WA DOH Fall Workshop

Radon - K-12 Program Implementation

November 3

2026

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Radon

What is it?

Radon is a naturally occurring radioactive gas that is invisible, odorless, and tasteless. It comes from the radioactive decay of radium, an element found in most rocks and soils. Radon can enter a building from the ground underneath, and may concentrate within the indoor environment.

Do I have to test?

Although testing for radon is not required by Washington State or federal laws, schools may conduct voluntary testing and mitigation. This can be done by school personnel or a consultant.

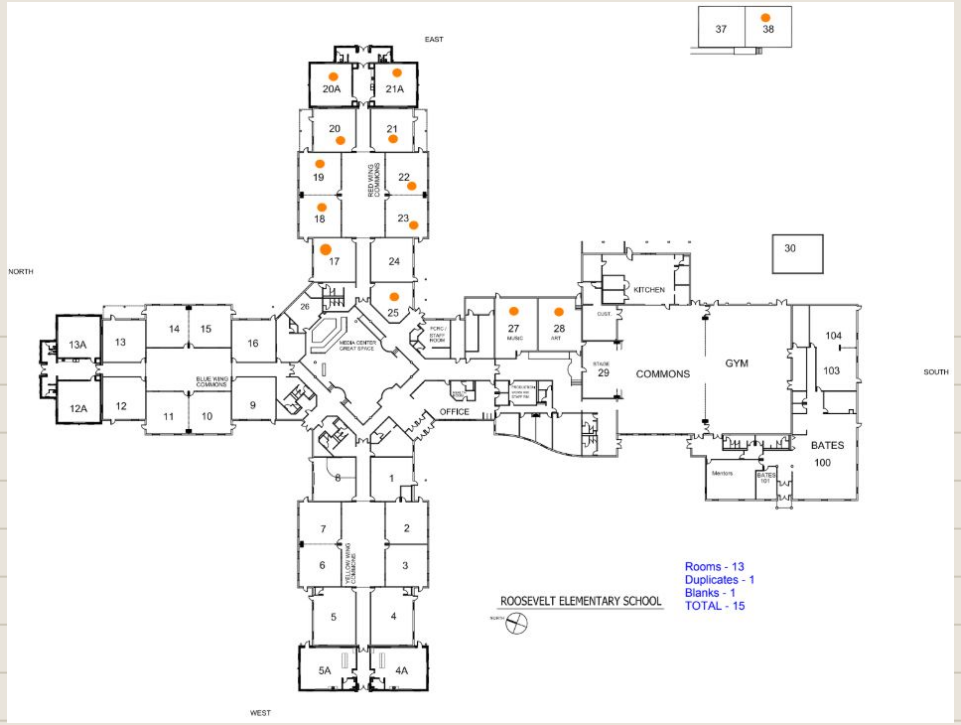
Why should I test?

Radon can have serious health implications. According to the EPA, it is the leading cause of lung cancer among non-smokers. The only way to know if you have radon is to test for it.

What about the new K-12 health and safety rule?

While radon is proposed in the new rule, it is not apart of Phase 1 implementation, which is currently in rulemaking. Further phases cannot be implemented until the legislature receives a final cost estimate and authorizes funding.

Planning



- Example: 20% of occupied rooms in contact with the ground over a 5 year period.
- Utilize basic floor plans (and past testing information if you have it) to determine rooms to be tested.
- Refer to quality assurance best practices to calculate blanks, duplicates, and spiking
- Order test kits
- Once received, mail for spiking
- Choose dates for testing
- Training/review if working with a team
- Communicate!

Communicate!

Planning Spreadsheet

Location	Test Kits	Duplicate	Blank	Total	School Email Sent	Radon Kits Mailed for Analysis	Results Rcvd	Results Notice	Notes
Skyview	5	1	1	7	YES	YES	YES	YES	All Clear
Week 3 - March 14th									
Jason Lee	5	1	1	7	YES	YES	YES	YES	All Clear
NEW McLoughlin	5	1	1	7	YES	YES	YES	YES	All Clear
NEW Marshall	5	1	1	7	YES	YES	YES	YES	All Clear
Minnehaha	5	1	1	7	YES	YES	YES	YES	All Clear
Ogden	7	1	1	9	YES	YES	YES	YES	All Clear
River	9	1	1	11	YES	YES	YES	YES	All Clear
NEW King	8	1	1	10	YES	YES	YES	YES	All Clear
NEW Truman	8	1	1	10	YES	YES	YES	YES	All Clear
NEW Walnut Grove	8	1	1	10	YES	YES	YES	YES	All Clear
Roosevelt	7	1	1	9	YES	YES	YES	YES	All Clear
GATE	4	1	1	6	YES	YES	YES	YES	All Clear
Jim Tangeman Center	7	1	1	9	YES	YES	YES	YES	All Clear
TOTALS				279					

Initial Short Term Testing

Test Kits

- 2-4 days; we've done 3.
- Follow suppliers directions for set-up and collection
- Follow ANSI standard for set-up

Past Insight
Placement matters; follow the directions provided with the test kit

Datalog Sheets

- Create datalog sheet based on suppliers directions
- Be sure to note serial numbers and locations on datalog sheet

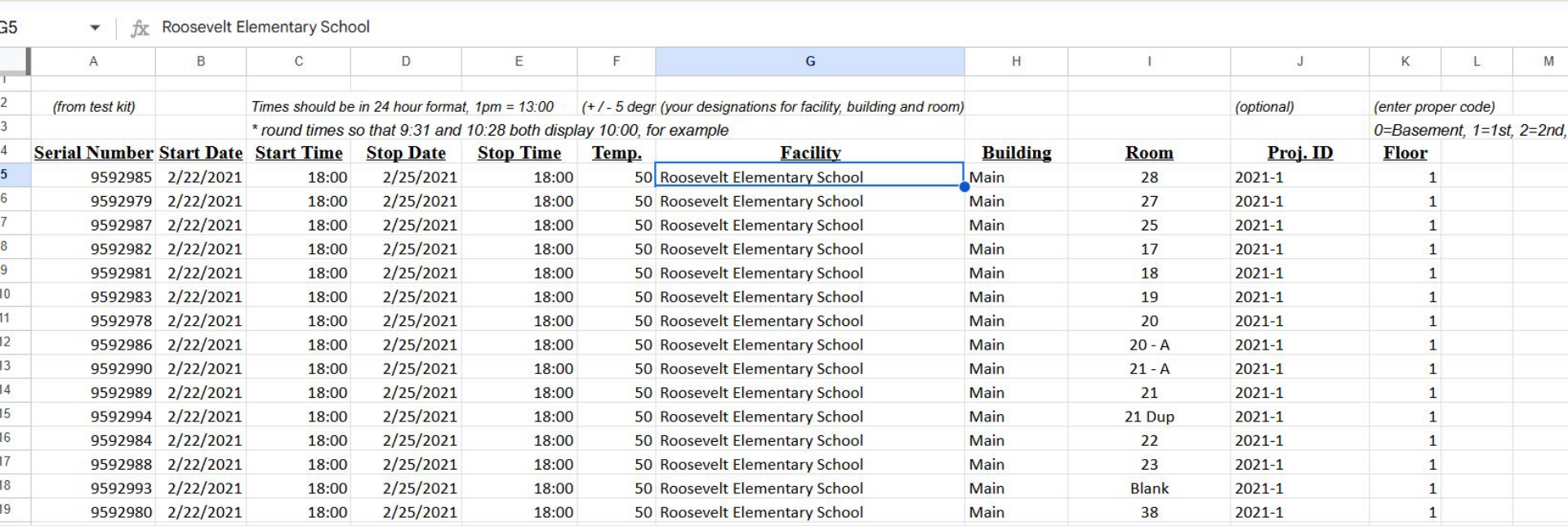
Past Insight
Don't forget to document date, time, and location! The test kit requires this and so does the datalog sheet.

Shipping

Ship next-day due to decay

Past Insight
Time the testing so that the test kits are mailed out the next day. Ensure the datalog matches what is being shipped.

Sample Datalog Sheet



G5 | Roosevelt Elementary School

	A	B	C	D	E	F	G	H	I	J	K	L	M
2	*(from test kit)*		*Times should be in 24 hour format, 1pm = 13:00*			*(+ / - 5 degr*	*(your designations for facility, building and room)*			*(optional)*	*(enter proper code)*		
3			** round times so that 9:31 and 10:28 both display 10:00, for example*								*0=Basement, 1=1st, 2=2nd,*		
4	**Serial Number**	**Start Date**	**Start Time**	**Stop Date**	**Stop Time**	**Temp.**	**Facility**	**Building**	**Room**	**Proj. ID**	**Floor**		
5	9592985	2/22/2021	18:00	2/25/2021	18:00	50	Roosevelt Elementary School	Main	28	2021-1	1		
6	9592979	2/22/2021	18:00	2/25/2021	18:00	50	Roosevelt Elementary School	Main	27	2021-1	1		
7	9592987	2/22/2021	18:00	2/25/2021	18:00	50	Roosevelt Elementary School	Main	25	2021-1	1		
8	9592982	2/22/2021	18:00	2/25/2021	18:00	50	Roosevelt Elementary School	Main	17	2021-1	1		
9	9592981	2/22/2021	18:00	2/25/2021	18:00	50	Roosevelt Elementary School	Main	18	2021-1	1		
10	9592983	2/22/2021	18:00	2/25/2021	18:00	50	Roosevelt Elementary School	Main	19	2021-1	1		
11	9592978	2/22/2021	18:00	2/25/2021	18:00	50	Roosevelt Elementary School	Main	20	2021-1	1		
12	9592986	2/22/2021	18:00	2/25/2021	18:00	50	Roosevelt Elementary School	Main	20 - A	2021-1	1		
13	9592990	2/22/2021	18:00	2/25/2021	18:00	50	Roosevelt Elementary School	Main	21 - A	2021-1	1		
14	9592989	2/22/2021	18:00	2/25/2021	18:00	50	Roosevelt Elementary School	Main	21	2021-1	1		
15	9592994	2/22/2021	18:00	2/25/2021	18:00	50	Roosevelt Elementary School	Main	21 Dup	2021-1	1		
16	9592984	2/22/2021	18:00	2/25/2021	18:00	50	Roosevelt Elementary School	Main	22	2021-1	1		
17	9592988	2/22/2021	18:00	2/25/2021	18:00	50	Roosevelt Elementary School	Main	23	2021-1	1		
18	9592993	2/22/2021	18:00	2/25/2021	18:00	50	Roosevelt Elementary School	Main	Blank	2021-1	1		
19	9592980	2/22/2021	18:00	2/25/2021	18:00	50	Roosevelt Elementary School	Main	38	2021-1	1		

Follow-Up Measurements

If results are greater than 2 but less than 4 pCi/L:

- Consider remediation*
- Institute a long-term radon management program

Retest with a short term test if result is greater than or equal to 4 pCi/L:

Test under the same conditions as much as possible.

If results are greater than or equal to 8 or 10 pCi/L:

Move on to Diagnostics & Mitigation.

Consider remediation?

Take note of levels approaching 4 pCi/L, and watch for trends in certain areas. Consider retesting the following year.

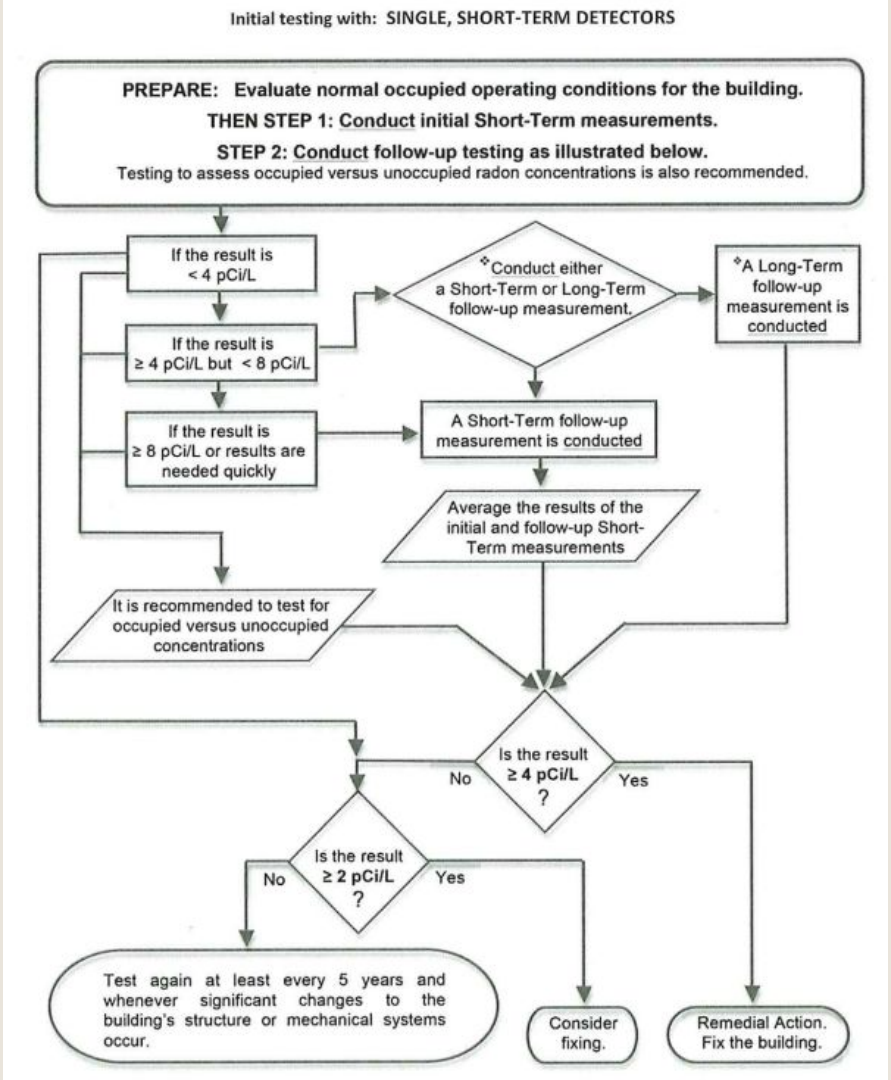
Communicate with building

Be sure occupants are aware that test kits will be placed in their room again.

Who do I reach out to?

There are many radon mitigation companies. A site visit is often the first step.

ANSI Single, Short-Term Detector



EPA Single, Short-Term Detector

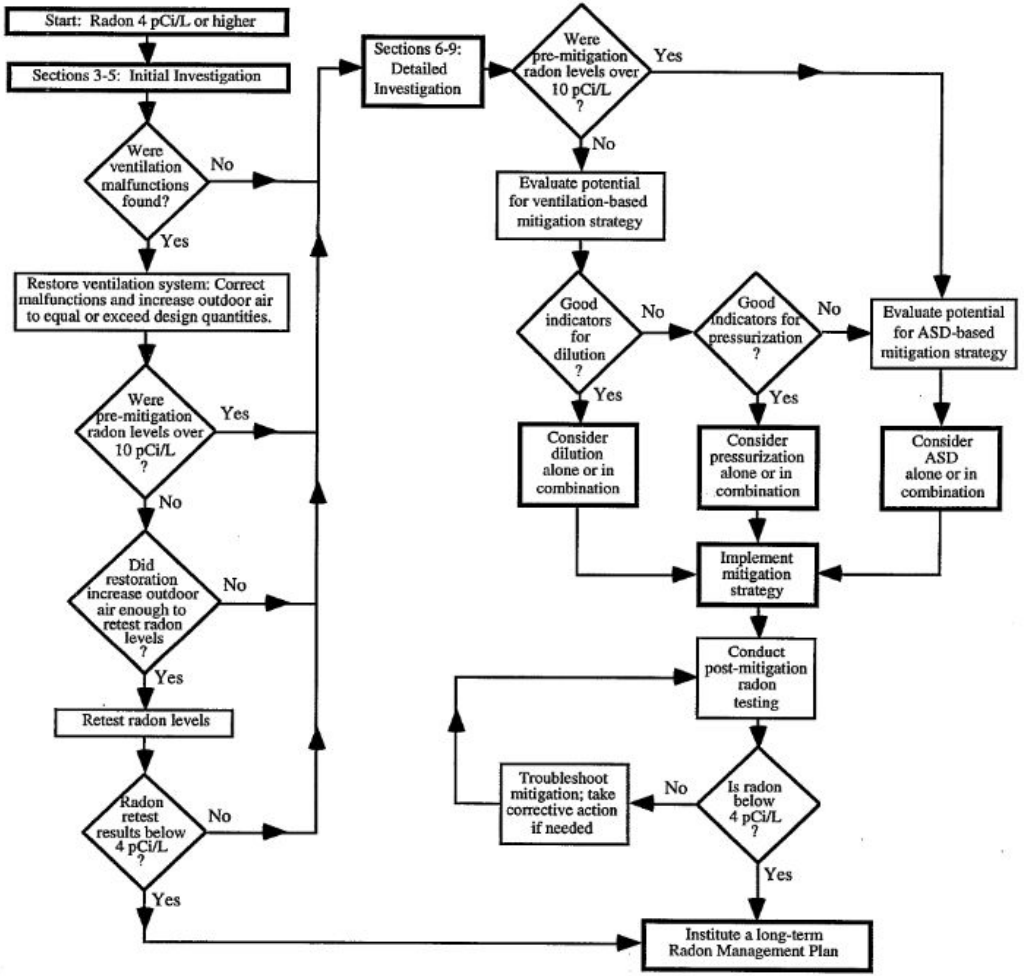


Figure 3-1: School Mitigation Flowchart

Results Spreadsheet

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
11485196	101	2025-03-03 @ 8:00 am	2025-03-06 @ 9:00 am	< 0.3	2025-03-08
11485197	102	2025-03-03 @ 8:00 am	2025-03-06 @ 9:00 am	< 0.3	2025-03-08
11485195	103	2025-03-03 @ 9:00 am	2025-03-06 @ 9:00 am	< 0.3	2025-03-08
11485166	104	2025-03-03 @ 9:00 am	2025-03-06 @ 9:00 am	< 0.3	2025-03-08
11485200	105	2025-03-03 @ 9:00 am	2025-03-06 @ 9:00 am	1.0 ± 0.3	2025-03-08
11485172	105 DUP	2025-03-03 @ 9:00 am	2025-03-06 @ 9:00 am	0.9 ± 0.3	2025-03-08
11485198	106	2025-03-03 @ 9:00 am	2025-03-06 @ 9:00 am	1.1 ± 0.3	2025-03-08
11485169	BLANK	2025-03-03 @ 9:00 am	2025-03-06 @ 9:00 am	< 0.3	2025-03-08

Air Chek 1936 Butler Bridge Rd, Mills River, NC 28759-3892 Phone: (828) 684-0893 Fax: (828) 684-8498

Diagnostics & Mitigation

Evaluation

- Evaluate HVAC system(s)
- Potential radon entry points

Why HVAC?

Radon testing allows for an efficacy check of the buildings HVAC system and components. Maybe a damper has failed!

Mitigation

Active Soil Depressurization (ASD): Depressurize the space under the building.

What if it doesn't work?

Systems have been known to require a larger fan to address high radon levels identified in nearby rooms years after the system was installed.

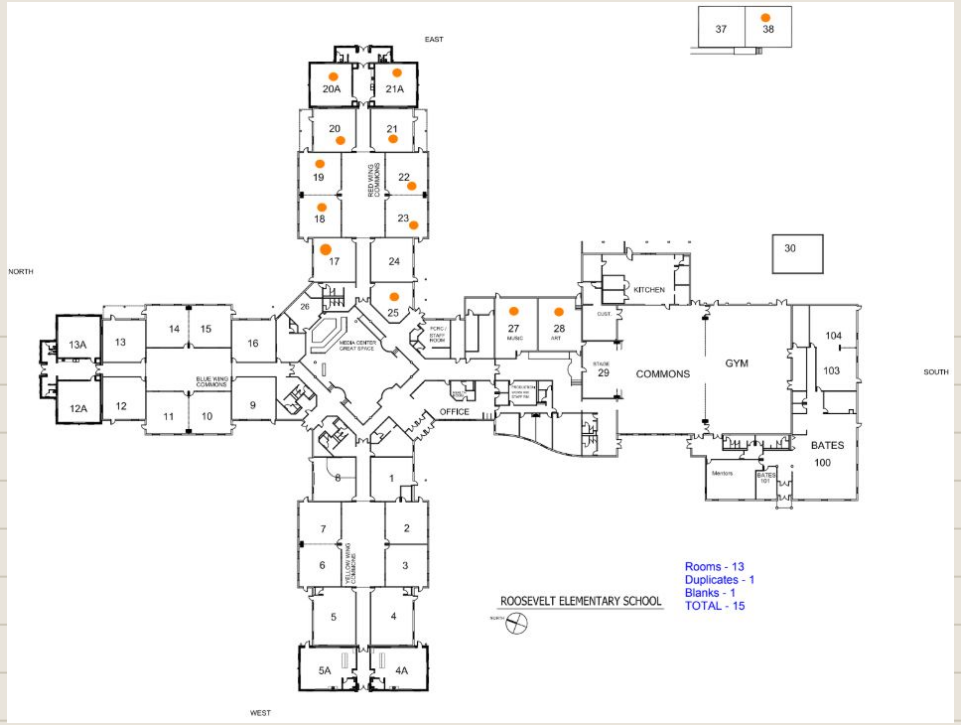
Retest

Retest after system installation and each year thereafter to verify efficacy.

Track where your systems are!

If you're tracking testing on a building floor plan, mark down the location of systems to assist with yearly testing procedures.

Communication



- Communicate with buildings prior to testing and have them share with building staff. Include map of rooms to be tested.
- Follow-up notices should be sent within a given number of days, determined by the district, detailing whether results require further action.
- Determine if results and messaging will be added to district webpage.
- Interpret all messages as needed (i.e. Spanish, Russian, etc.)

Speak with district leaders to develop a communications plan!

Sample Messaging

Sample - Prior to testing:

Good Afternoon,

Annual Radon testing will be conducted at your building beginning [date]. The rooms to be tested are marked on the attached map.

Communications will send notification to staff and families after testing has been completed and we learn whether the results are below the allowable limit or we have resolved any issues.

Learn more about radon testing district website [link website].

Sample Messaging

Sample - Results with no elevated levels:

Dear [school] families:

Radon testing was completed at your school the week of [DATE].

Results showed no elevated radon levels in the school.

More information can be found at the district website [link website].

If you have any questions, please call [department] at [number].

Sample - Results evaluated levels:

[Building Administrator]:

Routine radon testing was completed at your school on [date].

Radon is measured and reported in picocuries per liter of air (pCi/L). The U.S. EPA action level is greater than or equal to 4.0 pCi/L. The U.S. EPA recommends reducing the concentration of radon in indoor environments below the radon action level.

Initial results indicate elevated levels in one or more rooms.

[table of results]

We are taking steps to improve ventilation in these areas and will retest when the work is completed in the [timeframe]. We will notify you of the results after retesting.

Sample Messaging

Sample - Results with no elevated levels following mitigation:

Dear [school] families:

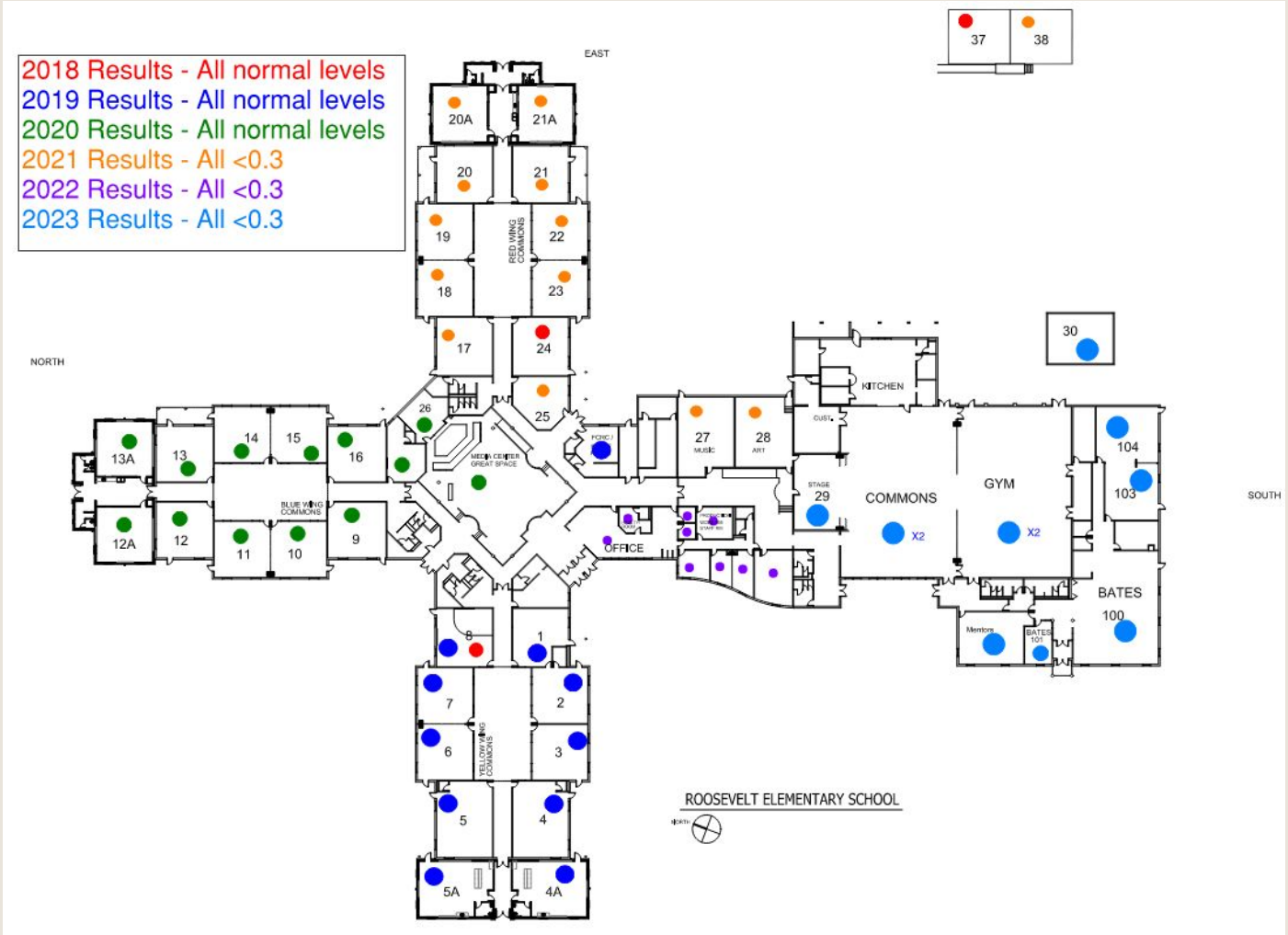
Following mitigation, a radon retest was completed at your school the week of [DATE].

Results showed no elevated radon levels in the school.

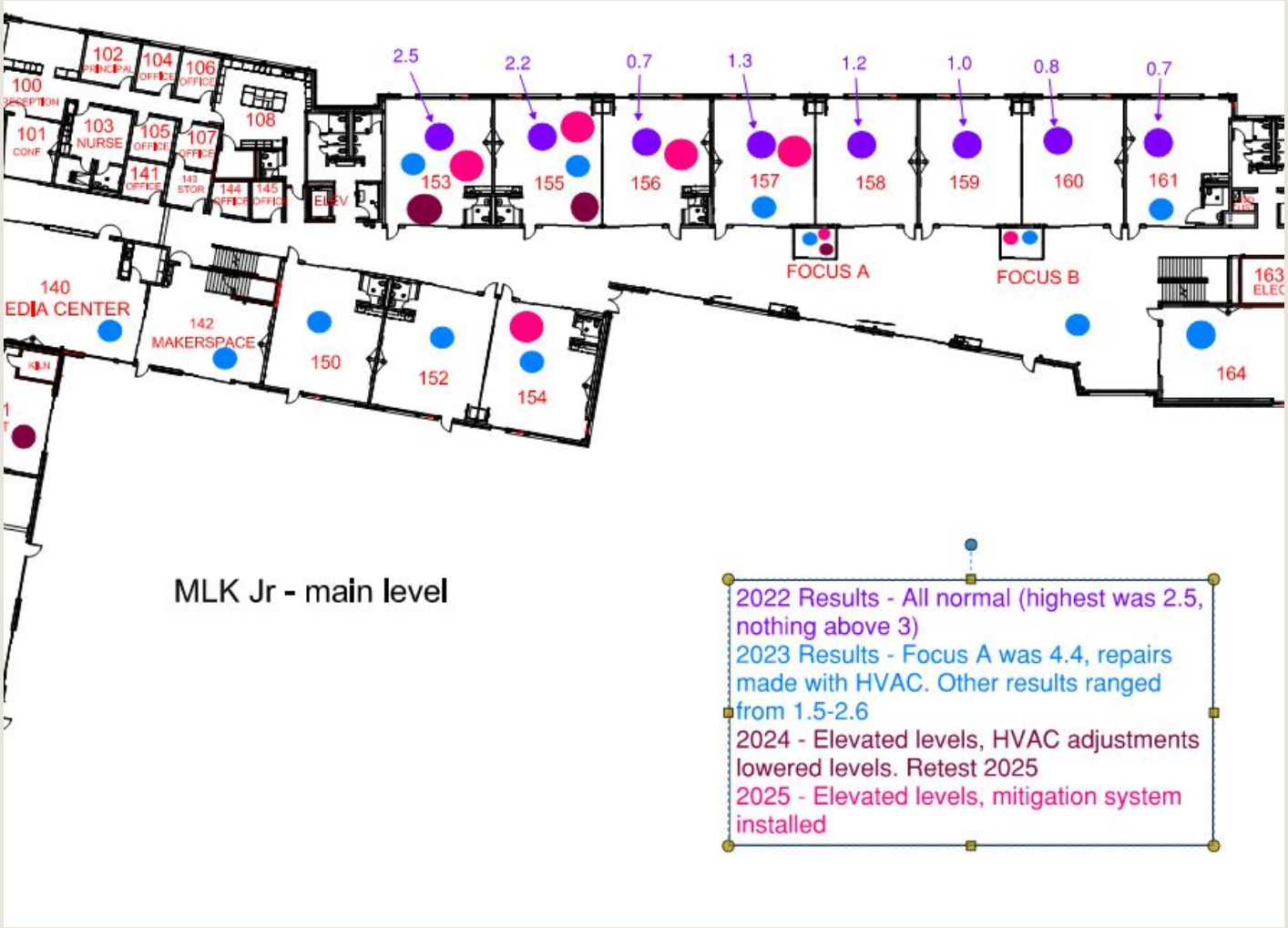
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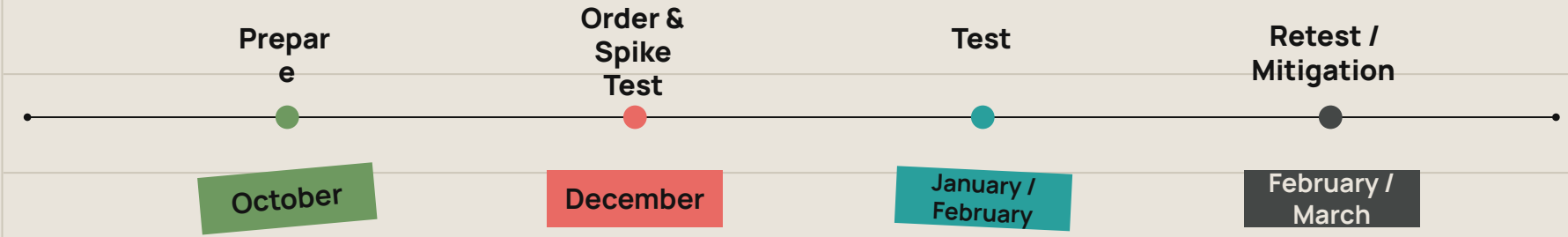
Long-Term Management



Long-Term Management



TIMELINE



Make the maps. Use the totals from the maps to fill out the planning spreadsheet. From these totals, calculate how many spikes you will need.

Place your order, and be sure to order a few spares for retests!
Mail test kits for spiking.

Start your testing. Can be over a period of weeks, placing test kits off Monday, picking up Thursday, and shipping on Friday

Retest any locations that tested high, reach out to mitigation companies for any that continue to test high. Communicate!

Grant Opportunities!

- EPA State Indoor Radon Grant (SIRG) Program
  - The program provides free test kits for homes and buildings, and is available to public and private schools. The program can provide 30-50 free kits per month, depending on availability. Test kits may also be purchased and shipped to the lab for $20. The free radon test kit will take 6 to 8 weeks to arrive.

THANK YOU!

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