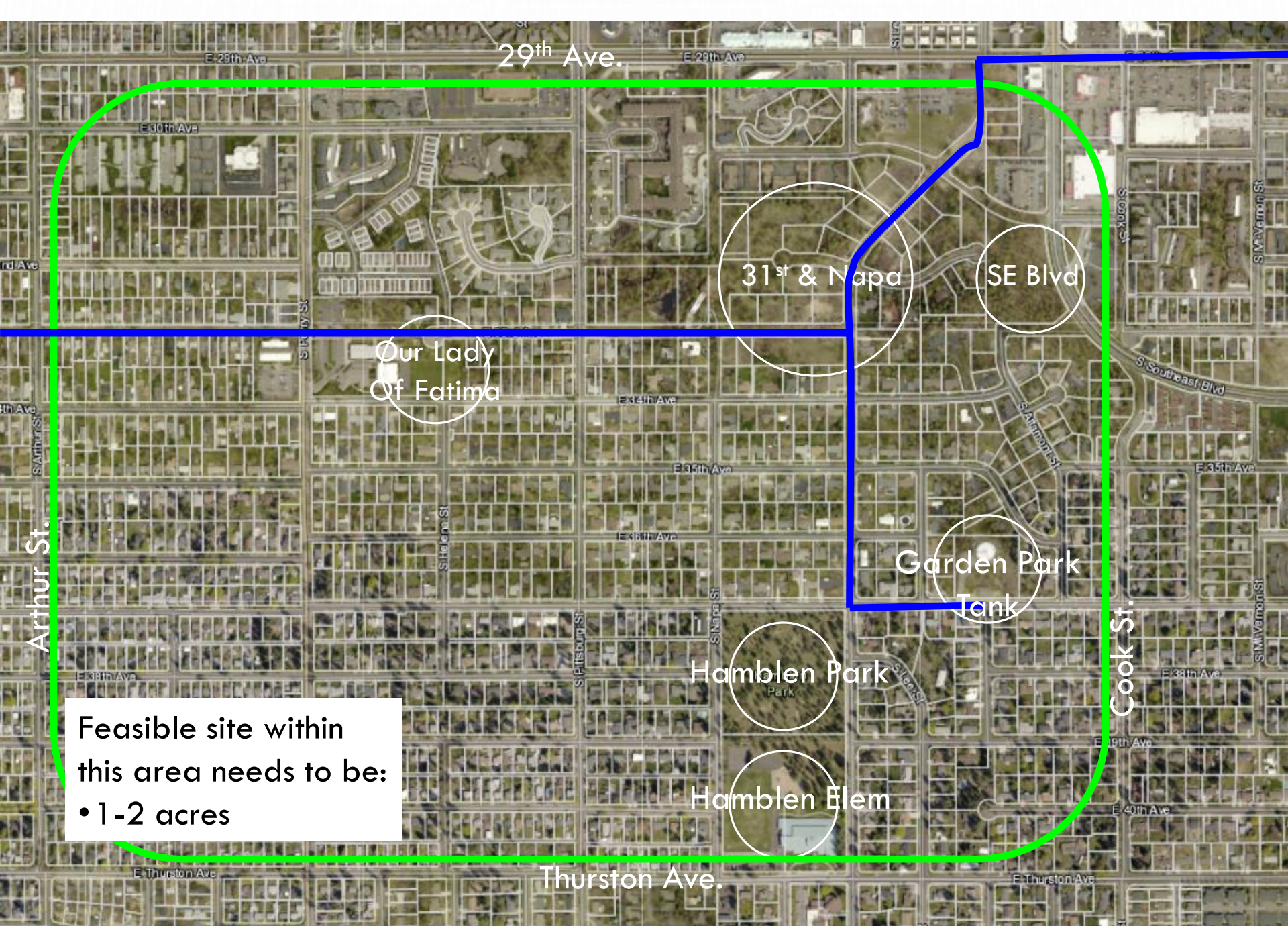
Arthur St.

Cook St.

Thurston Ave.

Feasible site within
this area needs to be:

- 1-2 acres





29th Ave.

E 28th Ave

E 29th Ave

E 30th Ave

rd Ave

th Ave

Arthur St.

S Perry St

Our Lady
Of Fatima

Elem St

E 33rd Ave

E 34th Ave

E 35th Ave

E 36th Ave

S Pittsburg St

S Napa St

Hamblen Park
Park

Hamblen Elem

Thurston Ave.

31st & Napa

SE Blvd

S Southeast Blvd

S Alameda St

E 35th Ave

Garden Park
Tank

Cook St.

E 38th Ave

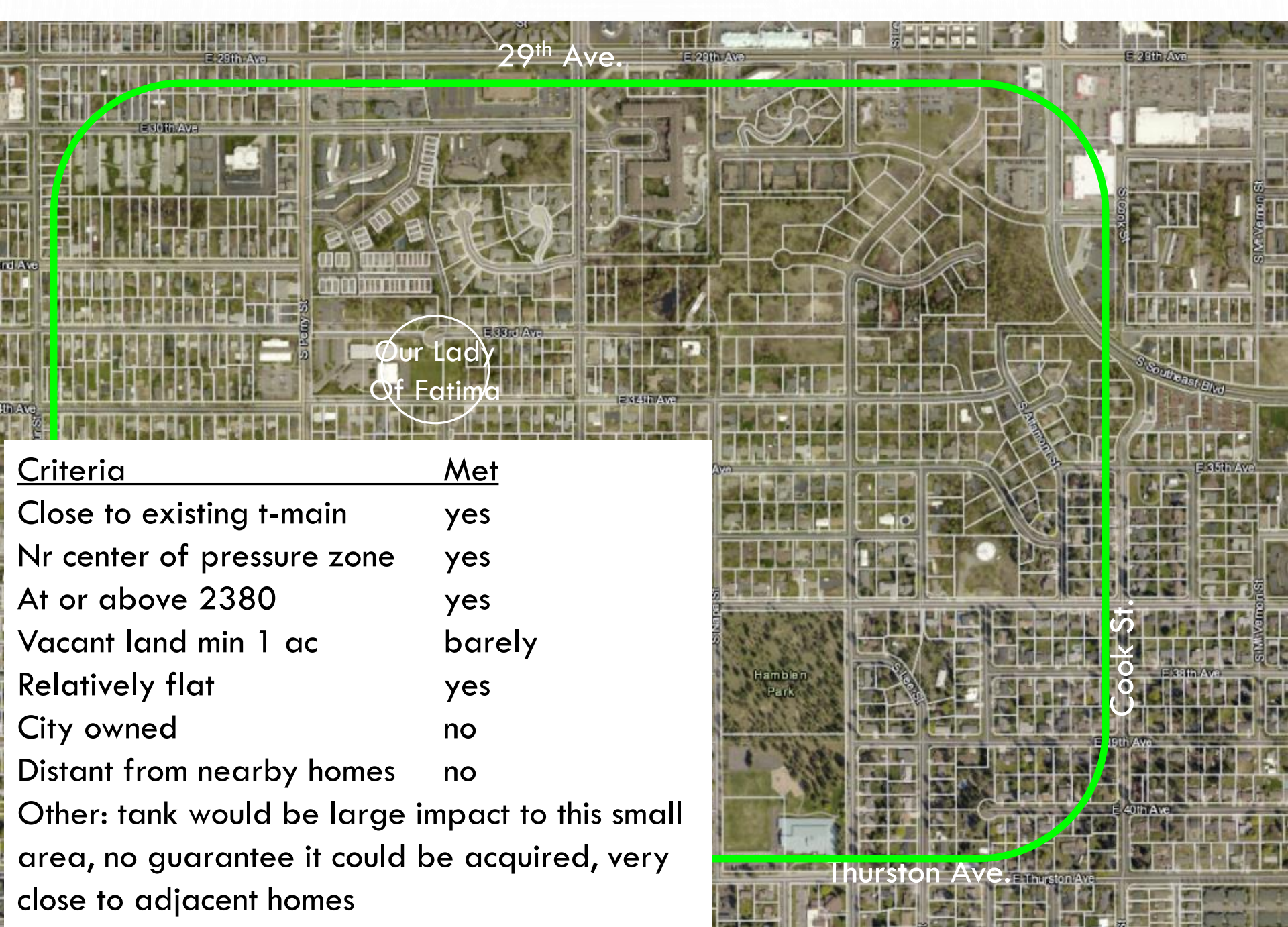
E 39th Ave

E 40th Ave

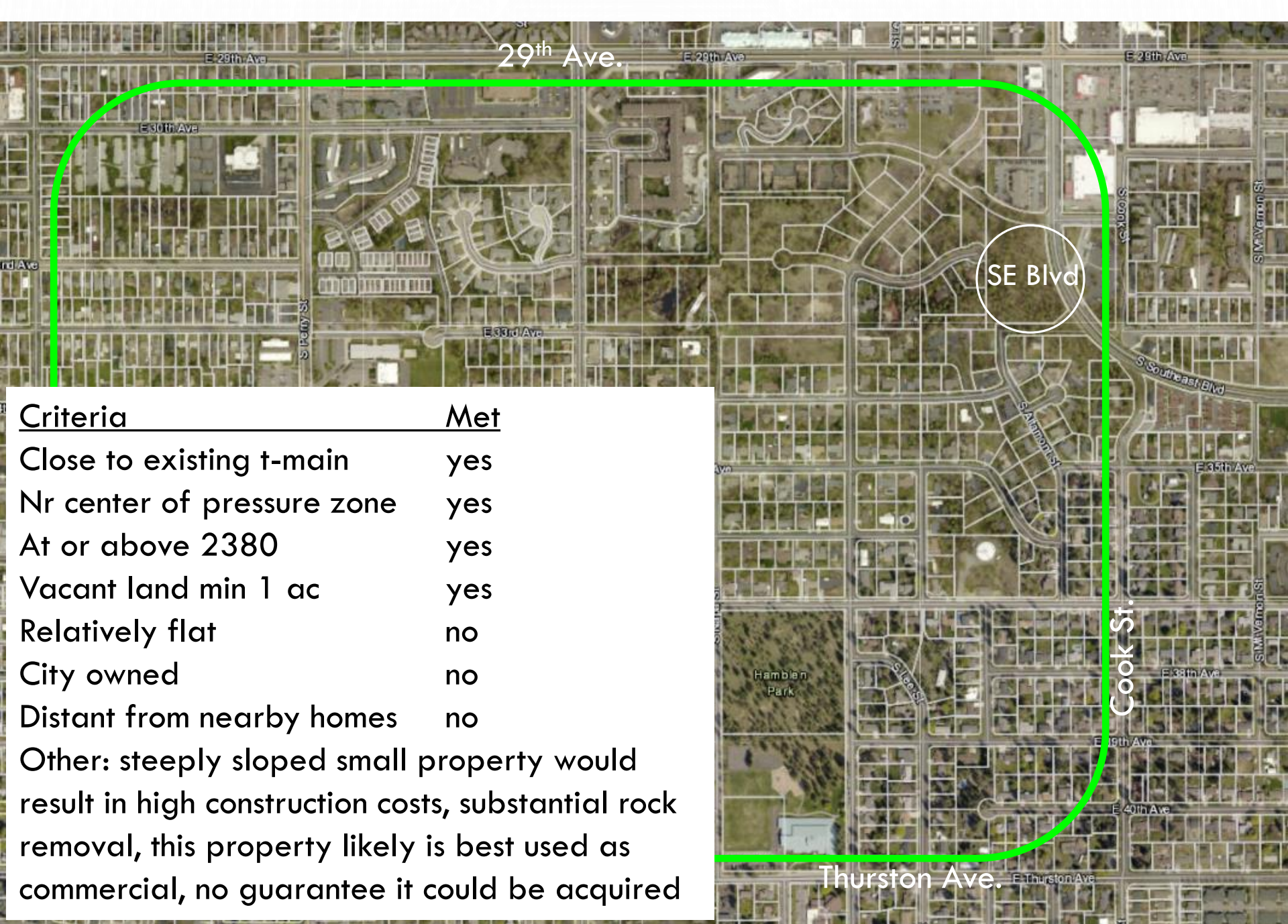
E Thurston Ave

S My Verman St

S My Verman St

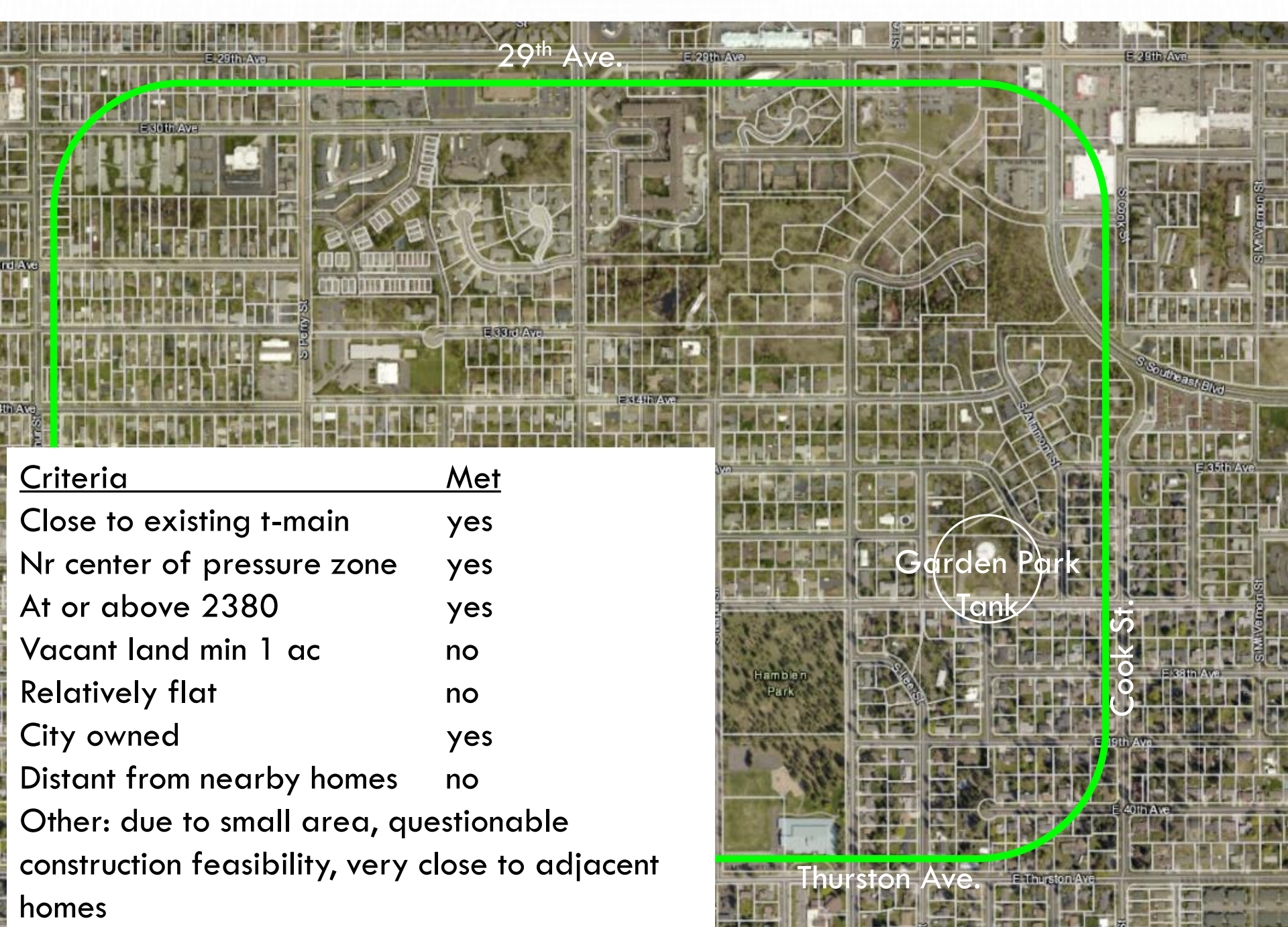


Criteria	Met
Close to existing t-main	yes
Nr center of pressure zone	yes
At or above 2380	yes
Vacant land min 1 ac	barely
Relatively flat	yes
City owned	no
Distant from nearby homes	no
Other: tank would be large impact to this small area, no guarantee it could be acquired, very close to adjacent homes	

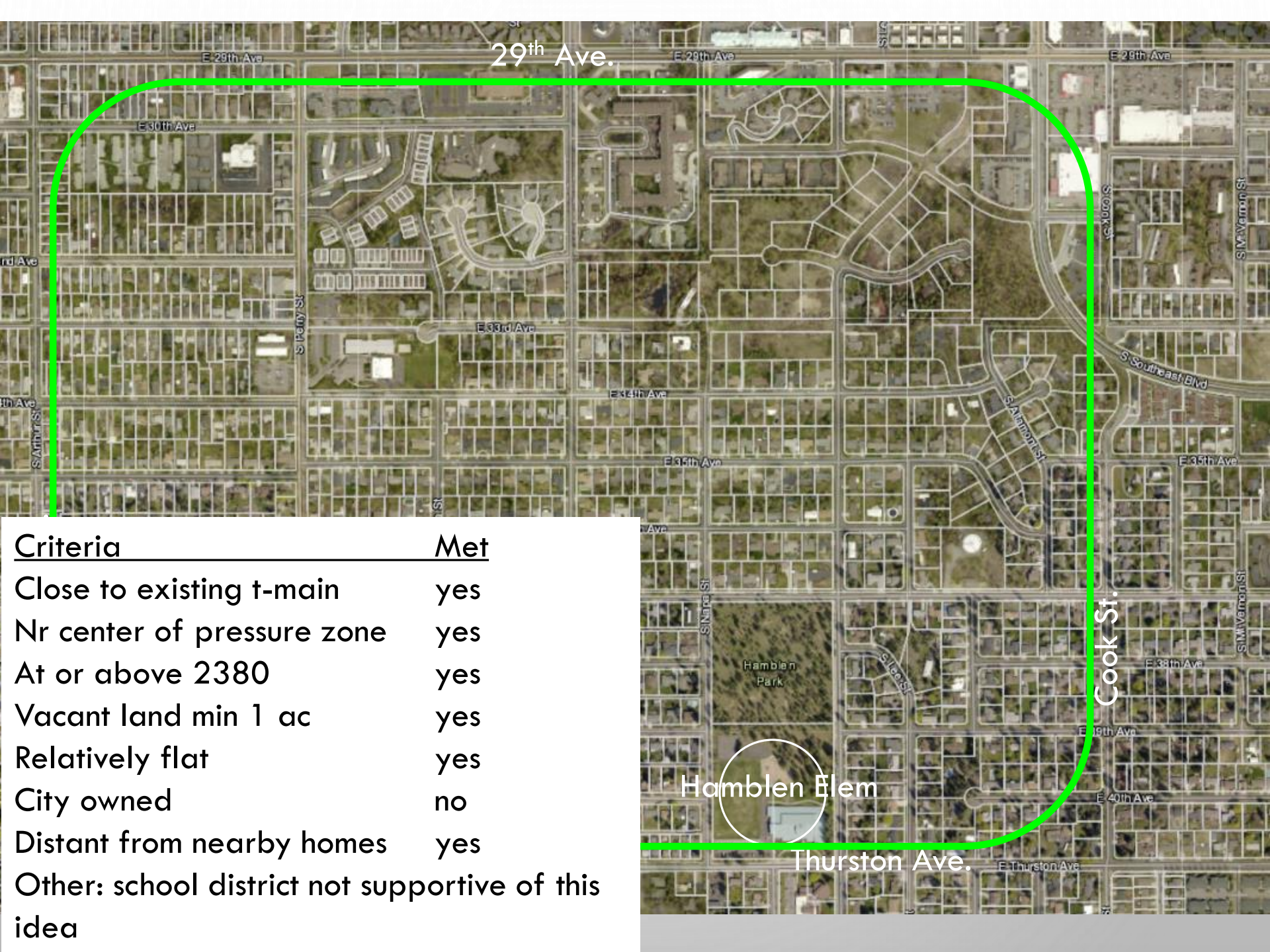


Criteria	Met
Close to existing t-main	yes
Nr center of pressure zone	yes
At or above 2380	yes
Vacant land min 1 ac	yes
Relatively flat	no
City owned	no
Distant from nearby homes	no
Other: steeply sloped small property would result in high construction costs, substantial rock removal, this property likely is best used as commercial, no guarantee it could be acquired	



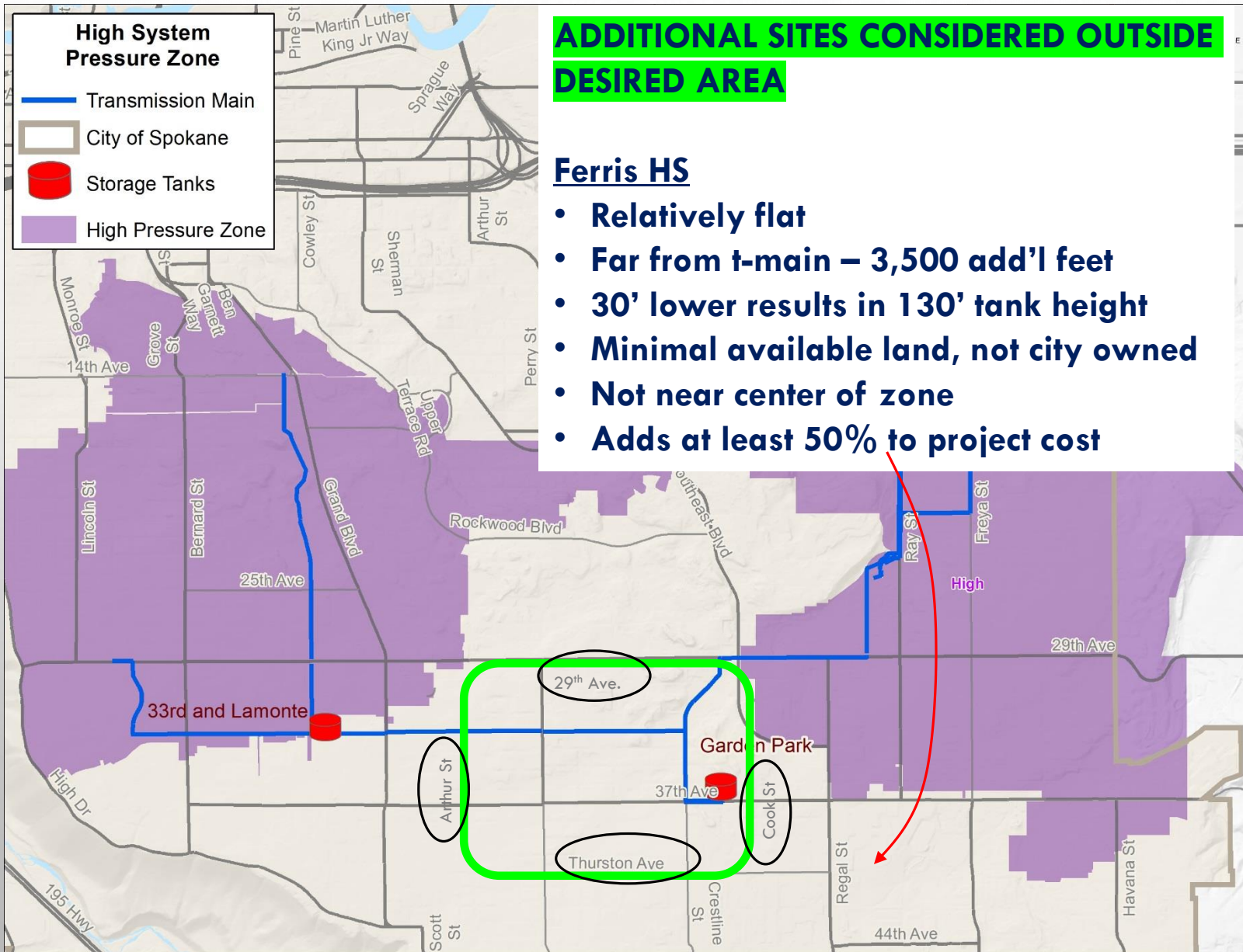


Criteria	Met
Close to existing t-main	yes
Nr center of pressure zone	yes
At or above 2380	yes
Vacant land min 1 ac	no
Relatively flat	no
City owned	yes
Distant from nearby homes	no
Other: due to small area, questionable construction feasibility, very close to adjacent homes	

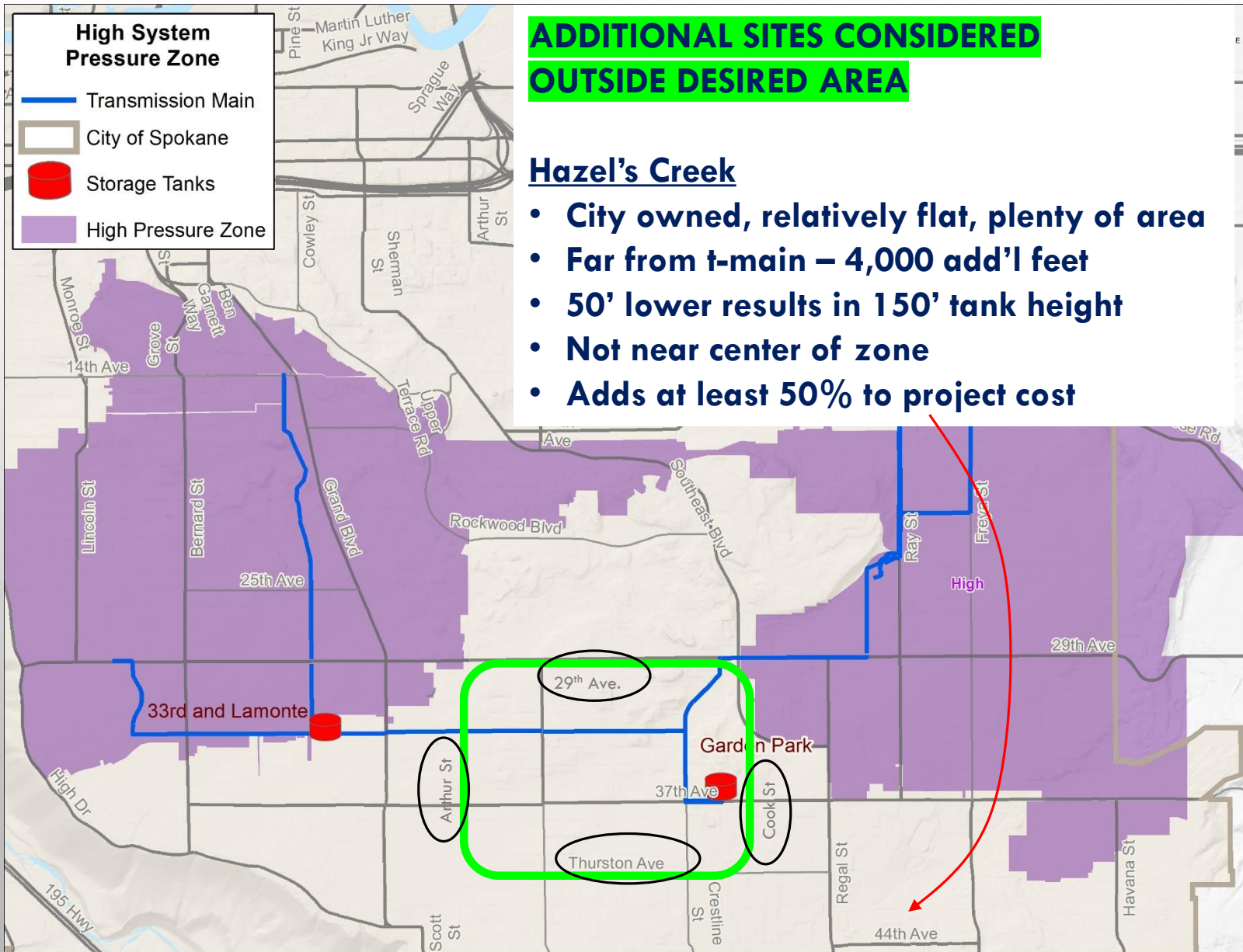


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Distant from nearby homes	yes
Other: school district not supportive of this idea	

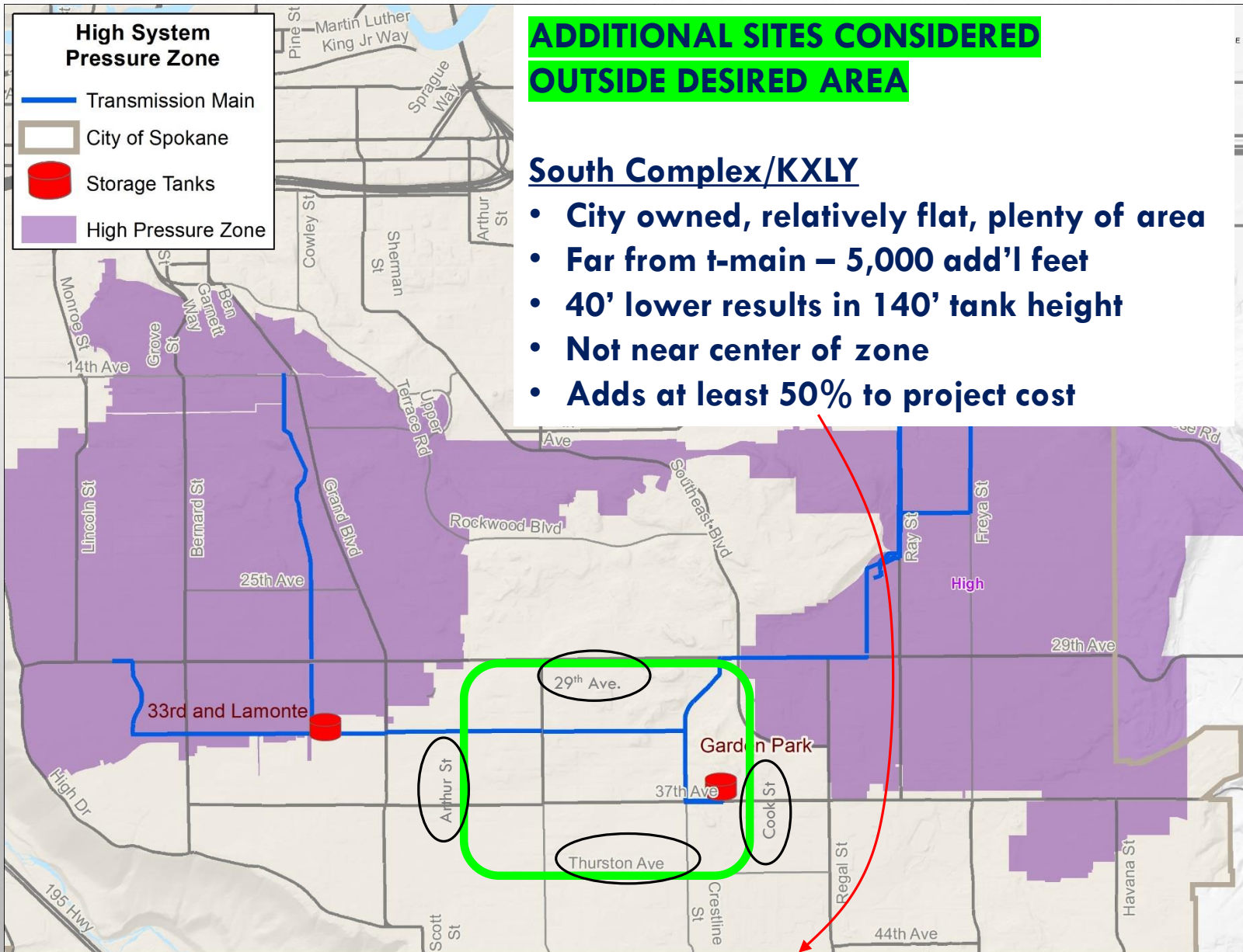
LOCATION SELECTION



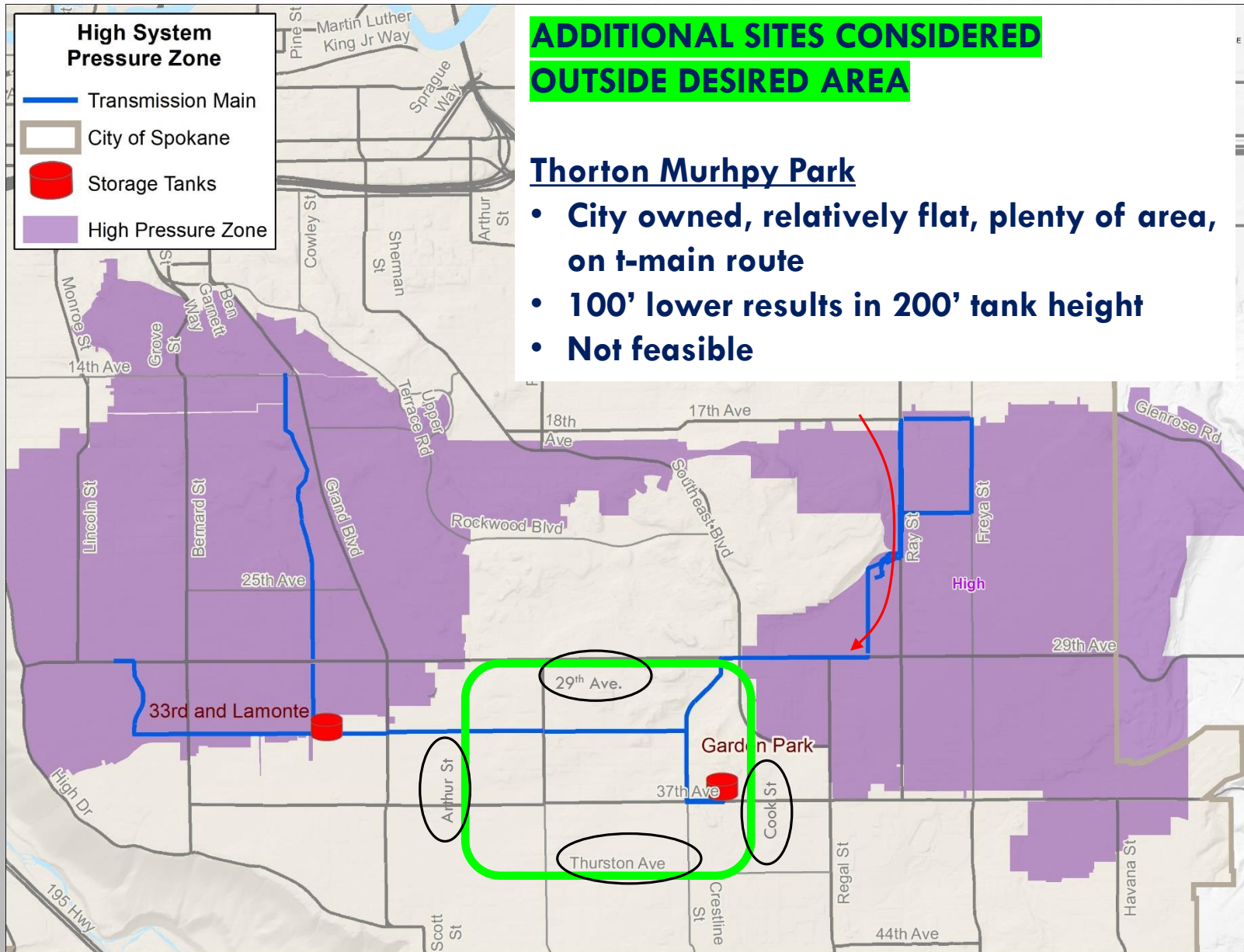
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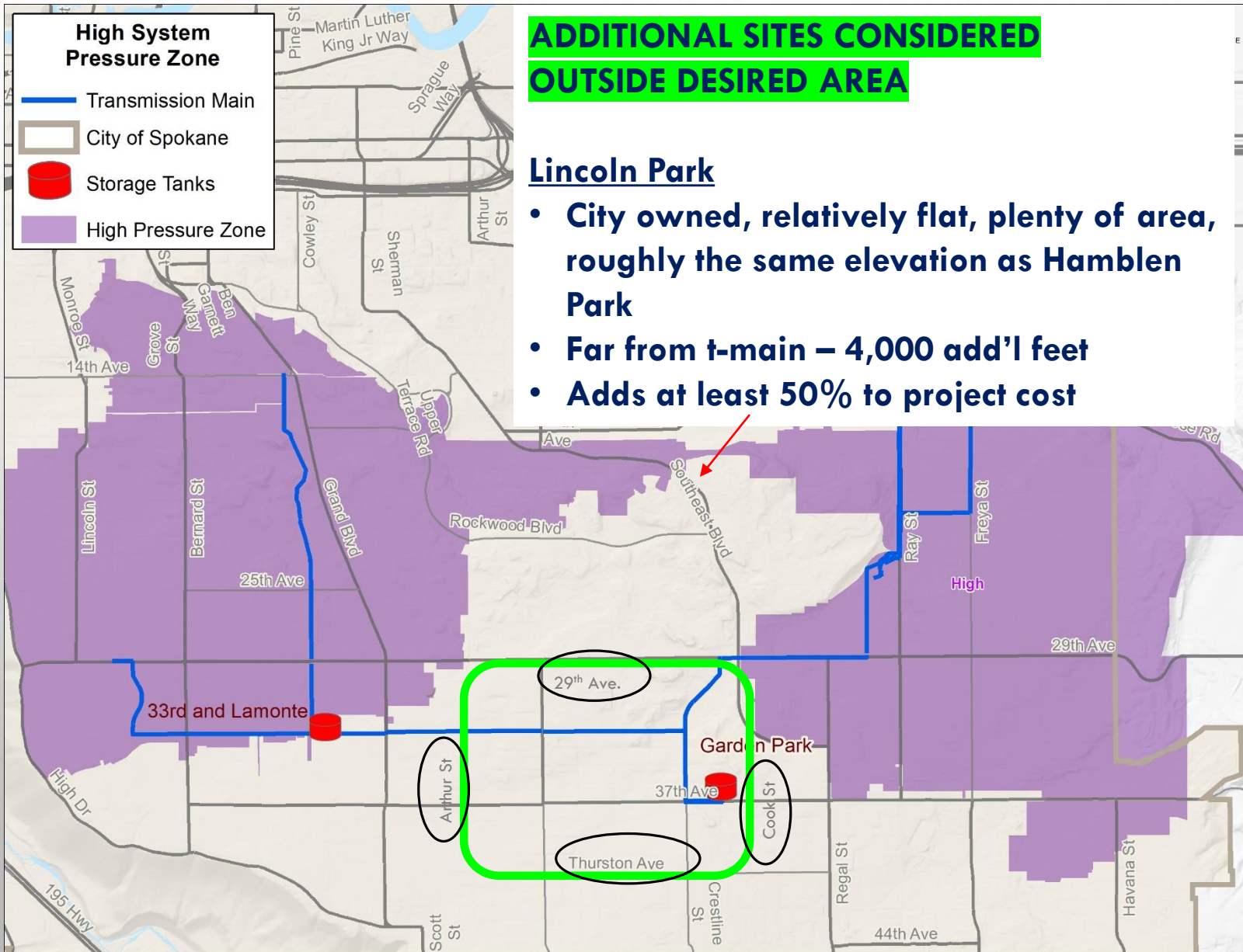
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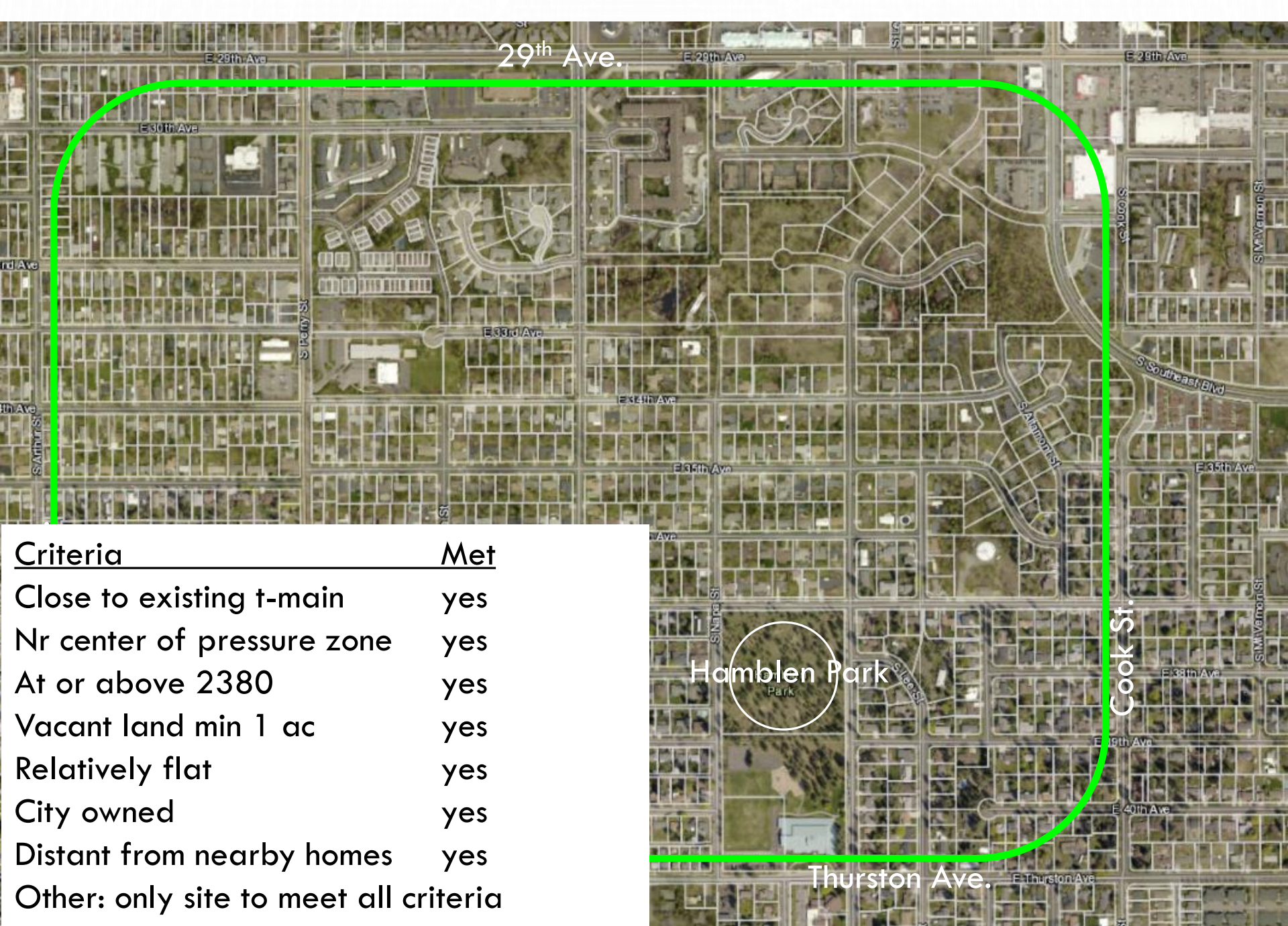


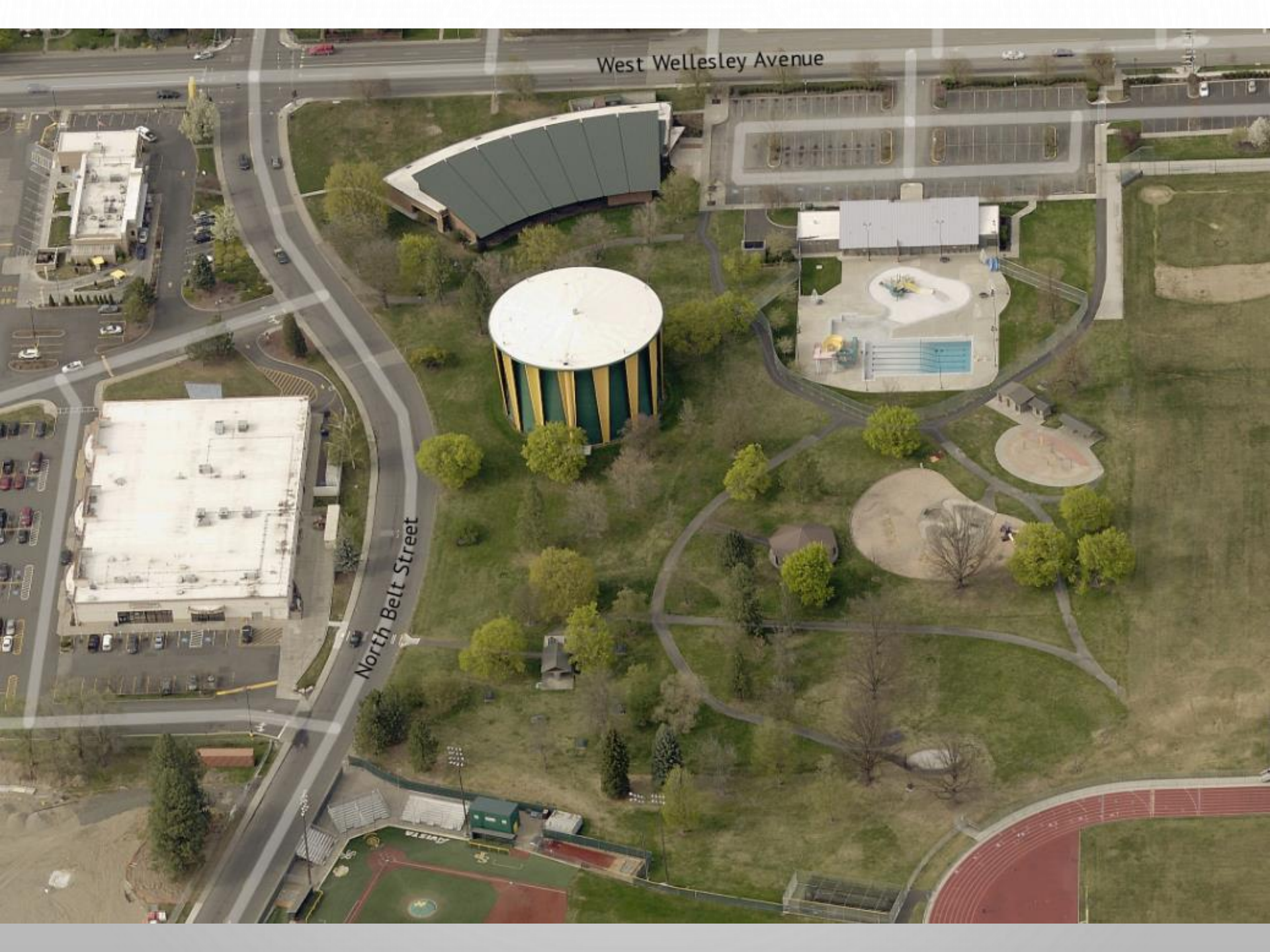
LOCATION SELECTION



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West Wellesley Avenue

North Belt Street



RESERVOIR DIMENSIONS

- APPROX. 100' TALL (AT HAMBLÉN PARK – VARIES IN OTHER LOCATIONS)
- APPROX. 2 MILLION GALLON CAPACITY
- 50'-60' DIAMETER AT ITS BASE (I.E., PEDESTAL DIAMETER)
- 100' TANK DIAMETER (I.E., TOP DIAMETER)

HAMBLÉN PARK

37TH AVE.

625'

625'

Hamblen
Park

HAMBLÉN
ELEMENTARY

NAPA ST.

CRESTLINE ST.

E 37th Ave

1900

2000

3700

3800

3900

4000

3700

3700

3800

2200

E 39th Ave

2300

4008

S Leo St

HAMBLÉN PARK

37TH AVE.

625'

PARK AREA = 9 AC
TANK FOOTPRINT = 0.08 AC
<1% OF PARK AREA

Hamblen Park



625'

NAPA ST.

CRESTLINE ST.

HAMBLÉN
ELEMENTARY

HAMBLÉN PARK

37TH AVE.

625'

325'

To nearest
home



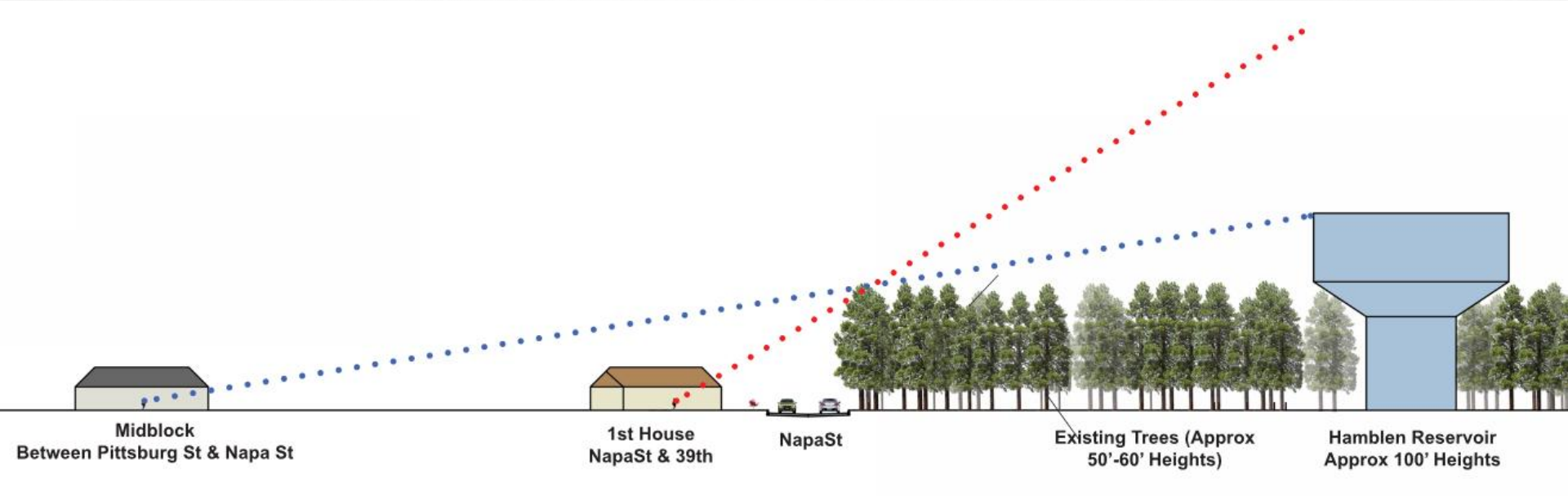
200'

Undisturbed
tree buffer

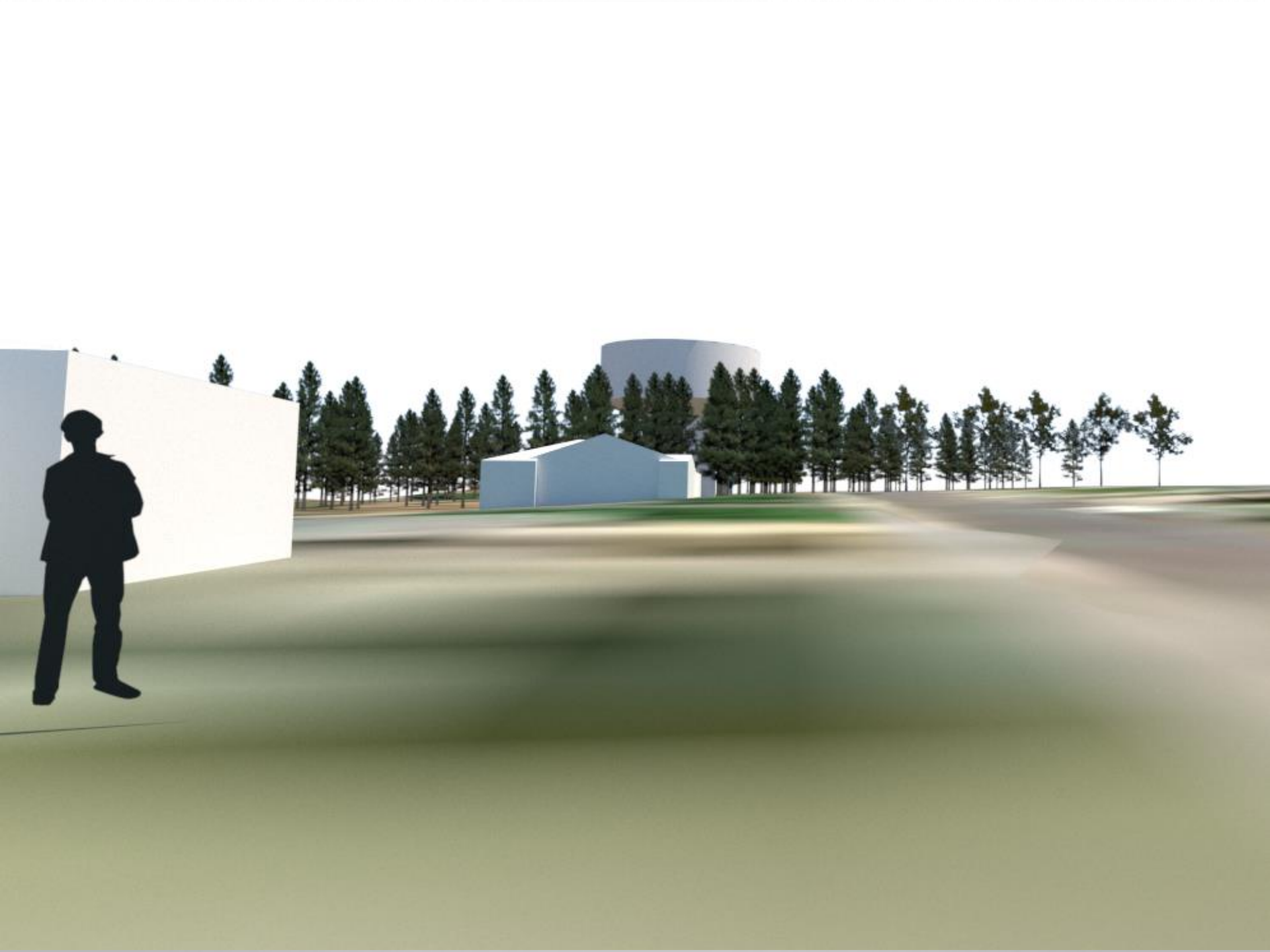
NAPA ST.

CRESTLINE ST.

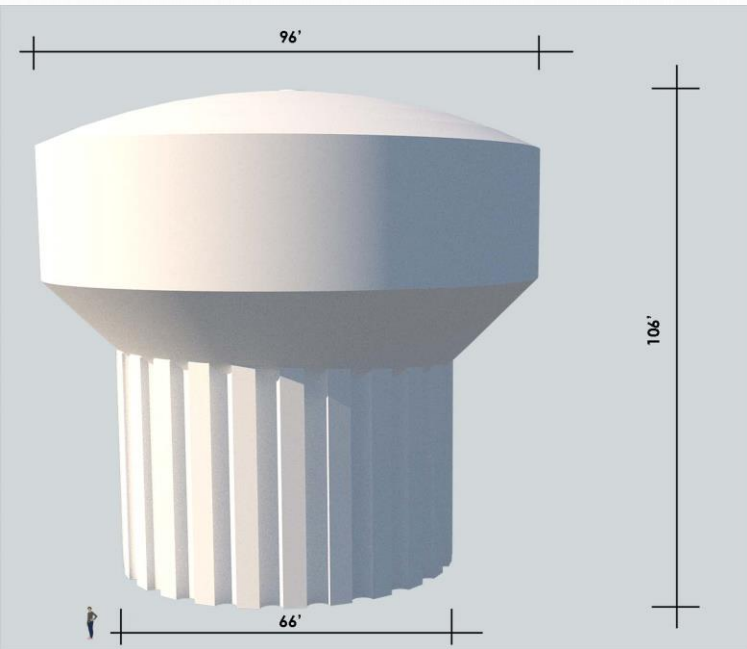
HAMBLÉN
ELEMENTARY







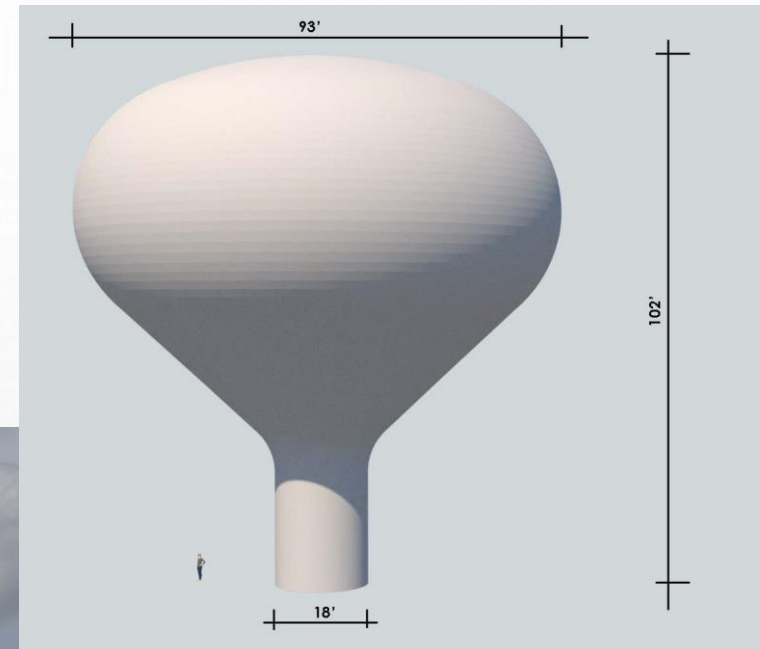
AVAILABLE RESERVOIR TYPES



Hydropillar



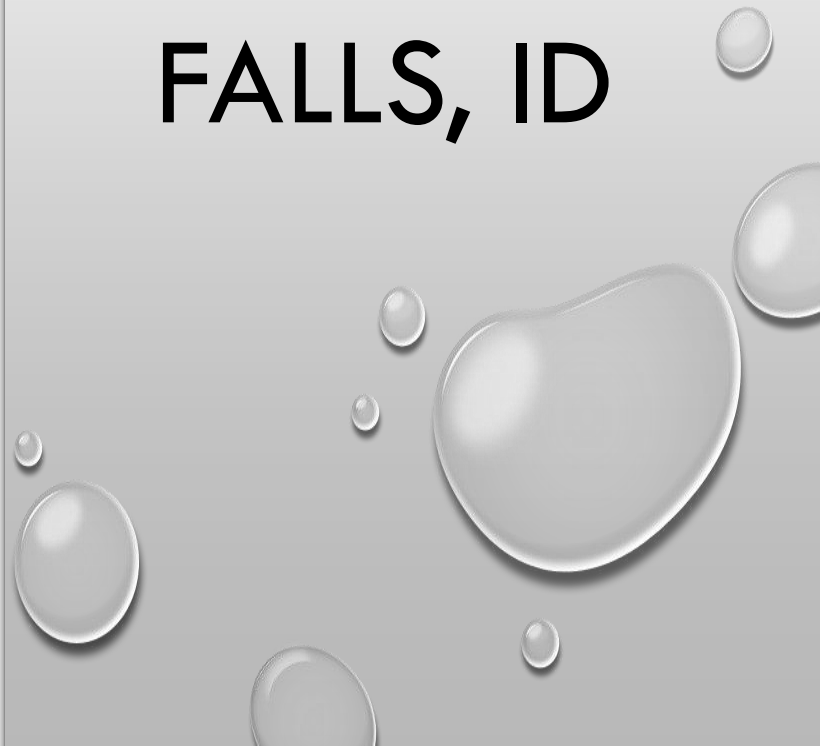
Standpipe



Water spheroid



POST FALLS, ID



MITIGATION MEASURES IF TANK IS LOCATED IN HAMBLÉN PARK

- START WITH HAMBLÉN PARK, POSSIBLY
INCLUDE OTHER PARKS
- THREE PARKS IN SOUTHGATE
NEIGHBORHOOD – HAMBLÉN, SOUTH
COMPLEX, BEN BURR
- ACQUISITION OF CONSERVATION LAND

PROJECT SCHEDULE & NEXT STEPS

- ✓ PRESENT PROJECT TO SOUTHGATE AND LINCOLN HEIGHTS NEIGHBORHOOD MEETINGS
- ✓ HOLD COMMUNITY MEETING ADVERTISED TO ALL RESIDENTS WITHIN A SEVERAL BLOCK RADIUS (MID SEPTEMBER)

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- EVALUATE & INCORPORATE COMMUNITY INPUT & SURVEY RESULTS (FALL 2020)
- SELECT TANK SITE AND BEGIN PERMITTING (WINTER 2020)

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- ANOTHER PUBLIC MEETING (ASSOCIATED WITH PERMITTING, WINTER 2020/21)
- INCORPORATE ADD'L COMMUNITY INPUT, FINALIZE PERMITTING (WINTER 2020/21)

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- ANOTHER PUBLIC MEETING (ASSOCIATED WITH PERMITTING, WINTER 2020/21)
- INCORPORATE ADD'L COMMUNITY INPUT, FINALIZE PERMITTING (WINTER 2020/21)
- PROJECT DESIGN (WINTER/SPRING 2021)
- CONSTRUCTION (2021-2022)

CONCLUDING THOUGHTS

- THIS TANK IS AN IMPROVEMENT THE CITY HAS TO MAKE
- IF YOU LIVE ANYWHERE SOUTH OF 14TH AVE., YOU BENEFIT

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- THE RESERVOIR MUST BE LOCATED IN THE VICINITY OF HAMBLÉN PARK AND SO WILL BE VISIBLE FROM THIS AREA REGARDLESS OF LOCATION

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- THE RESERVOIR MUST BE LOCATED IN THE VICINITY OF HAMBLLEN PARK AND SO WILL BE VISIBLE FROM THIS AREA REGARDLESS OF LOCATION
- HAMBLLEN PARK MEETS ALL THE CRITERIA
- HAMBLLEN DOESN'T DISPROPORTIONATELY IMPACT SOME NEIGHBORS BECAUSE IT'S A BLOCK AWAY FROM THE NEAREST HOME

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- HAMBLÉN PARK MEETS ALL THE CRITERIA
- HAMBLÉN DOESN'T DISPROPORTIONATELY IMPACT SOME NEIGHBORS BECAUSE IT'S A BLOCK AWAY FROM THE NEAREST HOME
- THE COMPLETED TANK IMPACTS LESS THAN 1% OF THE AREA IN HAMBLÉN PARK. THE PARK WILL NOT BE LOST OR DESTROYED AS SOME FEAR.
- A TANK IN HAMBLÉN PARK IS AN OPPORTUNITY TO END UP WITH COMMUNITY ASSETS WHICH WOULD NOT BE REALIZED AT OTHER LOCATIONS

PROCEDURAL MATTERS

- THE PROJECT WEBPAGE IS YOUR SOURCE FOR UP TO DATE INFORMATION INCLUDING:
 - THIS PRESENTATION
 - THE SURVEY I REFERENCED
 - FAQs
 - STATUS UPDATES

PROCEDURAL MATTERS

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- BECAUSE OF THE IMPRACTICALITY OF PUBLIC QUESTIONS/COMMENTS WITH THIS MEETING FORMAT, YOU CAN SUBMIT COMMENTS AND QUESTIONS TO THE EMAIL ADDRESS ON THE WEB PAGE

QUESTION & COMMENTS

- COMMENT/QUESTION: THE PROPOSED TANK WILL SEVERELY IMPACT THE PARK. HOW MUCH OF THE PARK WILL BE IMPACTED?

QUESTION & COMMENTS

- COMMENT/QUESTION: THE PROPOSED TANK WILL SEVERELY IMPACT THE PARK. HOW MUCH OF THE PARK WILL BE IMPACTED?
- RESPONSE: AS WE'VE ATTEMPTED TO COMMUNICATE IN THIS PRESENTATION, WE DO NOT TAKE LOCATING THIS TANK IN THE PARK LIGHTLY. WE'VE COVERED TONIGHT THE 10 OTHER SITES CONSIDERED AND THE SUBSTANTIAL DISADVANTAGES OF EACH. RECALL THAT LESS <1% OF THE TOTAL PARK AREA WILL BE CONSUMED BY THE PROPOSED TANK.

THE TEMPORARY CONSTRUCTION IMPACT OF THIS TANK AFFECTS A LARGER AREA, APPROX. 1 ACRE OR 12% OF THE SITE. THAT IMPACTED AREA WILL BE REPLANTED AND RESTORED IMMEDIATELY FOLLOWING CONSTRUCTION.

QUESTION & COMMENTS

- COMMENT/QUESTION: IF THIS TANK DOES END UP BEING IN HAMBLÉN PARK, PLEASE DON'T "IMPROVE" THIS PARK. WE LIKE IT JUST THE WAY IT IS.

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- COMMENT/QUESTION: IF THIS TANK DOES END UP BEING IN HAMBLÉN PARK, PLEASE DON'T "IMPROVE" THIS PARK. WE LIKE IT JUST THE WAY IT IS.
- RESPONSE: WE HAVE RECEIVED THIS COMMENT FROM A NUMBER OF PEOPLE. WE HAVE ALSO RECEIVED THE OPPOSITE COMMENTS FROM A NUMBER OF PEOPLE. WE LOOK FORWARD TO REVIEWING THE SURVEY RESULTS TO SEE WHAT THE MAJORITY OF PEOPLE WAY ON THIS ISSUE.

THE CITIZENS WILL GUIDE OUR MITIGATION MEASURES. PARK IMPROVEMENTS DO NOT NECESSARILY MEAN DEVELOPING THE PARK.

QUESTION & COMMENTS

- COMMENT/QUESTION: IS “IMPACTS TO THE PUBLIC” ONE OF THE SITE SELECTION CRITERIA?

QUESTION & COMMENTS

- COMMENT/QUESTION: IS “IMPACTS TO THE PUBLIC” ONE OF THE SITE SELECTION CRITERIA?
- RESPONSE: YES, IT IS.
 - ONLY CONSIDERING VACANT PARCELS (AS OPPOSED TO BUYING HOMES AND DEMOLISHING HOUSES) IS ONE WAY TO REDUCE THE IMPACT TO PUBLIC.
 - FAVORING A RESERVOIR SITE WHICH IS AT LEAST 300’ FROM THE NEAREST ADJACENT HOME IS ANOTHER WAY TO REDUCE IMPACTS TO THE PUBLIC.
 - SELECTING A SITE WHICH REDUCES COSTS WE ALL HAVE TO PAY IS YET ANOTHER WAY TO REDUCE IMPACTS TO THE PUBLIC.
 - PLACING THE TANK CENTRALLY IN A TREED AREA ALSO REDUCES THE VISUAL IMPACT TO THE PUBLIC.

QUESTION & COMMENTS

- COMMENT/QUESTION: WAS THE POTENTIAL REDUCTION IN PROPERTY VALUES ONE OF THE CONSIDERATIONS FOR TANK SITE SELECTION?

QUESTION & COMMENTS

- COMMENT/QUESTION: WAS THE POTENTIAL REDUCTION IN PROPERTY VALUES ONE OF THE CONSIDERATIONS FOR TANK SITE SELECTION?
- RESPONSE: ONE OF THE CRITERIA IS TO LOCATE THIS TANK AWAY FROM ADJACENT HOMES TO THE MAXIMUM EXTENT POSSIBLE TO REDUCE IMPACTS INCLUDING ANY POTENTIAL IMPACTS TO PROPERTY VALUES. HAMBLÉN PARK IS THE LOCATION THAT PLACES THE PROPOSED TANK FURTHER FROM ADJACENT RESIDENTS THAN ANY OTHER ALTERNATIVE WHILE STILL ACCOUNTING FOR COST CONSIDERATIONS.

QUESTION & COMMENTS

- COMMENT/QUESTION: HAS AN ENVIRONMENTAL REVIEW BEEN PERFORMED YET? HAS A TREE PRESERVATION/REPLACEMENT PLAN BEEN DEVELOPED?

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- RESPONSE: NO, THIS WILL OCCUR ONCE SITE SELECTION HAS BEEN FINALIZED.

QUESTION & COMMENTS

- COMMENT/QUESTION: HAVE YOU CONSIDERED VARIOUS COLOR SCHEMES OR A MURAL TO REDUCE VISUAL THE IMPACTS TO THIS TANK.

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- RESPONSE: THOSE EVALUATIONS WILL BE PERFORMED WITH COMMUNITY INPUT FOLLOWING FINALIZATION OF TANK SITE SELECTION. AS YOU SUGGEST, THERE ARE A NUMBER OF OPTIONS FOR REDUCING THE VISUAL IMPACTS.

QUESTION & COMMENTS

- COMMENT/QUESTION: WILL CELL PHONES ANTENNAE AND/OR AIRCRAFT WARNING LIGHTS BE INSTALLED ATOP THIS TANK.

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- COMMENT/QUESTION: WILL CELL PHONES ANTENNAE AND/OR AIRCRAFT WARNING LIGHTS BE INSTALLED ATOP THIS TANK.
- RESPONSE: YES, AIRCRAFT WARNING LIGHTS MUST BE INSTALLED. CELL PHONE ANTENNAE INSTALLATION WILL NOT BE A PART OF THIS PROJECT. CELL PHONE COMPANIES DESIRING TO PUT ANTENNAE ATOP THIS TANK WILL HAVE TO COMPLY WITH A SEPARATE PERMITTING PROCESS THAT IS NOT RELATED TO TANK CONSTRUCTION.