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# **1350 Ala Moana Pipe Replacement Project**

**Owners Forum Meeting  
1350 Ala Moana  
January 17, 2013**

# Purpose of Meeting

- Review project scope of work and history to date, including changes to scope and effect on project budget
- Identify specific costs associated with various portions of project scope and scope of work in each unit
- Discuss ownership of building components and associated costs as defined by provisions of AOA/OA condominium declaration



# Basic Overview of Plumbing System

Description of Existing Plumbing Systems:

- Drain / Waste / Vent (DWV)
- Domestic Water Supply
- Rain Leaders

All located within fire-rated plumbing shafts that extend vertically through each apartment unit in entire building



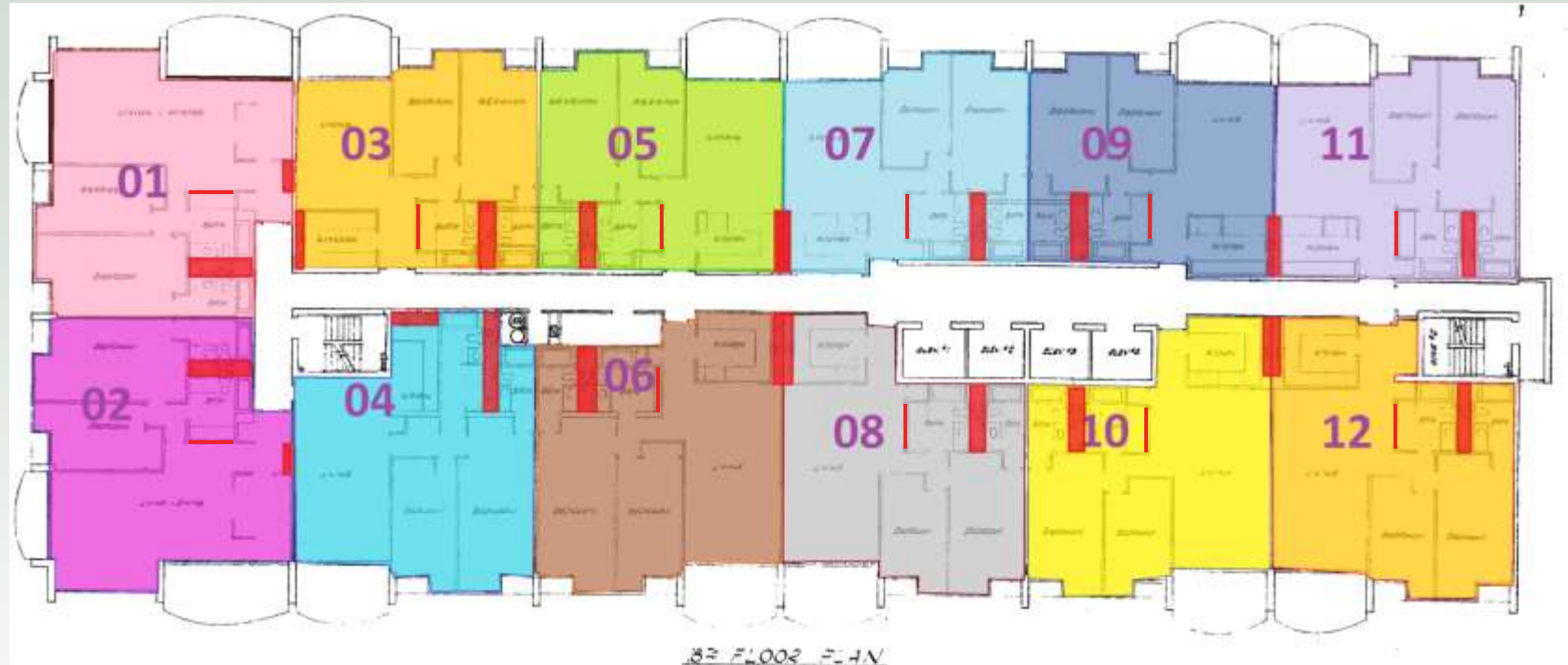
# Basic Overview of Plumbing System



Risers run vertically through building, serving multiple apartment units in a stack; laterals run horizontally serving one apartment unit only



# Typical Floor Plan & Chases



- Thirty-one plumbing shafts throughout the building, extending from 3<sup>rd</sup> floor through roof
- Typically 2 - 3 per apartment unit, including 1 shared between adjacent kitchens



# Project Scope of Work

## *What is included in the repair scope?*

- Asbestos abatement work required to access plumbing shafts
- All DWV and rain leader piping in plumbing chase
- DWV piping in unit up to, but not including, fixtures
- Plumbing accessories in unit (i.e. washer box, tub/shower drain & overflow pipes, unit isolation valves on bathroom stack only)
- Fire stopping and repair of fire-rated wall assembly deficiencies
- Removal of electrical and fire hazards

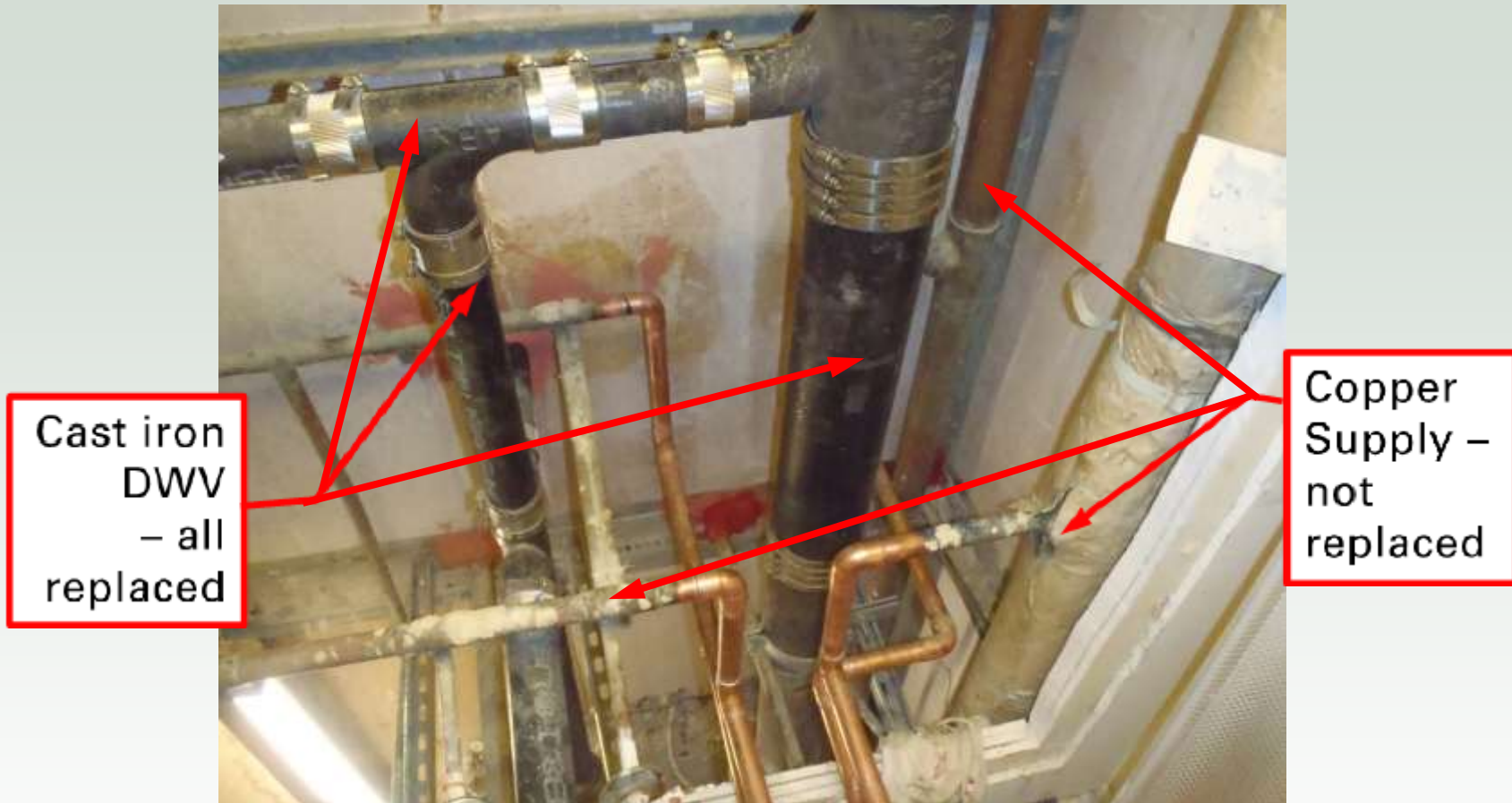


# Project Scope of Work

- Asbestos abatement work
  - Must be performed by licensed environmental subcontractor
  - Isolate work areas to contain friable material
  - Removal of all ACM from unit prior to remaining work



# Project Scope of Work



The project scope includes replacement of all cast iron DWV risers and laterals; only visibly defective copper supply lateral piping is replaced





# Project Scope of Work

## Plumbing Work –

- New pipe supports are being installed to meet revised seismic Code requirements, as well as to prevent pipe from falling down the chase and causing damage to persons or materials below



# Project Scope of Work

## Plumbing accessories

- Unit isolation ball valves to shut off service to each unit (in bathroom)
  - In case of leak, system can be isolated more quickly
  - Individual unit renovations can be made without affecting all the units in a stack



- New washer supply and drain box
  - Replacement of defective materials in supply system



# Project Scope of Work

## Plumbing accessories:

- Installation of pipe insulation on hot water supply laterals (from riser connection to fixture connection)



- Replacement of tub drain and overflow piping
  - Replacement of defective materials in supply system



# Project Scope of Work

## Fire rated drywall assembly

- Four layers of drywall must be repaired according to Code standards for fire-rated walls
- Edge must be staggered to prevent direct flame path through wall
  - Second cut required at perimeter of each opening = extra labor
- Patch must be properly supported with steel studs
  - No studs present in existing wall assembly, so new framing required throughout repaired walls
- Tape, mud, & paint finish to match surrounding wall



# Project Scope of Work



## Firestopping work:

- Each penetration through rated wall must be fire protected

- Piping penetrations occur throughout the plumbing system
- Cost allowances were developed for each type of penetration



# Project Scope of Work

## Firestopping work:

- Various gaps existed in original construction that required fire protection



- Application of material was engineered specially for this project in conjunction with manufacturer, installer, and architect



# Project Scope of Work

## Firestopping work:

- Exhaust vent sub-ducts required fire stopping at existing gaps



# Project Scope of Work

**Q: Why can't individual owners do this work on their own?**

A: First, the work under the current permit must be completed by the contractor of record; separate contractors would need to obtain their own permit, which can take 6-8 weeks. Second, the work involves life-safety repairs to the fire-rated shaft wall, and the AOA assumes liability if those conditions are not repaired in a timely fashion and according to Code standards. Verification of separate repair efforts would be costly and time **consumptive**. **Lastly, there's the logistical issue of** introducing more contractors into a building already undergoing two major projects. Elevators, parking, and deliveries are already congested, and adding more contractors would increase inconvenience to all residents.





# Project Job-to-Date History

Following almost a year of investigation and design work, construction began in January 2012 with a small pilot project in 10 units

- Bid separately from the main project
- Provide a **“test run”** for the contractor and the AOA to determine the most efficient way to conduct project
  - Further define scope of work for full project
  - Provide mockup as the quality standard for the balance of the project
- Allow an analysis of the project before full investment



# Project Job-to-Date History

Several unforeseen conditions were identified during the pilot project that led to increases in the overall cost of the project:

- Size of openings required to access plumbing was larger than originally anticipated
  - More drywall to be removed and replaced
- Presence of asbestos in walls and ceilings was previously excluded from contractor pricing
  - Additional cost for hazardous materials subcontractor
  - Additional cost for not being able to reuse existing drywall
- Seismic pipe support bracing
  - Existing pipe supports are insufficient and unusable
- Washing machine boxes
  - Corrosion on valves likely cause for leaks
- Firestopping and fire-wall deficiencies
  - Much more widespread than originally anticipated



# Project Job-to-Date History

Original budget estimate from contractor did not include costs for these unforeseen conditions:

- Size of openings required to access plumbing was larger than originally anticipated
  - ~ \$600,000
- Presence of asbestos in walls and ceilings
  - ~ \$850,000
- Seismic pipe support bracing
  - ~ \$1,350,000
- Washing machine boxes
  - ~ \$107,000
- Firestopping and fire-wall deficiencies
  - ~ \$1,255,000

Approximate total additional costs for unforeseen conditions: ~ \$4,162,000



# Project Job-to-Date History

Original estimated project budget from contractor (before pilot project completion):  
~ \$ 9,377,000 (~ \$ 25,500 per standard unit)

Revised project budget from contractor (after completion of pilot project):  
~ \$ 13,320,000 (~ \$ 36,200 per standard unit\*)

*\* Penthouse / Lanai unit costs still being finalized*

Net construction cost increase of ~ \$ 3,943,000

- Total cost increase less cost savings from reduction in scope of work (existing supply piping to remain; separate direct contract with firestopping contractor)

*Note that project budget figures above include construction costs with allowances, A/E/Cm fees, and permitting costs*



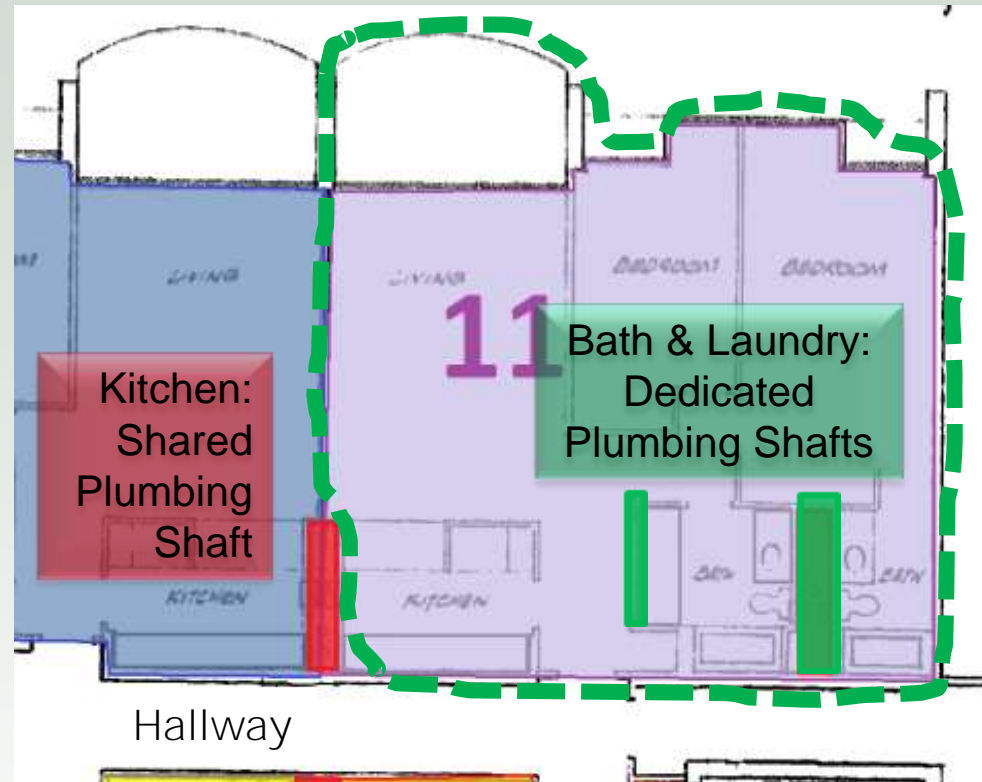
# Ownership of Building Components

According to the AOA condominium declarations, items located within each individual apartment unit are considered to be the responsibility of the unit owner, while items located outside individual apartments are considered to be the responsibility of the AOA.

Owner Responsibility	AOAO Responsibility
<ul style="list-style-type: none"><li>• All plumbing work in bathroom &amp; laundry from riser to each fixture</li></ul>	<ul style="list-style-type: none"><li>• All plumbing, drywall, and firestopping work in kitchen</li></ul>
<ul style="list-style-type: none"><li>• All drywall work in bathroom &amp; laundry, including ACM abatement and new drywall installation</li></ul>	<ul style="list-style-type: none"><li>• All work in common areas (i.e. lobby, storage, roof, etc.)</li></ul>
<ul style="list-style-type: none"><li>• All firestopping work in bathroom &amp; laundry</li></ul>	<ul style="list-style-type: none"><li>• Architectural / Engineering / Construction Manager fees</li></ul>
<ul style="list-style-type: none"><li>• Installation of new washer box</li></ul>	



# Ownership of Building Components



Building components that are within the apartment perimeter wall lines are owned by the unit owner; items outside the perimeter wall line of an apartment are common elements



# Ownership of Building Components




Risers serve multiple apartment units, and are owned by the AOA0; laterals serve one apartment unit only, and are owned by that unit owner



# Project Costs – Owner vs. AOA

Information about the “chargeback” costs for unit-owned components has been included in project documents since the beginning of the work, including the Project Overview notice and the Owner’s Stack Forum meeting presentation.



Information Bulletin #2  
Project Overview  
April 17, 2012

## Drain Replacement Project Overview

SageWater is the contractor that is replacing the drain / waste/ vent piping system in your stack. Allana Buick & Bers (ABB), the architect / engineer for the project, will be providing construction management and



Information Bulletin #1  
Project Overview  
April 17, 2012

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colors only – wallpaper and/or custom finishes (e.g. faux finish, plaster, etc.) will not be repaired or replaced at this time. In some cases, the back of the interior of a cabinet will be cut to install the new piping or valves—we will repair the back of the cabinet with melamine sheeting.

- **Pre-existing damages to interior finish surfaces, including drywall holes and/or stains, will not be repaired as part of the repipe project.** However, we will repair any incidental damages that are caused by our work in your unit.
- **Code enforcement officials require that any toilet removed during work must be replaced with a water-efficient toilet.** The configuration of the plumbing in the chase requires that one toilet is removed in order to access the piping. The toilet removed must be replaced with a water conserving, low-flush fixture. Should you already have such a toilet installed, it will be reset with no charge. SageWater will have a selection of three low-flush fixtures available for each owner to select for installation in their unit. This work will be contracted directly to the unit owner. Alternately, if you prefer to purchase your own toilet and materials, SageWater will install it for a nominal labor charge.
- **Certain components in the plumbing repair scope are unit-owned, and the cost for these repairs will be charged to unit owners.** These include the washer box, low-flush toilet, lateral waste piping serving only your unit, and other items. The AOA Board will charge these costs directly back to the unit owners. Details will be provided through the AOA and property management company.
- **The project includes repair of certain electrical defects and other fire hazards.** Costs for repair of observed defects, whether caused by the current or prior unit owners, will be charged to the current unit owner. If electrical defects are located within the plumbing riser “vertical path” work areas, the unit

## Project Costs – Owner vs. AOA

According to the AOA Bylaws, items located within each individual apartment unit are considered to be the responsibility of the unit owner, while items located between adjacent apartments are considered to be the responsibility of the AOA.

Owner Responsibility	AOA Responsibility
• All plumbing work in bathroom / laundry from riser to each fixture	• All plumbing, drywall, and firestopping work in kitchen
• All drywall work in bathrooms / laundry including ACM abatement and new drywall installation	• All work in common areas (i.e. lobby, storage, roof, etc.)
• All firestopping work in bathroom / laundry	• Architectural / Engineering / Construction Manager fees
• Installation of new washer box	



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# Project Costs – Owner vs. AOA

During the bidding phase of the project, the bid form was organized in consideration of ownership of building components:

- Bid scope was broken out by bathroom / laundry vs. kitchen work areas
  - This includes plumbing, firestopping, and drywall / finish scopes of work
- This pricing was then used to determine the charges that were passed on to the owners directly
  - The amounts the contractor charged the AOA were passed on to the individual owners
  - This eliminated the issue of labor vs. materials breakdown, which is typically not given on a lump sum construction contract



# Project Costs – Owner vs. AOA

Below are the amounts in the construction bid for the various Owner components:

Owner Responsibility	Costs
• All plumbing work in bathroom & laundry from riser to each fixture	\$664,240
• All drywall work in bathroom & laundry including ACM abatement and new drywall installation	\$1,600,000
• All firestopping work in bathroom & laundry	\$680,800
• Installation of new washer box	\$106,490

Total project costs associated with Owner components: \$ 3,051,530

(~ 24% of total project construction cost)



# Project Costs – Owner vs. AOA

Below are the unit costs for the various Owner components (in standard apartment unit\*):

Owner Responsibility	Costs
• All plumbing work in bathroom & laundry from riser to each fixture	\$1,805
• All drywall work in bathroom & laundry including ACM abatement and new drywall installation	\$4,360
• All firestopping work in bathroom & laundry	\$1,850
• Installation of new washer box	\$337

Total unit costs associated with Owner components: \$ 8,352

*\* Penthouse / Lanai unit costs still being finalized*



# Project Costs – Financing

Q: Why have chargebacks at all? Why not finance all the construction costs for both AOA and unit-owner costs together in the loan?

A: The AOA is responsible for the cost of repairs to the common elements only, not for repairs to unit-owner components. The loan is repaid through maintenance fees, which are based on a percentage of common interest ownership. Thus the larger apartments have a higher common interest and pay more, while the smaller apartments pay less. However, the contractor charged the same amount per standard apartment for the work. So including the unit-owner costs in the maintenance fee would result in skewed charges, and not everyone will pay their fair share of the cost for their apartment. Charging the owner specific costs back is the most reasonable manner to handle this.



# Project Costs – Unit Deficiencies

Unit Owners are also responsible for the costs of any additional work required in their units as a result of existing code deficiencies or hazards uncovered during the process of completing the project scope of work. These costs will be tracked per unit and charged back to the unit owners at the conclusion of work in each unit. Costs for such additional work so far range from \$80 - \$5,000 per unit, depending on the severity of the defects.



# In Closing...

*The Board of Directors, the General Manager and staff, and the entire project team would like to sincerely thank the owners and residents for their patience and understanding through this project. While it has been a difficult process and the costs are substantial, the end result will be a significant increase in the value of the property, elimination of a major barrier to insurability, and an overall increase in life safety and in the reliability of the building systems. This will strengthen 1350 Ala Moana's status as one of Honolulu's premier luxury condominium properties.*





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**MAHALO!**