

Waste Reduction Coordination for Headquarters Renovation

Meeting Summary March 17, 1992

Attendees: Glen Taylor, Flor Matias, Joanna Karl, Pat Varley, Don Roupe,
Andy Sloop, Jim Goddard, Debbie Palermini

(Additional distribution: Genya Arnold, Berit Stevenson,
Leigh Zimmerman, Steve Kraten, Michel Gregory)

Design & Construction Work: Demolition is between 30-40% complete. Upcoming work will include cut-outs for windows and parking garage ramps. The arrangement between Hoffman Construction and Allied for exchange of metal salvage rights for hauling inert materials to St. Johns Landfill seems to be working equitably and will continue. More asbestos has been found in the restaurant area, delaying its demolition. The design is proceeding with development drawings. The HVAC equipment and window/wall systems will be ordered soon by Hoffman.

Salvage & Construction Site Recycling: Construction site recycling totals to-date are 45 tons ferrous, 7 tons aluminum, 760 tons inert taken to St. Johns, 9 tons of wood hauled for recycling, and 20 tons of waste disposed. It's not yet known if Allied's plan for recycling the bricks has been successful. Debbie Palermini is continuing the on-site recycling coordination efforts for Metro. The Oregon Commercial Contractor's Board has issued a fine to Hippo Hardware for performing salvage operations without a Contractor's License. Metro was aware that Hippo did not have their license but were in the process of getting it at the time of the work. Metro accepted the liability for any potential damage done to the building by Hippo, since all work areas were scheduled for demolition by Hoffman.

Status of Buy Recycled: A letter was sent to Wayne Drinkward from Bob Martin and Neil Saling describing the "Buy Recycled" philosophy at Metro. (Attached.) Rich Wiley suggested that Metro's standard sub-contract language for "Buy Recycled" not be used. Instead, specific materials specifications for items that Metro would like to use in the project should be presented to Hoffman. Pat Varley and Berit Stevenson have been working with the Architect to finaliz. this. Some materials, such as ceiling tiles and drywall are standard construction materials that should not require a price preference; other non-standard items may require the price pretense to ensure their use on the project. Subcontractors should also be encouraged to submit recycled materials ideas for consideration. Recycled content roofing does not appear to be a viable option at this time. Space allocation in the recycling room still needs to be confirmed. Painting bids will not be requested for a few more months.

The Metro Headquarters Communication Plan is attached.

Public Affairs will be using the project name "Metro Headquarters Resourceful Renovation." Michel Gregory and Vickie Rocker were at the job site on March 16, 1992 to review possible publicity items. On-site sign discussions need to be continued in order to seize the opportunity. Some potential measures of the success at the project are:

- ◆ How much material would have been sent to transfer stations without the construction site recycling project
- ◆ Quantity material will be left in place and reused
- ◆ The cost of same building to construct new

A short videotape was made of the project for submittal to National Geographic for review as a possible story. There may be some graffiti problems in the area of the building. On-site signage should be situated to minimize the risk of vandalism.

Status of Recycling System: The recycling chute is still part of the project. The \$17,000 Hoffman bid is being checked.

Energy Report: The response to questions submitted about the energy report is attached. The questions regarding specific lighting arrangements will need to be answered during detail design. Resource Lighting Center in Seattle may be used for design assistance. The final draft of the energy report will be available this week. Mike Porter (Portland Energy Office) and Kurt Nichols (ODOE) will review the report. Glenn Taylor has also contacted MicroGrid for a review.

Glenn and Berit met with the Portland Water Office; however, they didn't have any new ideas to add to the project. More information will be gathered on water issues, including on-demand hot water. Glenn contacted a solar energy advocate to discuss solar application. Currently, the domestic hot water system will be gas fired with a solar pre-heat.

The **EPA position** will not be advertised until final approval of the EPA grant has been received. All work is complete with Personnel for this position. The grant is expected to be received no earlier than April 1.

Next Meeting: Tuesday, March 31, from 3:30 p.m. to 4:30 p.m. in room 240.

Action Items:

Debbie Palermini:

- ◆ Research whether or not bricks are being sent to a separate recycler - 3-31-92
- ◆ Determine the amount of construction site recycling that would be done on a project of this type - 3-31-92

Pat Varley:

- ♦ Define the price preference application - 3-31-92
- ♦ Continue defining acceptable "Buy Recycled" materials for use in the project - 4-14-92

Michel Gregory:

- ♦ Determine requirements for on-site signage, including types of information that may need to be obtained/tracked on a regular basis - 3-24-92

Glenn Taylor:

- ♦ Obtain facts from Hoffman, including quantity of material reused in the building and the cost of construction of a similar building without reuse - 3-31-92
- ♦ Submit two copies of the energy report to Joanna Karl, and one to MicroGrid - 3-24-92

Joanna Karl:

- ♦ Obtain water conservation information, including on-demand water heating efficiencies - 3-31-92

Flor Matias:

- ♦ Review recycling room space allocation - 3-24-92

JG:gbc

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METRO

2000 SW First Avenue
Portland, OR 97201-5398
(503) 221-1646
Fax 241-7417

March 17, 1992

Mr. Wayne Drinkward
Project Manager
Hoffman Construction Company
1300 SW Sixth Avenue
Portland, OR 97201

Dear Mr. Drinkward:

We are writing to reinforce our commitment to using recycled building materials in Metro's new headquarters, and to thank you for your cooperation in this matter.

As you know, Metro is responsible for coordinating solid waste planning and recycling in the Portland Metropolitan region. Part of our responsibility includes developing markets for recycled materials. Supporting the burgeoning recycled building products industry is essential to our Market Development Program.

Renovation of Metro's new headquarters is a prime opportunity (if not a mandate for Metro) to "practice what it preaches" about recycling. The renovation gives Metro a unique opportunity to showcase the use of recycled building products and efficient building practices. It also could provide new insights about purchasing and using recycled building products.

Our understanding of the renovation contract is that the design/build team intends "to be responsive to Metro at each and every step of the project" and that it recognizes "Metro wishes an open and participatory design and construction process." We must compliment you for employing these principles to date. We understand from Berit Stevenson and Pat Varley your cooperation in this matter has been exceptional!

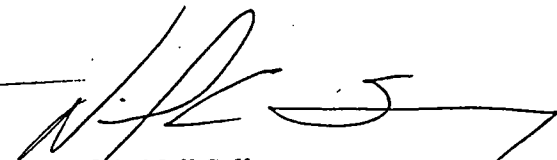
We appreciate and understand the parameters under which we must work to achieve our recycling goals—the project timeline is tight and the financial resources are limited. We assure you we are doing everything possible to facilitate the use of recycled building products in the renovation. Beginning our next fiscal year (July 1992), we have budgeted funds to help offset the cost of purchasing selected recycled products. An EPA grant request is in process to help us record and publicize this state-of-the-art project on a national level. We also understand that Berit and Pat are working closely with your design team to establish potential criteria for selection of certain products.

In closing, we must reiterate our appreciation of your cooperation. We look forward to working with you further to achieve the optimum use of recycled building materials.

Sincerely,



Mr. Bob Martin
Director of Solid Waste



Mr. Neil Saling
Director of Regional Facilities

BM:jc
cc: Rena Cusma, Executive Officer

Executive Officer
Rena Cusma

Metro Council

Tanya Collier
Presiding Officer
District 9

Jim Gardner
Deputy Presiding
Officer
District 3

Susan McLain
District 1

Lawrence Bauer
District 2

Richard Devlin
District 4

Tom DeJardin
District 5

George Van Bergen
District 6

Ruth McFarland
District 7

Judy Wyers
District 8

Roger Buchanan
District 10

David Knowles
District 11

Sandi Hansen
District 12

Jim Goddard

Headquarters "Resourceful Renovation" Signs

Description:

Two weatherproof signs to be posted on construction cyclone fencing over duration of construction, one each on Grand Ave. and Lloyd Blvd. Design them so the "tons recycled" figure can be updated monthly on both signs. Perhaps a frame can be attached so we can slide figures in and out on laminate panels.

Please visit the site to determine what size is readable for cars passing by.

Copy:

Future Metro Headquarters
Resourceful Renovation

(Number) Tons Recycled On This Project

→ Need 1st number (total)

Budget:

\$1,000. Needs to include production costs and tonnage updates for April, May and June. July through January updates will come out of next year's budget. Please let me know how much each number update will cost.

Completion date: March 30th
Coordinating with Hoffman + TUA/Cole on posting w/ construction signs.

Metro Headquarters Communication Plan

Goals

1. Communicate "big picture facts" about the project:
 - Need for building
 - Long-term investment argument
 - Costs: sq. ft., parking, TI, etc.
 - Garage purchase rationale
2. Publicize the many positive components of the project:
 - Waste reduction
 - Energy efficiency
 - Minority hiring
 - NE neighborhood impact
 - One percent for art
3. Prepare responses for potential "negatives" that may raise:
 - Handicapped access
 - Costs
 - Parking garage

Strategies

Media Relations

1. Develop standard press kit:
 - General fact sheet
 - Highlights piece with descriptions of "positives"
 - Rendering
 - Fun facts
2. Pursue press coverage of project highlights. Media targets would include local business, environmental and, in some cases, general news reporters. Some angles would warrant contact with trade publications. Media outreach could include press events, releases and personal contact. Story opportunities, some of which are also good photo opportunities, might include the following:

Waste reduction

- EPA grant award
- Monthly recycling figures
- Hoffman/Don Nail feature
- The chute recycling system
- National Geographic visit
- Think tank as reuse
- Buy Recycled
- Reintegrating medallions

(See action items on ^{last page} ~~releases~~)

Energy efficiency

- PP & L Financer program
- Unusual elements

Minority hiring

- Hoffman commitment to minority hiring
- Job information booth
- Apprenticeship program with unions
- Hiring & subcontracting results

NE neighborhood impact

- Revival of "dead" gateway to Lloyd District
- Aesthetic impact

One percent for art

- Solicitation for proposals
- Project selections
- Artist features
- Installation features
- Metro commitment to public art

3. Identify potentially sensitive areas and develop written response plans.

Community & Industry Relations

General

1. Prepare packet with general project information to distribute to interested groups or individuals. This is very similar to the press kit.
2. Host finished building open house with tours. Target neighboring businesses, government officials and other key constituents.

Waste Reduction

1. Post waste reduction project signage on site fencing.
2. Host tours of project for construction/development/recycling folks.
2. Produce slide documentary of project ("Recycling A Department Store"). Present to construction trades, developers, recycling industry, and relevant conferences via Waste Reduction program.

| <u>Action Items</u> | | <u>Date</u> |
|---|-----|----------------|
| 1. Prepare press kit & community information packet. | | 3/27 |
| √Need fact sheet information. (Regional Facilities and/or Finance) | | |
| -Need for building | | |
| -Long-term investment argument | | |
| -Costs: sq. ft., parking, TI, etc. | | |
| -Garage purchase rationale | | |
| -Bldg. details - square footage, building features, parking spaces, etc. | | |
| √Write highlights piece. (Michel) | | |
| √Copy of rendering. (Glen/Berit) | | |
| √“Fun Facts,” if available. (Glen/Berit) | | |
| 2. Seek press coverage opportunities. (Michel/Vickie R.) | | |
| (L= Local N = National special interest & trades) | | |
| √Minority hiring/job booth release/event | L | Wk.of 3/23 |
| √Waste reduction program introduction | L/N | Wk. of 4/6 |
| √Don Nail/Hoffman recycling feature | L/N | Wk. of 4/6 |
| √EPA grant award announcement | L/N | Late April? |
| √Bob Thompson feature - “vision thing” & Metro Headquarters as new gateway to district | L | May |
| √One percent for art intro story | L | Late April |
| √One percent artist(s) announcement | L | Mid-June |
| (Develop full media calendar as much as possible to identify project highlights from April through move in) | | |
| 3. Develop response plan for potentially negative issues. | | 3/31 |
| 4. Post waste reduction project signage on site fencing. | | 3/26 |
| 5. Produce slide documentary of project. | | Ongoing |
| 6. Waste reduction building tours. (Jim/Debbie) | | Ongoing |

GLUMAC & ASSOCIATES, INC.
Consulting Engineers
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Portland, Oregon 97204
503/227-5280

JIM GODDARD
FYI

MAR 15 1992

March 12, 1992

Glenn Taylor
METRO
2000 SW First Ave.
Portland, OR 97201-5398

SUBJECT: Joanna Karl Memo

Dear Glenn:

Thank you for transmitting Ms. Karl's comments regarding energy use at the new METRO headquarters. As always, we wish to be responsive to METRO's needs and concerns. The following are responses to Ms. Karl's memo which I hope address these concerns. Should you wish, we would be happy, of course, to meet with METRO staff concerned about the building energy use.

1) QUESTION: Is VAV or TRAV system modeled?

RESPONSE: The modelling tool used for the Finanswer Program is the DOE 2.1 D program. The building was modelled with a fan-powered variable air volume induction system on the perimeter with interior VAV terminals. The program does not, as such, model any proprietary control scheme. Nevertheless, Glumac will be incorporating many elements of the TRAV design in the project specifications for DDC controls.

2) QUESTION: Its hard to believe there is no cost difference for purchasing/installing R-12.5 wall insulation rather than R-11. If so, would it be cost-effective to increase the R-value even more.

RESPONSE: Hoffman Construction priced the R12.5 wall insulation. I assume their estimate for materials is correct. Labor should be comparable for R11 or R12.5 since both are 3 1/2" insulation batts installed in a framing cavity.

To increase insulation from the 12.5 level would require a different framing or a different building skin. Both of these alterations would be very costly to implement and would have other implications. (6" framing would, for example, decrease the overall building square footage.)

Insulation measures obey the law of diminishing returns. Each increasing level of insulation reduces energy from a smaller margin.

Our past experience has been, that in a building of this type, the additional cost to go to a 6" framing is approximately \$1.50 per square foot of wall while the energy savings to go from R-11 insulation to R-19 are rather small, on the order of 1 KWH per sq.ft. of wall. This being the case, the simple payback on such a measure would be approximately 37 years.

Other factors which militate against this control in this application are cost and indoor air quality. First, we anticipate the cost per temperature control zone would double at a minimum. Secondly, if air to a zone were shut down, there would no way to assure adequate indoor air quality and comfort when the space was reoccupied.

7. QUESTION: Lighting features not included in this analysis:

- Lighting shelves
- Dimmer general lighting with task lighting.

RESPONSE: Light shelves were discussed by METRO and the design team at the initial energy meeting. It was decided at that time that costs were prohibitive and architectural requirements indicated other approaches.

As regards dimmer lighting levels, please see our response for Item 4 above.

8. QUESTION: Domestic hot water features not included in this analysis:

- Water conservation leads to less hot water to heat.
- Solar hot water system back-up could be on-demand gas.

RESPONSE:

-The building basic design includes flow restrictors on all lavatory faucets and also incorporates low flow shower heads.

- Since the Finanser Program provides funding only for measures which impact electrical use, a solar water heating system with gas backup would be nonfundable. Regardless of this proviso, Glumac will provide information to METRO to permit evaluation of gas versus electric water heating.

9. QUESTION: Why is a central system not being considered in lieu of the high efficiency packaged rooftop cooling?

RESPONSE: The initial schematic design provided several options, including a central chilled water system. The rooftop option, however, was the most cost effective and the option chosen by the client.

A central plant for the METRO building would likely employ a screw compressor, since centrifugal chillers are not available or competitive in the tonnage size required. A screw compressor and central chilled water plant would have energy using performance similar to that of the high efficiency package studied.

10. QUESTION: Is co-generation a possibility?

RESPONSE: These systems are complex and costly. They are normally considered for facilities with constant high heating/cooling loads and high backup electrical requirements and/or high utility rates. Even in areas where electrical rates are \$ 0.10 to \$ 0.12 per kilowatt hour the systems are normally only used in hospitals or industrial facilities. Given the Northwest's low electrical rates and the character of the METRO headquarter's this is not a practical measure.