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Subject: Alternative to Cargo Containers in the park

To: DBR Office <office@discoverybayresort.org>

I am proposing an alternative to placing cargo containers in the park for food storage. My proposal is based on the fact that the focus of emergency planning for food and supplies is around the Ramada. I believe we should make the building a durable and functional gathering point for catastrophic events and also for daily community life. The location is as good as possible for a central gathering spot. The building is well constructed but could collapse unless we do earthquake retrofitting. Below, I have laid out details of what needs to be done. I believe that for under \$20,000, we can have confidence in the survival of the structure and create the needed storage for food and supplies for a catastrophe, and at the same time, create added functionality for community gatherings and activities.

My arguments against cargo containers are:

1. They will be an eyesore every day
2. They are not waterproof (yes, water resistant), so they will need a roof covering and maintenance, and Jefferson County may require a pitched roof and siding per code.
3. They are not rodent-proof
4. Will need power for lighting
5. Will need a solution for condensation and moisture
6. Will need mitigation of heat and cold

To the BOD and the park in general;

A substantial yet unknown amount of money will be needed to make the containers compliant with Jefferson County code and functional as food storage. Why not use that money to make the Ramada a viable resource for emergencies and daily life at the park? At this point, the task force does not know what Jefferson County will require, which could mean no camouflage or possibly paint or murals or a pitched roof and full siding to make it look like a shed. I think it is a win-win if the focus is on making the Ramada all that it can be and not having to look at cargo containers. We have talked for years about improving the Ramada; this is an opportunity to provide a location for emergency food and supply storage and do what we can to ensure the Ramada is still standing when needed.

I've researched what is needed to make a pole building in our region able to withstand earthquakes or extreme wind conditions. I want to say that I was a general contractor for years in Seattle and did a lot of earthquake remediation on older houses. I've taken courses on the subject and studied it. I know there are a number of women in the park who are skilled in using power tools, and I believe we could accomplish much of what would be needed to retrofit the Ramada. However, some aspects of the project may need to be contracted by specialists.

Here is a summary of what would be needed to reduce the risk of damage to a pole building in Sequim:

*\*\* are my comments.*

Earthquake-Proofing Recommendations for Sequim, WA:

1. Deep, Reinforced Footings

- Embed posts at least 4 feet deep in reinforced concrete to anchor against lateral movement.
- Use seismic-rated post brackets to secure the base connection.

*\*\*I believe the existing posts are deep enough, but we need to verify that. We should add new posts between the existing 12' spans but keep existing posts, and all posts need to be tied into the concrete.*

2. Shear Walls for Lateral Strength

- Install plywood or OSB sheathing (minimum ½-inch thick) on walls to increase stiffness.

- Reinforced end walls should be considered to handle lateral forces better.

\*\*On the attached drawing, I've shown walls on the corners and ends of the building; this provides substantial strength and anti-racking to the building and is a perfect location for storage (for emergency supplies) and kitchen facilities. Of course, windows can be included to provide light and ventilation. At some point, the remaining openings could have sliding barn doors for holding heat.

### 3. Diagonal Bracing

- Use steel cross-bracing or wood X-bracing between posts, especially on longer walls.

Ensure roof trusses have diagonal bracing to resist twisting.

### 4. Anchoring & Ties

- Use hurricane ties and seismic connectors at post-to-beam and beam-to-roof joints.
- Secure roof trusses to prevent uplift.

\*\*Due to Hurricane Andrew in 1992, building codes across the country were upgraded to include requiring anchoring and ties. Simpson StrongTies is now the leading manufacturer of anchors and ties. They are simple to install and require a hammer and nails.

<https://www.strongtie.com/resources/product-installers-guide/landing>

### 5. Reduce Heavy Loads

- Avoid heavy roofing materials like tile or thick shingles—metal roofing is better.

\*\* We are in good stead with our metal roof; however, sheathing (plywood or OSB) under a metal roof is recommended to withstand racking. This is something that could be done when the roof needs to be replaced.

### 6. Proper Drainage & Soil Stability

- Ensure proper site grading and drainage to prevent soil shifting.
- If in a liquefaction-prone area, consider deep foundation reinforcement (e.g., gravel or helical piers).

Cost:

Retrofitting for earthquakes runs \$9-10 per square foot, and the Ramada is about 1800 s.f. We could be looking at \$18,000.00. This depends on how much we can do ourselves. It also doesn't include adding kitchen facilities, doors, or electrical upgrades, which could be phased in later.

The cargo container costs are not yet finalized, but I would guess \$10,000-15,000, depending on the costs of installing electricity, permits, etc. Those numbers don't include food purchases. Obviously, the Ramada project would take time, but temporary storage is available at the laundry building for the already purchased food.

In closing, I fully support having emergency supplies on hand, but I don't want to sacrifice the beauty of our park when we have other options. At the very least, a 10' X 14' Tuff Shed (or two) would hold a lot of supplies and cost about the same. I would rather do everything we can to reinforce the Ramada and make it functional.