

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF AUTHORIZING THE)
ISSUANCE OF A REQUEST FOR PROPOSALS,) RESOLUTION NO. 94-1887
AND AUTHORIZING THE EXECUTIVE OFFICER TO)
ENTER INTO A CONTRACT FOR SERVICES TO) Introduced by Rena Cusma,
CREATE A BOOKLET "WHAT 'S A HOUSEHOLD) Executive Officer
HAZARDOUS WASTE FACILITY?")

WHEREAS, Metro received a grant from the United States Environmental Protection Agency (EPA) in 1992 to produce a booklet that explains the function and purpose of materials recovery facilities (MRF), entitled "What's a MRF?"; and

WHEREAS, The booklet has been published and was enthusiastically received by the EPA and others; and

WHEREAS, Metro presently operates two "state of the art" Household Hazardous Waste Facilities, one at Metro Central Transfer Station and one at Metro South Transfer Station, and the EPA would like to use Metro's facilities as a model to educate the national public about household hazardous waste facilities that may be built at MRF's and transfer stations by developing a companion booklet to "What's a MRF?"; and

WHEREAS, The EPA is prepared to authorize an extension to the original EPA Contract X820327-01-0 to conclude June 30, 1994, that would add an additional \$20,000 from EPA and a \$2,875 Metro in-kind contribution to the grant for a total grant award of \$60,875. This provides \$30,000 to produce the new booklet designed to educate the public about household hazardous waste facilities; and

WHEREAS, The Solid Waste Department will prepare a budget amendment for Council consideration and approval to receive and expend the grant funds; and

WHEREAS, Progressive legislation will create a significant demand in the future for household hazardous waste facilities that likely will be built in conjunction with material recovery facilities (MRF's) and transfer stations, and such a publication would educate the public about the need for this type of facility and address the public's concerns about household hazardous wastes; and

WHEREAS, The resolution was submitted to the Executive Officer for consideration and was forwarded to the Council for approval; now therefore,

BE IT RESOLVED,

The Metro Council hereby authorizes issuance of a Request for Proposals, whereby a vendor will author and illustrate the companion booklet, "What's a Household Hazardous Waste Facility?", and authorizes the Executive Officer to execute a contract for personal services to provide this service.

ADOPTED by the Metro Council this 27th day of January, 1994.



Judy Wyers, Presiding Officer

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REQUEST FOR PROPOSALS

TO CREATE A COMPANION BOOKLET "WHAT'S A HOUSEHOLD HAZARDOUS WASTE FACILITY?"

RFP #94R-1-SW

January 1994

**Metro
Solid Waste Department
600 NE Grand Avenue
Portland, OR 97232-2736
(503) 797-1650**

Printed on recycled paper

REQUEST FOR PROPOSALS

TO CREATE A COMPANION BOOKLET "WHAT'S A HOUSEHOLD HAZARDOUS WASTE FACILITY?" RFP #94R-1-SW

I. INTRODUCTION

The Solid Waste Department of Metro, a metropolitan service district organized under the laws of the State of Oregon and the 1992 Metro Charter, located at 600 NE Grand Avenue, Portland, OR 97232-2736, is requesting proposals to create a companion booklet "What's a Household Hazardous Waste Facility?" Proposals will be due no later than 5:00 p.m., Friday, February 18, 1994, in Metro's business offices at 600 NE Grand Avenue, Portland, OR 97232-2736. Details concerning the project and proposal are contained in this document.

II. BACKGROUND/HISTORY OF PROJECT

Since the successful completion of the booklet "What's a MRF?", Metro has had several requests to produce a companion booklet to educate the public on household hazardous waste facilities. This booklet will be produced by Metro and funded by a grant from the U.S. Environmental Protection Agency (EPA). This companion booklet "What's a Household Hazardous Waste Facility?" will be an extension of the original EPA Grant.

There will be a significant demand for household hazardous waste facilities to be built in this decade. Most of these facilities would be built at material recovery facilities (MRFs) transfer stations throughout the country. Metro presently operates two "state of the art" Household Hazardous Waste Facilities, one at Metro Central Transfer Station and one at Metro South Transfer Station.

Anticipating the possibility of negative responses from the local communities for the building of these facilities, this booklet would be aimed at defusing public objection. Fear of the term household hazardous waste, fear of an unfamiliar building type, and the types of waste that will be brought to these facilities together with a lack of understanding, will be addressed in this booklet. This publication can also be used as a tool to target public audiences and educate them on the need for household hazardous waste facilities and hopefully disperse the NIMBY phenomena. Household hazardous waste facilities (HHWF) will be critical links in the solid waste stream and yet most people know very little about their function and operation.

This booklet will target a national audience and explain what HHWF are and what they do. It will be utilized by public agencies and developers as information handouts and distributed at community events and facility tours. It is hoped that fears associated with these building types and the difficulties in their siting and approval will be dispersed. This will be an opportunity

for Metro together with the U.S. EPA, to produce, at modest cost, a very valuable, high quality, nationally published and environmentally responsible document.

III. PROPOSED SCOPE OF WORK/SCHEDULE

Metro is seeking proposals from qualified firms to perform the following services and to deliver the products described:

The consultant will research, write, edit, design, illustrate and coordinate production with Metro Graphic's staff for the two-color booklet entitled "What's a Household Hazardous Waste Facility?". Since this booklet will be a companion booklet, overall appearance, text and illustrations will need to be compatible with the first booklet, "What's a MRF?" (attached). Drafts of the document will be sent to a few individuals and organization in the industry and government, selected by Metro, for review and comment. EPA will be sent a final draft for their approval. Metro has final editorial and design review and approval.

Metro will grant funds to pay printing and film costs for approximately 1,500 booklets and 10 sets of composed films. Two hundred booklets and one set of composed film will be sent to EPA/Washington D.C. One thousand two hundred fifty booklets and eight sets of composed films will remain at Metro for later distribution. Fifty booklets and one set of composed film will be held by the author for distribution. Any of the three parties will be able to distribute sample quantities of the booklet and loan plate ready film to interested agencies, individuals and groups.

Three sets of templates designed for an 8 1/2" x 11" insert describing a local project will be provided. This will allow local agencies to conveniently and inexpensively promote a local project for a household hazardous waste facility.

The Consultant will provide the following services with respect to the HHWF booklet:

- μ Research
- μ Writing
- μ Editing
- μ Graphic Design
- μ Illustrations
- μ Review process
- μ Production/ printing coordination
- μ Project administration

The booklet must be printed on post-consumer content recycled paper with vegetable based ink. The project will be completed by June 30, 1994.

IV. QUALIFICATIONS/EXPERIENCE

State your understanding of the issues and intent of this booklet and describe how you will approach this project. Outline your research approach and your development of text and illustrations.

Demonstrate your ability to write with a high degree of clarity and preciseness. Demonstrate your ability to visualize written material making both the wording and illustrations compatible.

Describe similar projects you have completed, including objectives and results achieved. Briefly explain how each is relevant to this project. List names and telephone numbers of client references for these projects. Samples are encouraged.

V. PROJECT ADMINISTRATION

Metro's project manager and contract for the project is Katie Dowdall. Proposals shall identify a single person as project manager to work with Metro.

Metro will have final editorial review and approval for this project. U.S. EPA requires approval of final draft. Since this publication will be a joint effort between Metro's staff and the author, weekly meetings will be required either by phone or office visits. This project will be under a tight timetable as the booklet must be at the printer by June 30, 1994.

VI. PROPOSAL INSTRUCTIONS

A. Submission of Proposals

Five (5) copies of the proposal shall be furnished to Metro, addressed to:

Katie Dowdall, Project Manager
Metro
Solid Waste Department
600 NE Grand Avenue
Portland, OR 97232-2736

B. Deadline

Proposals will not be considered if received after 5:00 p.m., Friday, February 18, 1994.

C. RFP as Basis for Proposals:

This Request for Proposals represents the most definitive statement Metro will make concerning the information upon which Proposals are to be based. Any verbal information which is not addressed in this RFP will not be considered by

Metro in evaluating the Proposal. All questions relating to this RFP should be addressed to Katie Dowdall, Project Manager at (503) 797-1648. Any questions, which in the opinion of Metro, warrant a written reply or RFP amendment will be furnished to all parties receiving this RFP. Metro will not respond to questions received after February 11, 1994.

D. Contract Type

Metro intends to award a Personal Services Agreement with the selected Contractor. A copy of the standard contract form approved by Metro General Counsel is attached.

E. Information Release

All proposers are hereby advised that Metro may solicit and secure background information based upon the information, including references, provided in response to this RFP. By submission of a proposal all proposers agree to such activity and release Metro from all claims arising from such activity.

F. Disadvantaged, Minority and Women-Owned Business Program

In the event that any subcontracts are to be utilized in the performance of this agreement, the Proposer's attention is directed to Metro Code provisions 2.04.100,200 & 300.

Copies of that document are available from the Procurement and Contracts Division of Regional Facilities, Metro, Metro Center, 600 NE Grand Avenue, Portland, OR 97232 or call (503) 797-1717.

VII. PROPOSAL CONTENTS

The proposal should contain not more than 10 pages of written material (excluding biographies and brochures, which may be included in an appendix), describing the ability of the consultant to perform the work requested, as outlined below:

- A. Transmittal Letter: Indicate who will be assigned to the project, who will be project manager, and that the proposal will be valid for ninety (90) days.
- B. Approach/Project Work Plan: Describe how the work will be done within the given time frame and budget. Include a proposed work plan and schedule.
- C. Staffing/Project Manager Designation: Identify specific personnel assigned to major project tasks, their roles in relation to the work required, percent of their time on the project, and special qualifications they may bring to the project.

Since illustrations are important, please identify sub contractor or personnel that will be assigned to this task, their role in relation to the authorship, and the special qualifications they may bring to the project.

Metro intends to award this contract to a single firm to provide the services required. Proposals must identify a single person as project manager to work with Metro. The consultant must assure responsibility for any subconsultant work and shall be responsible for the day-to-day direction and internal management of the consultant effort.

- D. Experience: List projects conducted over the past five years similar to the work required here. For each project, include the name of the contact person, his/her title, role on the project, and telephone number. Identify persons on the proposed project team who worked on each project, and their respective roles. Include resumes of individuals proposed for this contract.
- E. Cost/Budget: Present the proposed cost of the project and the proposed method of compensation. List hourly rates for personnel assigned to the project, total personnel expenditures, support services, and subconsultant fees (if any). Requested expenses should also be listed. A budget not to exceed \$23,000 has been established for this part of the project.
- F. Exceptions and Comments: To facilitate evaluation of proposals, Metro wishes that all responding firms adhere to the format outlined within this RFP. Firms wishing to take exception to, or comment on, any specified criteria within this RFP are encouraged to document their concerns in this part of their proposal. Exceptions or comments should be succinct, thorough and organized.

VIII. GENERAL PROPOSAL/CONTRACT CONDITIONS

- A. Limitation and Award: This RFP does not commit Metro to the award of a contract, nor to pay any costs incurred in the preparation and submission of proposals in anticipation of a contract. Metro reserves the right to waive minor irregularities, accept or reject any or all proposals received as the result of this request, negotiate with all qualified sources, or to cancel all or part of this RFP.
- B. Contract Type: Metro intends to award a personal services contract with the selected firm for this project. A copy of the standard form contract which the successful consultant will be required to execute is attached.
- C. Billing Procedures: Proposers are informed that the billing procedures of the selected firm are subject to the review and prior approval of Metro before reimbursement of services can occur. For mutual consideration, the parties agree that compensation shall be made in the following manner: Metro will

advance \$13,000 to contractor when contract is signed. Upon completion and delivery of the project to Metro, Metro will make the final payment of \$10,000 to contractor.

- D. Validity Period and Authority: The proposal shall be considered valid for a period of at least ninety (90) days and shall contain a statement to that effect. The proposal shall contain the name, title, address, and telephone number of an individual or individuals with authority to bind any company contacted during the period in which Metro is evaluating the proposal.
- E. Conflict of Interest. A Bidder filing a bid thereby certifies that no officer, agent, or employee of Metro or Metro has a pecuniary interest in this Bid or has participated in contract negotiations on behalf of Metro; that the bid is made in good faith without fraud, collusion, or connection of any kind with any other Bidder for the same call for Bids; the Bidder is competing solely in its own behalf without connection with, or obligation to, any undisclosed person or firm.

IX. EVALUATION OF PROPOSALS

- A. Evaluation Procedure: Proposals received that conform to the proposal instructions will be evaluated. The evaluation will take place using the evaluation criteria identified in the following section. The evaluation process will result in Metro developing a short list of the firms who, in its opinion, are most qualified. Interviews with these firms may be requested prior to final selection of one firm.
- B. Evaluation Criteria: This section provides a description of the criteria which will be used in the evaluation of the proposals submitted to accomplish the work defined in the RFP.

- | General - Compliance with the RFP.

- | Project Work Plan/Approach (50%)
 - 1. Demonstration of understanding of the project objectives.
 - 2. Performance methodology.
 - 3. Creativity

- | Previous Work and Project Staffing Experience (35%)
 - 1. Previous work relevant to Metro's project
 - 2. Results and timelines of past projects

- | Budget/Cost Proposal (15%)

SOLID WASTE COMMITTEE REPORT

CONSIDERATION OF RESOLUTION NO. 94-1887, FOR THE PURPOSE OF AUTHORIZING THE ISSUANCE OF A REQUEST FOR PROPOSALS, AND AUTHORIZING THE EXECUTIVE OFFICER TO ENTER INTO A CONTRACT FOR SERVICES TO CREATE A BOOKLET "WHAT'S A HOUSEHOLD HAZARDOUS WASTE FACILITY?"

Date: January 19, 1994

Presented by: Councilor Hansen

Committee Recommendation: At the January 18 meeting, the Committee voted 4-0 to recommend Council adoption of Resolution No. 94-1887. Voting in favor: Councilors Hansen, McFarland, McLain and Wyers. Councilors Buchanan and Monroe were absent.

Committee Issues/Discussion: Katie Dowdall, Solid Waste Staff, explained the purpose of the resolution. She noted that Metro had received an EPA grant to produce a booklet related to material recovery facilities (MRF) entitled "What is a MRF?" Due to the success of this booklet and Metro's development of state-of-the-art household hazardous waste (HHW) facilities, EPA has offered an additional grant to produce a companion booklet on HHW facilities. The resolution would authorize issuance of an RFP related to the production work needed to develop an HHW booklet.

The total cost of the production of the booklet is estimated to be \$30,000. Of this total, \$20,000 will be a new grant from EPA, \$7,125 from the remaining balance on the MRF booklet project, and a "soft" match of \$2,875 in Metro staff time associated with the management of the project.

Councilor Wyers asked how many copies of the MRF booklet had been printed. Dowdall responded that 1,500 copies had been made. Wyers expressed concern that the per booklet cost appeared to be about \$20. Dowdall responded that other jurisdictions can use the booklet templates to reproduce it at their own cost, so it is likely that many more than 1,500 of the booklets have actually been distributed.

Councilor Van Bergen asked if the MRF booklet in any way inferred an endorsement of such facilities by Metro. Dowdall noted that the booklet specifically indicates that it does not constitute an endorsement. Councilor Hansen noted that since Metro does operate two HHW facilities, that maybe Metro support for such facilities should be indicated in the HHW booklet.

1. Stated ability to complete project within budget and within schedule.
2. Clarity, understandability and conformity to instructions.

X. SCHEDULE

The following is a tentative project schedule

January 31, 1994	RFP released
February 18, 1994	RFP due in Metro office by 5:00 p.m.
February 25, 1994	Contractor selection
June 30, 1994	Project due at printers

XI. NOTICE TO ALL PROPOSERS -- STANDARD AGREEMENT

The personal services agreement included herein is a standard agreement approved for use by Metro's General Counsel. As such, it is included for your review prior to submitting a proposal.

Any changes in the included standard agreement must be requested and resolved as part of the proposal process or as a condition attached to the proposal.

Consider the language carefully. Conditioned proposals may be considered nonresponsive. Subsequent requests for modification may not only be rejected, but interpreted as a request to modify and withdraw the original proposal.

Project:
Contract No:

PERSONAL SERVICES AGREEMENT

THIS AGREEMENT is between Metro, a metropolitan service district organized under the laws of the State of Oregon and the 1992 Metro Charter, located at 600 NE Grand Avenue, Portland, Oregon 97232, and ___ referred to herein as "Contractor," located at

In exchange for the promises and other consideration set forth below, the parties agree as follows:

1. **Duration.** This personal services agreement shall be effective _____, and shall remain in effect until and including _____, unless terminated or extended as provided in this Agreement.
2. **Scope of Work.** Contractor shall provide all services and materials specified in the attached "Exhibit A – Scope of Work," which is incorporated into this Agreement by reference. All services and materials shall be provided by Contractor in accordance with the Scope of Work, in a competent and professional manner. To the extent that the Scope of Work contains additional contract provisions or waives any provision in the body of this Agreement, the Scope of Work shall control.
3. **Payment.** Metro shall pay Contractor for services performed and materials delivered in the amount(s), manner and at the time(s) specified in the Scope of Work for a maximum sum not to exceed _____ AND _____/100 DOLLARS (\$_____).
4. **Insurance.**
 - a. Contractor shall purchase and maintain at the Contractor's expense, the following types of insurance, covering the Contractor, its employees, and agents:
 - (1) Broad form comprehensive general liability insurance covering bodily injury and property damage, with automatic coverage for premises, operations, and product liability. The policy must be endorsed with contractual liability coverage; and
 - (2) Automobile bodily injury and property damage liability insurance.
 - b. Insurance coverage shall be a minimum of \$500,000 per occurrence. If coverage is written with an annual aggregate limit, the aggregate limit shall not be less than \$1,000,000.

c. Metro, its elected officials, departments, employees, and agents shall be named as ADDITIONAL INSUREDS. Notice of any material change or policy cancellation shall be provided to Metro 30 days prior to the change or cancellation.

d. Contractor, its subcontractors, if any, and all employers working under this Agreement that are subject employers under the Oregon Workers' Compensation Law shall comply with ORS 656.017, which requires them to provide Workers' Compensation coverage for all their subject workers. Contractor shall provide Metro with certification of Workers' Compensation insurance including employer's liability. If Contractor has no employees and will perform the work without the assistance of others, a certificate to that effect may be attached, as Exhibit B, in lieu of the certificate showing current Workers' Compensation.

e. If required by the Scope of Work, Contractor shall maintain for the duration of this Agreement professional liability insurance covering personal injury and property damage arising from errors, omissions, or malpractice. Coverage shall be in the minimum amount of \$500,000. Contractor shall provide to Metro a certificate of this insurance, and 30 days' advance notice of material change or cancellation.

5. Indemnification. Contractor shall indemnify and hold Metro, its agents, employees and elected officials harmless from any and all claims, demands, damages, actions, losses and expenses, including attorney's fees, arising out of or in any way connected with its performance of this Agreement, or with any patent infringement or copyright claims arising out of the use of Contractor's designs or other materials by Metro and for any claims or disputes involving subcontractors.

6. Maintenance of Records. Contractor shall maintain all of its records relating to the Scope of Work on a generally recognized accounting basis and allow Metro the opportunity to inspect and/or copy such records at a convenient place during normal business hours. All required records shall be maintained by Contractor for three years after Metro makes final payment and all other pending matters are closed.

7. Ownership of Documents. All documents of any nature including, but not limited to, reports, drawings, works of art and photographs, produced by Contractor pursuant to this Agreement are the property of Metro, and it is agreed by the parties that such documents are works made for hire. Contractor hereby conveys, transfers, and grants to Metro all rights of reproduction and the copyright to all such documents.

8. Project Information. Contractor shall share all project information and fully cooperate with Metro, informing Metro of all aspects of the project including actual or potential problems or defects. Contractor shall abstain from releasing any information or project news without the prior and specific written approval of Metro.

9. Independent Contractor Status. Contractor shall be an independent contractor for all purposes and shall be entitled only to the compensation provided for in this Agreement. Under no circumstances shall Contractor be considered an employee of Metro. Contractor shall provide all tools or equipment necessary to carry out this Agreement, and shall exercise complete control in achieving the results specified in the Scope of Work. Contractor is solely responsible for its performance under this Agreement and the quality of its work; for obtaining and maintaining all licenses and certifications necessary to carry out this Agreement; for payment of any fees, taxes, royalties, or other expenses necessary to complete the work except as otherwise specified in the Scope of Work; and for meeting all other requirements of law in carrying out this Agreement. Contractor shall identify and certify tax status and identification number through execution of IRS form W-9 prior to submitting any request for payment to Metro.

10. Right to Withhold Payments. Metro shall have the right to withhold from payments due to Contractor such sums as necessary, in Metro's sole opinion, to protect Metro against any loss, damage, or claim which may result from Contractor's performance or failure to perform under this Agreement or the failure of Contractor to make proper payment to any suppliers or subcontractors.

11. State and Federal Law Constraints. Both parties shall comply with the public contracting provisions of ORS chapter 279, and the recycling provisions of ORS 279.545 - 279.650, to the extent those provisions apply to this Agreement. All such provisions required to be included in this Agreement are incorporated herein by reference. Contractor shall comply with all applicable requirements of federal and state civil rights and rehabilitation statutes, rules and regulations including those of the Americans with Disabilities Act.

12. Situs. The situs of this Agreement is Portland, Oregon. Any litigation over this agreement shall be governed by the laws of the state of Oregon and shall be conducted in the circuit court of the state of Oregon, for Multnomah County, or, if jurisdiction is proper, in the U.S. District Court for the District of Oregon.

13. Assignment. This Agreement is binding on each party, its successors, assigns, and legal representatives and may not, under any circumstance, be assigned or transferred by either party.

14. Termination. This Agreement may be terminated by mutual consent of the parties. In addition, Metro may terminate this Agreement by giving Contractor five days prior written notice of intent to terminate, without waiving any claims or remedies it may have against Contractor. Termination shall not excuse payment for expenses properly incurred prior to notice of termination, but neither party shall be liable for indirect or consequential damages arising from termination under this section.

15. No Waiver of Claims. The failure to enforce any provision of this Agreement shall not constitute a waiver by Metro of that or any other provision.

16. Modification. Notwithstanding any and all prior agreements or practices, this Agreement constitutes the entire Agreement between the parties, and may only be modified in a writing signed by both parties.

METRO

By: _____

By: _____

Print name and title

Print name and title

Date: _____

Date: _____

KD:ek
S:\DOWDAEPA.RFP
January 19, 1994

SCOPE OF WORK

"What's a Household Hazardous Waste Facility?"

The \$27,124.50 requested from the EPA, together with the \$2,875.50 of Metro match funding will allow Metro to engage the consultant/author to write, edit, illustrate and aid in production coordination of the two-color booklet entitled "What's a Household Hazardous Waste Facility?".

The consultant will research, write, edit, design, illustrate and coordinate production with Metro Graphic's staff for the two-color booklet entitled "What's a Household Hazardous Waste Facility?". Since this booklet will be a companion booklet, overall appearance, text and illustrations will need to be compatible with the first booklet, "What's a MRF?" (attached). Drafts of the document will be sent to a few individuals and organization in the industry and government, selected by Metro, for review and comment. EPA will be sent a final draft for their approval. Metro has final editorial and design review and approval.

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Three sets of templates designed for an 8 1/2" x 11 insert describing a local project will be provided. This will allow local agencies to conveniently and inexpensively promote a local project for a household hazardous waste facility.

Consultant will provide the following services with respect to the HHWF booklet:

- μ Research
- μ Writing
- μ Editing
- μ Graphic Design
- μ Illustrations
- μ Review process
- μ Production/ printing coordination
- μ Project administration

The booklet must be printed on post-consumer content recycled paper with vegetable based ink. The project will be completed by June 30, 1994.

PAYMENT:

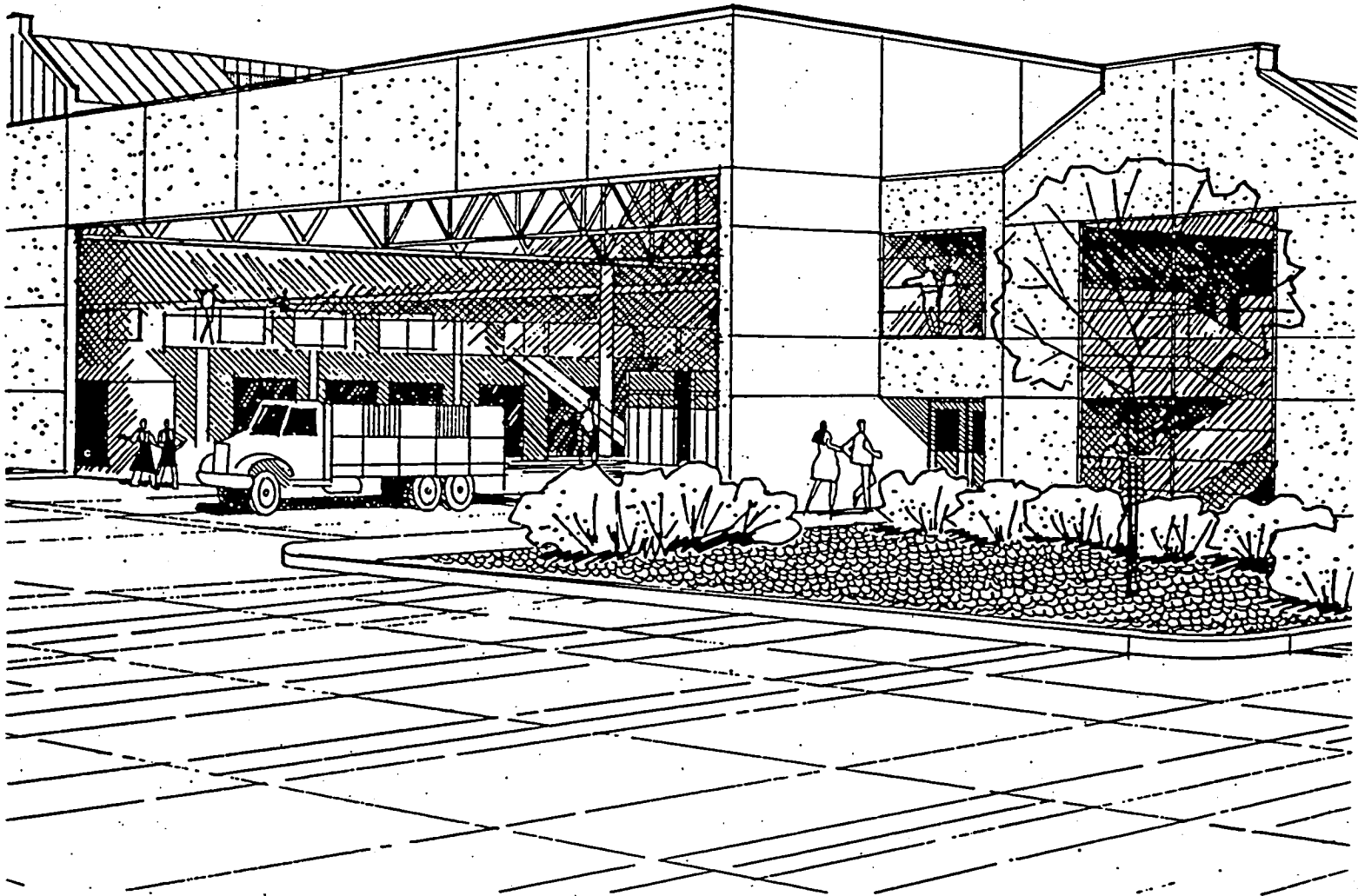
For mutual consideration, the parties agree that compensation shall be made in the following manner.

- μ Metro will advance \$13,000 to Contractor when contract is signed.
- μ Upon completion and delivery of project to Metro, Metro will make the final payment of \$10,000 to Contractor.

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January 19, 1994

WHAT'S A MRF?

AN INTRODUCTION TO
MATERIALS RECOVERY FACILITIES



WHY THIS PUBLICATION WAS CREATED

This publication describes what MRFs are and how they work. The goal is to increase public understanding and acceptance of these facilities as they are developed throughout the United States.

The function of a MRF is often misunderstood. MRFs are perceived as a new building type despite the fact that many have operated in parts of the country for years. MRFs complement recycling programs. Their mission is to extract and sort recyclable materials which were previously sent to landfills and burners. MRFs come in all types, sizes and designs. For simplicity, only the most basic terms and operations are described in this publication.

A FEW WORDS & PHRASES YOU'LL NEED TO KNOW

Garbage is the familiar term describing unsorted wet and dry waste, or everything that is discarded, and is more currently called **solid waste**.

Municipal solid waste (MSW): Unsorted, wet and dry solid waste not including industrial process wastes, agricultural wastes, mining wastes and sewage sludge. MSW is typically divided into residential and commercial categories.

Mixed waste: Unsorted, dry municipal solid waste.

Recyclables: Reclaimed materials which can be used as raw materials in the manufacture of new products. Typical recyclables are newspapers, magazines, corrugated cardboard, computer paper, mixed paper, glass jars and bottles, varieties of plastic containers, aluminum cans, tin cans, designated scrap metals, motor oil, wood and yard trimmings.

Source separated recyclables: Dry recyclables separated by type at the point of discard in the home or business.

Commingled recyclables: Recyclables which have been separated from solid waste but not from each other. Starting from unseparated, the levels of separation are commingled, partially commingled and fully separated.

C&D waste: Wastes from construction and demolition activities.

Compostables: Organic materials which can be reclaimed through biological decomposition.

Processing: Handling, separating, sorting and upgrading recyclables in a MRF.

Recovery rate: The percentage of recyclables reclaimed from a defined waste stream.

Residue: Waste material left over or rejected after extracting or processing recyclables.

Throughput: The quantity of waste received at a facility to be processed, typically measured in tons per day.

White goods: Discarded appliances such as refrigerators and ranges.

WHAT'S A MRF?

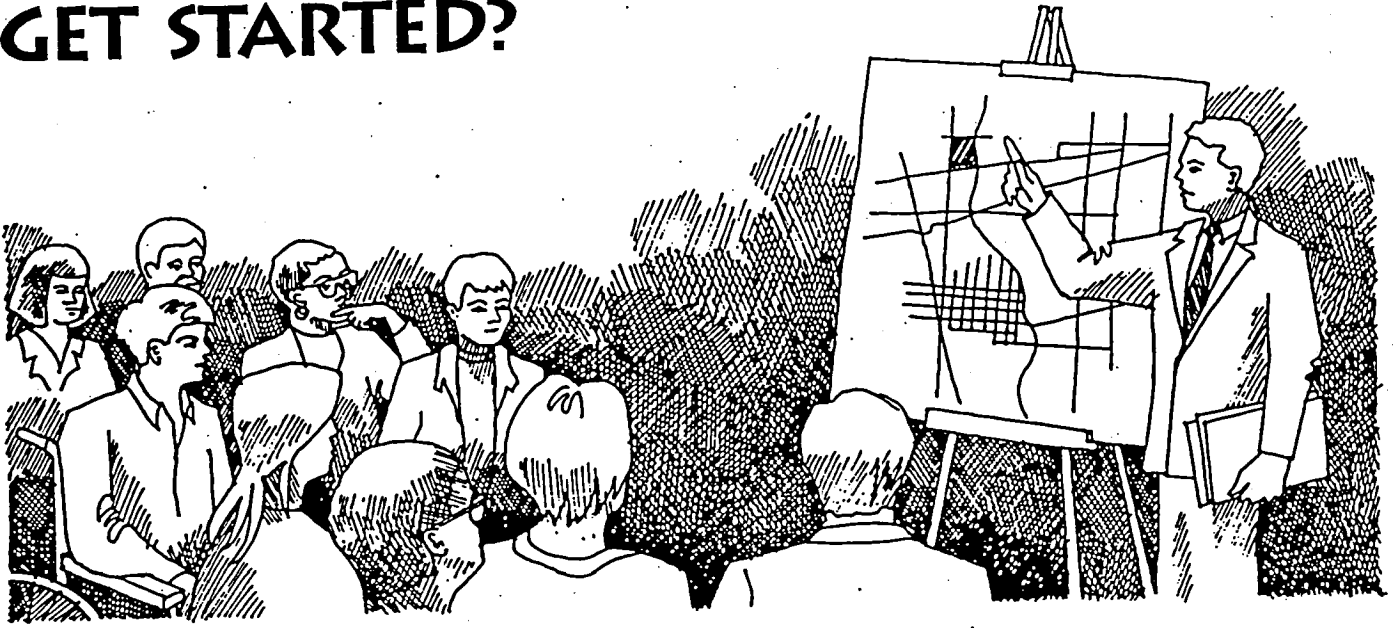
Meet "MRF." It rhymes with "surf" and it's recycling's companion, the materials recovery facility. MRFs are a link in the chain of managing wastes — from garbage to reusable material. MRFs complete the process started when people separate their garbage.

A MRF is a facility where recyclable materials are processed and sorted for re-use. Sometimes called an intermediate processing facility (IPF), or an intermediate processing center (IPC), they do the same thing. They upgrade recyclables into marketable commodities. Typically the recyclable materials have been fully separated at their source or are commingled when delivered to the MRF.

Waste collection/disposal systems vary regionally and by community. MRFs also differ depending on their location and the type of recycling program they support. The amount and complexity of processing at MRFs vary considerably. Some accept a small range of source separated materials and use simple processing techniques. Other larger facilities are designed to process a wide range of commingled recyclables with more varied and complex equipment. Almost all use some amount of hand sorting. Recyclables can arrive at a MRF from various sources: commercial, residential, curbside collection, public or self-hauling and from public drop-off or collection centers. A few MRFs use sophisticated equipment to extract recyclables from mixed waste.



HOW DO MRF PROJECTS GET STARTED?



Most communities adopt solid waste management plans, typically mandated by state or local governments. MRFs are integral to these waste management plans because they increase recovery of recyclables and reduce the amount of waste sent to landfills.

MRFs are developed in several ways. They can be sponsored by the public or private sector, or by joint arrangement. Public sponsors are cities, counties, districts and special waste agencies. Private developers include national waste companies, scrap processors, local collection companies and equipment vendors. A common joint arrangement is for a public agency to design and construct the facility and then contract with a private company for operation and maintenance. Or a community provides the site and a private company finances and constructs the facility. In a fully private development, sometimes called a Merchant MRF, a company purchases

a site and develops the facility. Less common is private development with sale or lease back to a public agency.

Every project starts with an operating program. The program establishes the throughput based on the collection system; sources, quantities and composition of the wastes; and the markets for recyclables. Next, goals are set for recovery rate of recyclables and, when included, compostables. Also important is the disposal of residue from the MRF: where it is going, how far it is to be shipped and by what method.

Rarely are any of these program elements static, so planners and designers of the MRF establish assumptions based on the best information available at the time of development. It's not unusual for a program to expand or change after construction has begun.

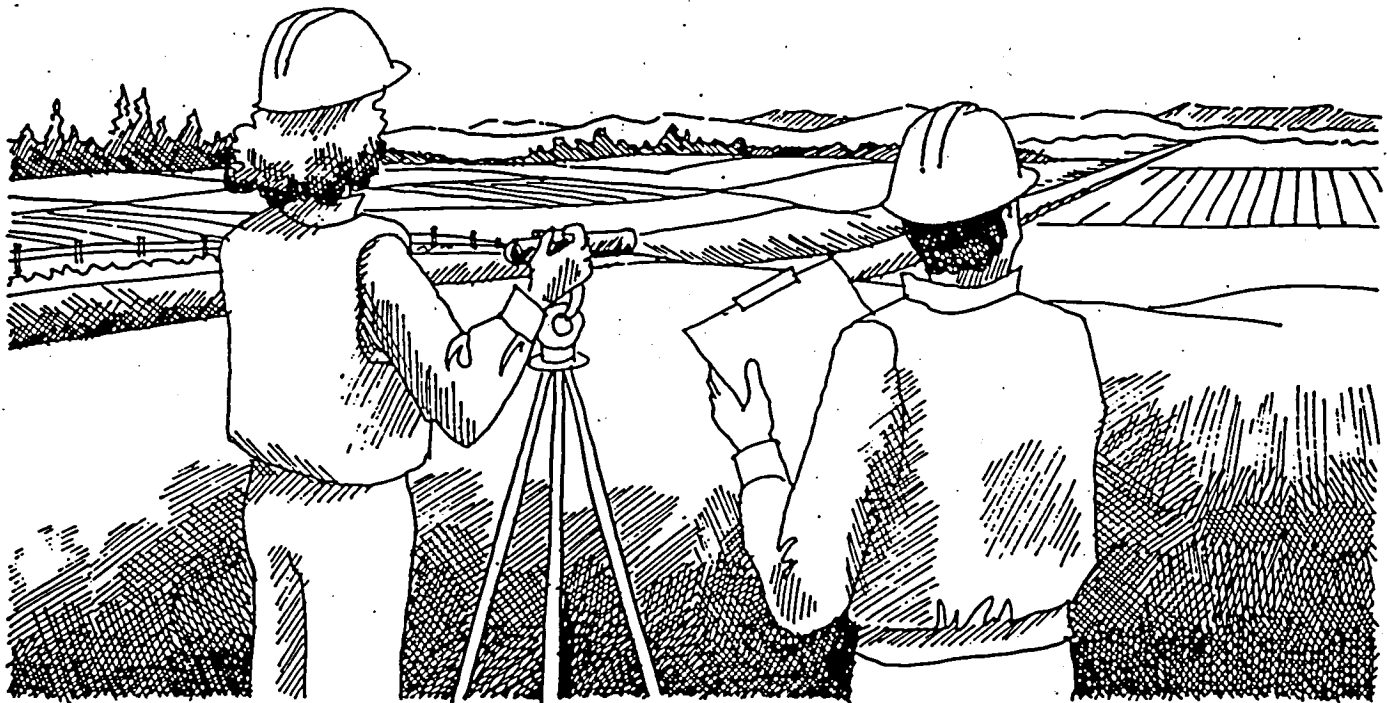
HOW ARE MRFs SITED?

Obtaining site approval is often the most challenging part of the project development process. A proposal to build a MRF, whether building new or using an existing structure, often attracts controversy.

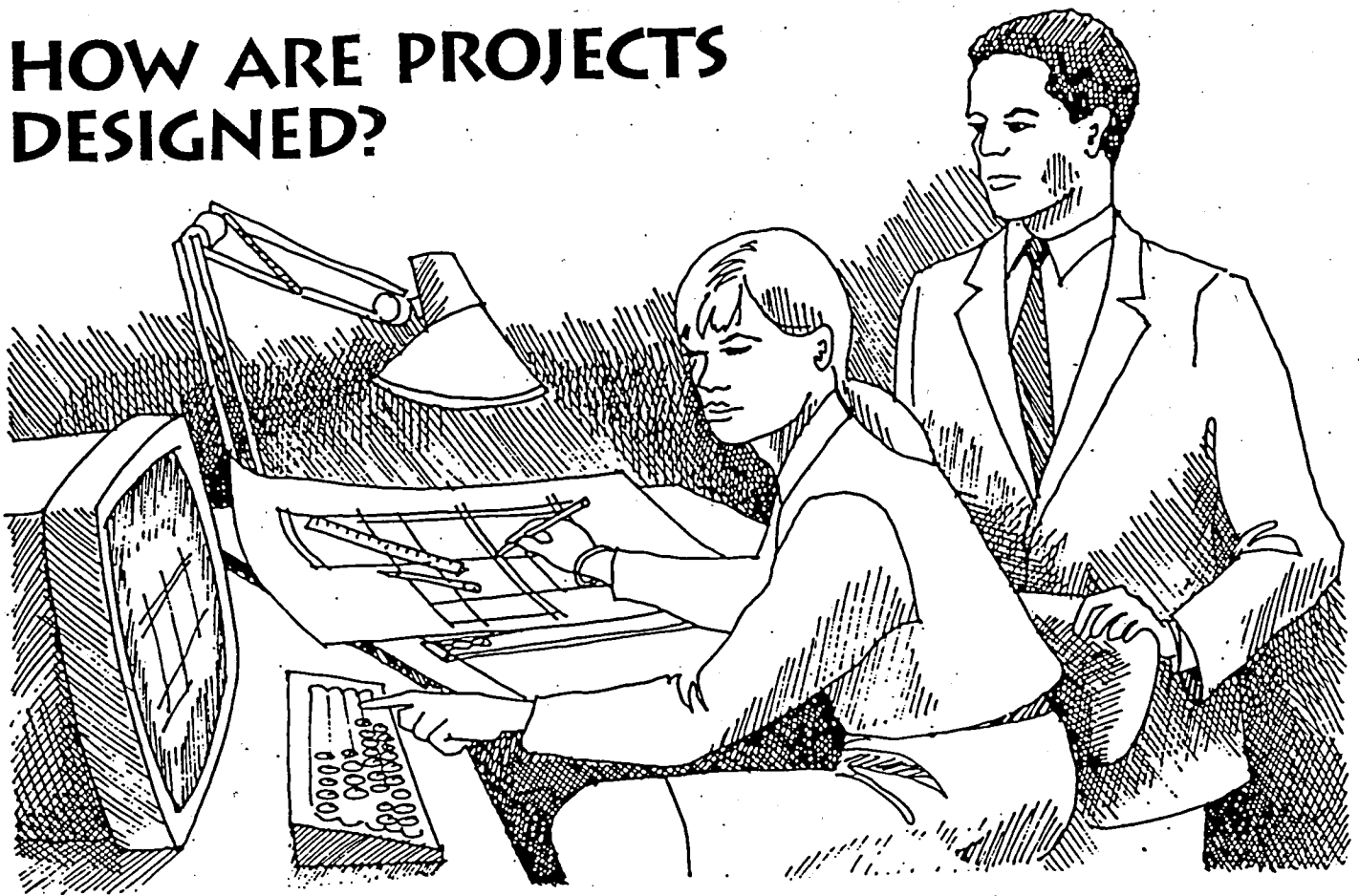
Site selection criteria include technical and political considerations. Technical considerations are location near the center of waste generation, accessibility for receiving and shipping, compatibility with adjacent land uses, topography, subsurface conditions, and the route and distance to the residue disposal destination.

Political considerations involve public perception of the same issues. Residential and business neighbors worry about compatibility. Acceptance hinges on belief in the mitigation of the perceived negative impacts. The credibility of a sponsor's solution usually sets the tone for the approval process.

Gaining approval for a site balances optimum location against political reality. MRFs are cleaner and quieter, with less negative environmental impact, than most users of land zoned for industrial use. MRFs are equivalent to light manufacturing buildings. MRFs do not accept hazardous wastes. MRFs do sort recyclables. The most sensitive impacts, traffic and litter, are managed with good design, mitigation plans and follow through.



HOW ARE PROJECTS DESIGNED?



Many professional and technical people work on the design of MRF projects. These consultants or project teams are led by engineers or architects and may include civil engineers, geotechnical (soils) engineers; structural, electrical and mechanical engineers; landscape architects and traffic engineers. Some projects include political consultants, community involvement specialists and environmental consultants. Many large waste companies have in-house engineering staffs providing technical services. Project designers pay close attention to operating efficiency, technical details and concerns for facility appearance.

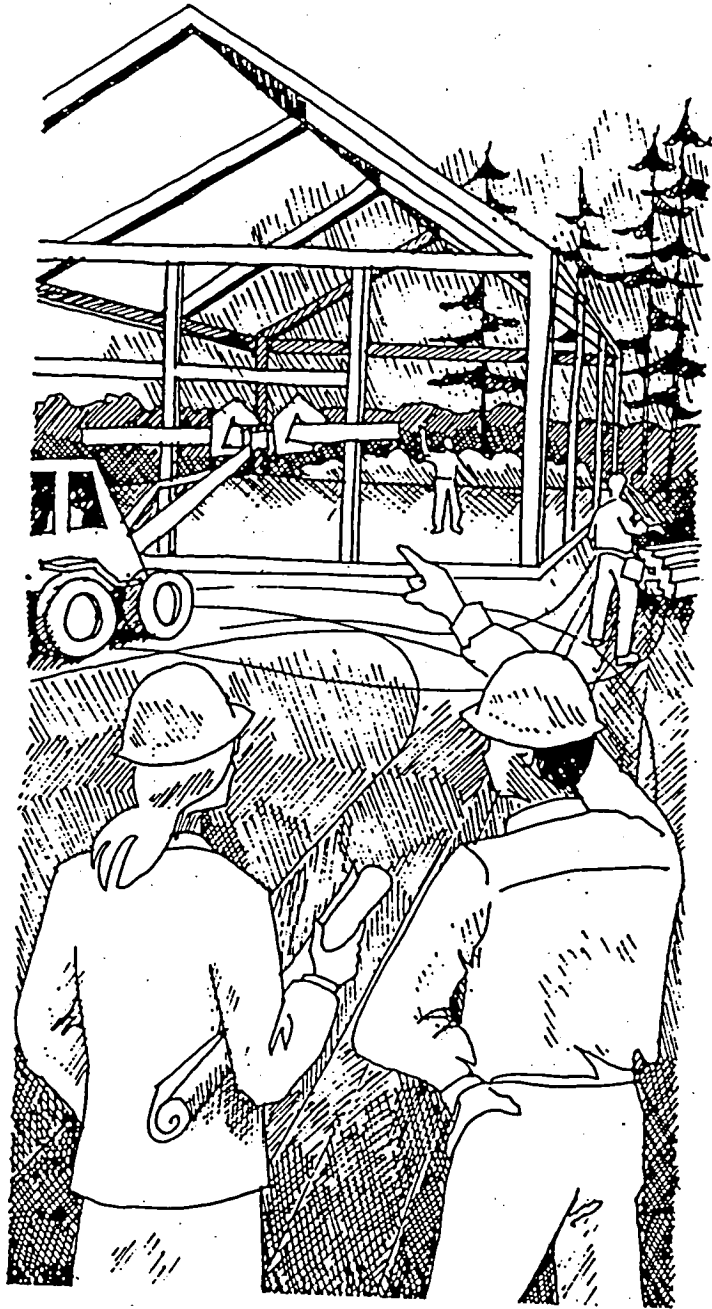
In the most familiar arrangement, the sponsor/developer, public or private, engages an engineer or architect, who plans the site, designs the facility and selects the processing equipment. The consultants assist in securing permits. They prepare construction documents including drawings and specifications. Then they solicit bids from contractors. During construction the consultants monitor the progress on behalf of the sponsor. Sometimes, tasks such as equipment design and procurement are done as a separate process.

HOW ARE PROJECTS BUILT?

Projects are built or developed differently depending on how they originate. Public works projects typically follow a traditional model: engage consultants, prepare construction documents, take bids, award contracts, monitor the construction process and take occupancy of the facility. A variation is the design/build contract. In this method the public agency solicits a complete facility package from a developer or contractor. The design/build developer or contractor includes the design and engineering services with the cost of the building in a single package. This nontraditional method can save time and money but leaves less direct control in the hands of the public agency.

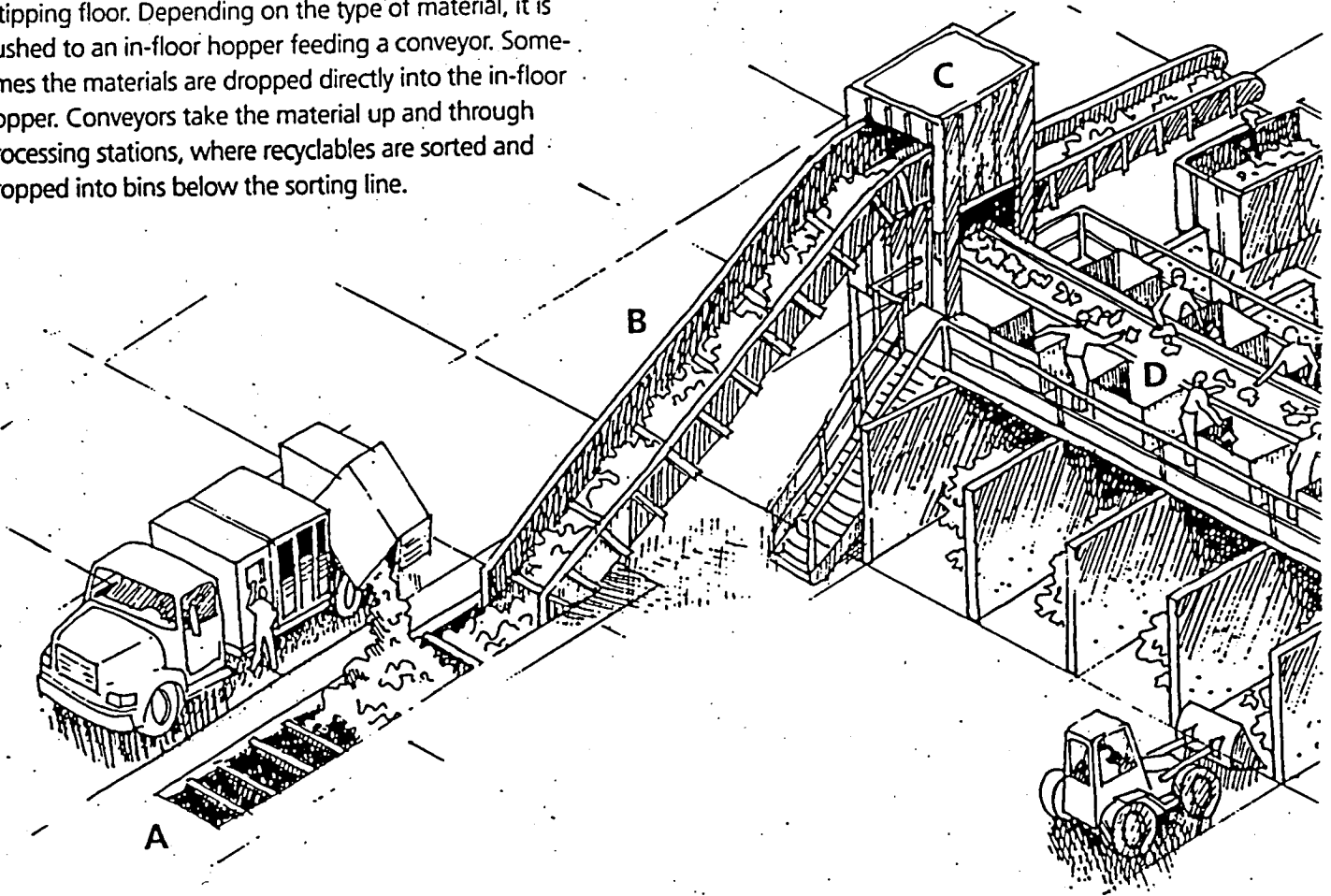
When time is critical, a "fast track" technique can be used. In this practice, design, bidding and construction proceed at the same time. For example, site improvements, building foundations and equipment ordering can be done while drawings for the building are being worked on.

With more latitude than a public agency, private developers can use combinations of these methods. Because they do not have to bid all work, they are free to negotiate contracts with selected suppliers and contractors. Each project development method has its own pros and cons. There is no one best method.



WHAT HAPPENS INSIDE A MRF?

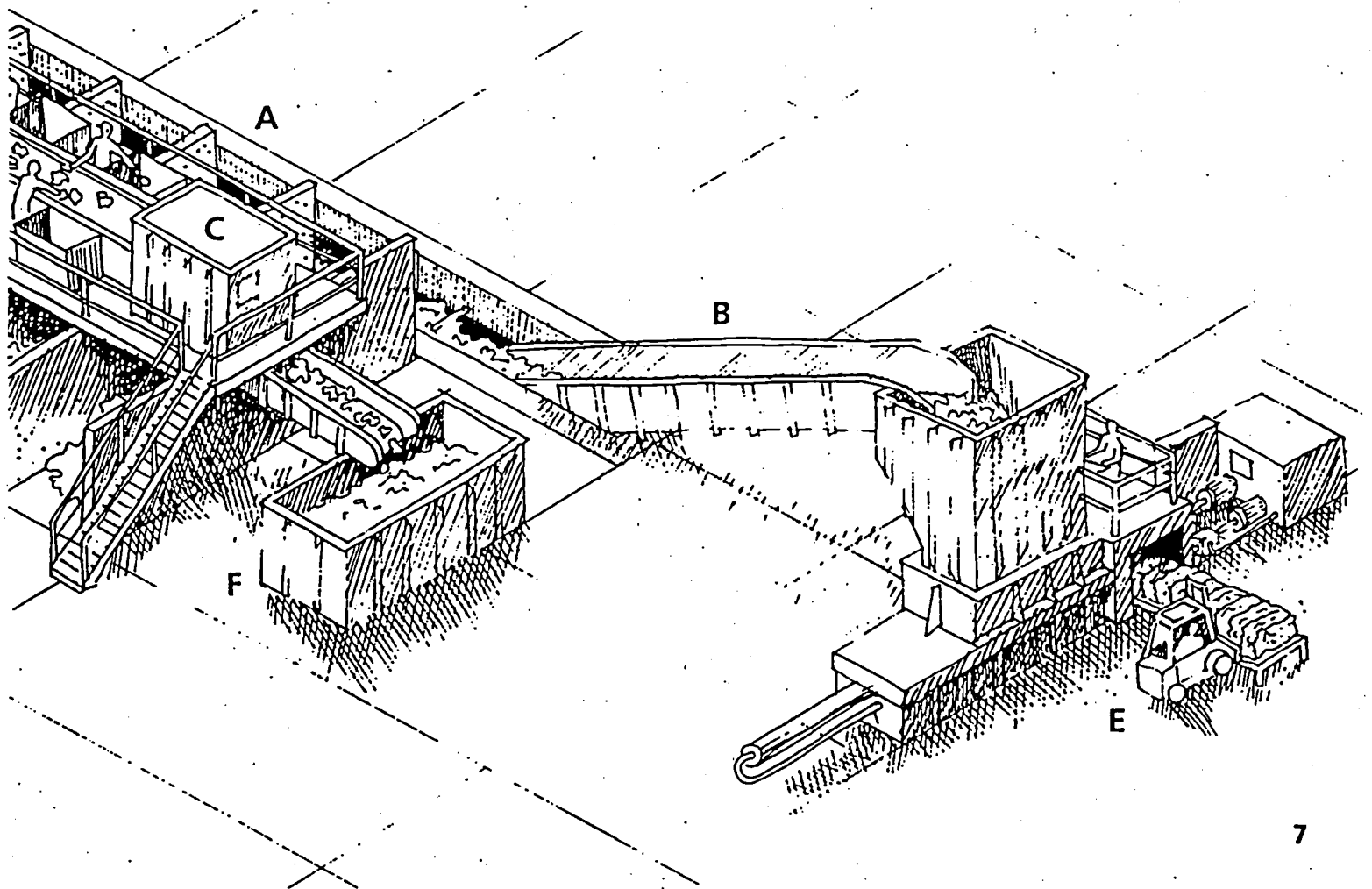
Incoming recyclables are dropped on a large floor called a tipping floor. Depending on the type of material, it is pushed to an in-floor hopper feeding a conveyor. Sometimes the materials are dropped directly into the in-floor hopper. Conveyors take the material up and through processing stations, where recyclables are sorted and dropped into bins below the sorting line.



Each facility is custom designed. Elements in this illustration:

- | | |
|--------------------------------------|------------------------------|
| A <i>In-floor hopper</i> | D <i>Sorting line</i> |
| B <i>Conveyor</i> | E <i>Baling</i> |
| C <i>Mechanical separator</i> | F <i>Residue</i> |

In addition to hand sorting stations and conveyors, processing equipment includes a variety of separation devices from simple magnets and screens to complex mechanical and air driven separators. Mechanical separation can occur before or after hand sorting. The arrangement and types of sorting systems designs vary considerably. Preparing recyclables for efficient shipment involves densifying, crushing, shredding and baling the product. Temporary storage allows transportation economy and market timing. Residue is loaded or compacted into trailers or containers for disposal.

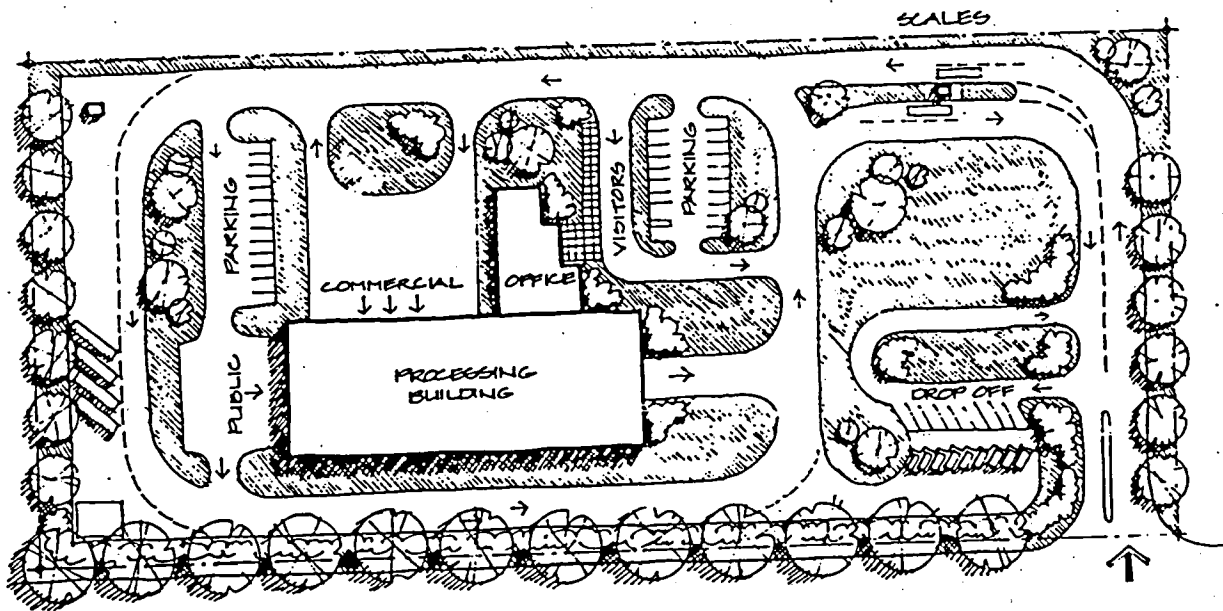


WHAT ELSE IS ON A MRF SITE?

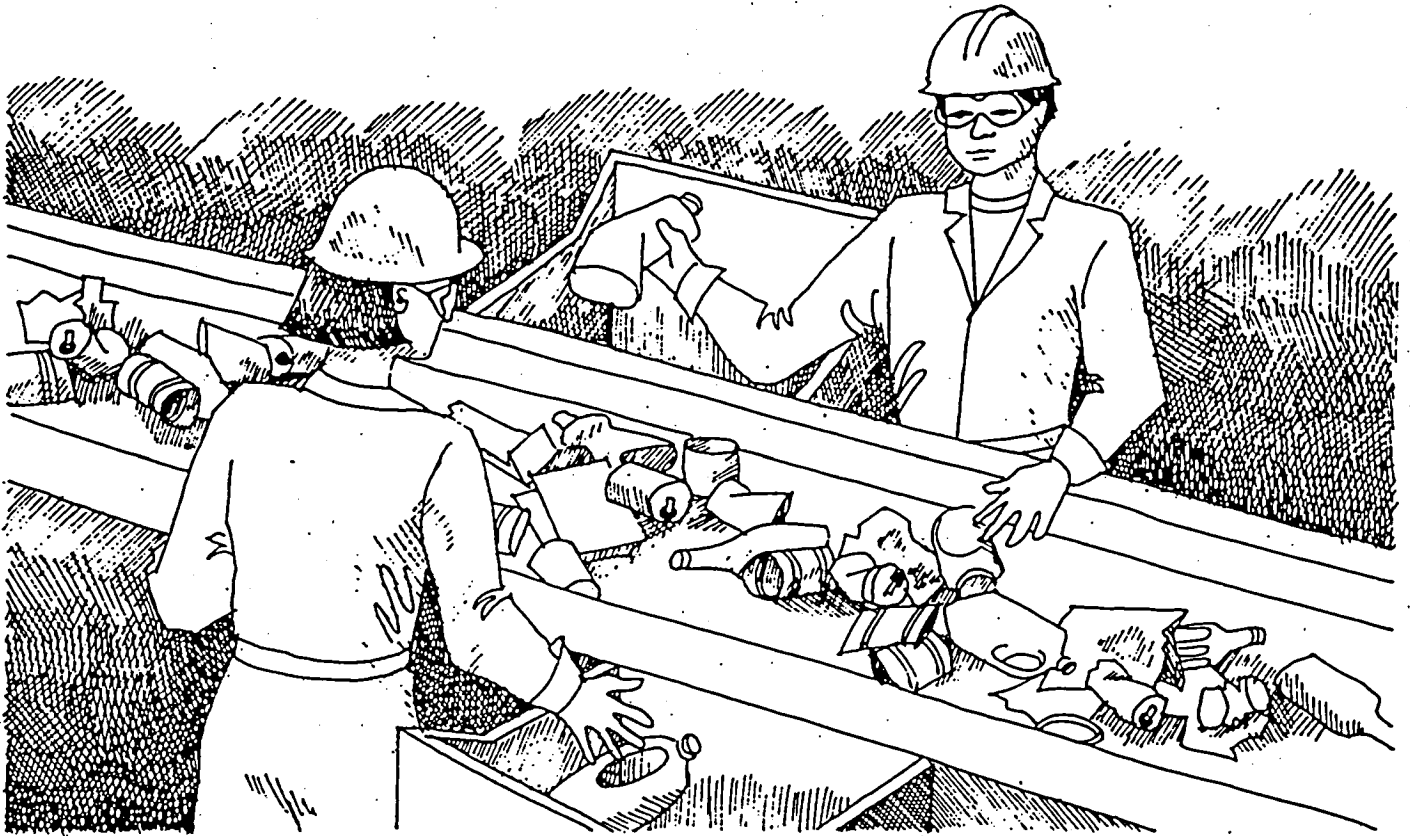
A large processing space is the core of the facility. Office and staff support spaces are incorporated within the shell or located in a separate building. At the entrance, scalehouse personnel manage weighing and payment while monitoring access to the site, which is usually fenced. As the facility grows in size and complexity other related activities may be included: visitor facilities, maintenance space and sometimes a recyclables drop-off center for the public. Some facilities accept yard debris, white

goods, C & D waste and other specialized wastes. MRFs are popular attractions for tours and field trips, so many installations include educational display spaces.

The area of the site varies according to the size of the facility, the complexity of the program and its setting in an urban or less developed location. Site areas range from under an acre to several acres where the MRF is sometimes located with other waste-related operations.



HEALTH AND SAFETY ISSUES AT A MRF



MRFs are a highly regulated building type. Their planning and implementation is governed or reviewed by federal, state and local jurisdictions. They are subject to local planning, building and fire codes. Additional site specific operating conditions and design criteria are often negotiated at the local level.

Like any manufacturing operation, there are concerns for occupational safety and health. OSHA compliance require-

ments are reviewed. Operators examine each proposed facility plan with a careful eye toward facility design, equipment selection, layout, visibility, ventilation and lighting. Their goal is to design for safety from the beginning.

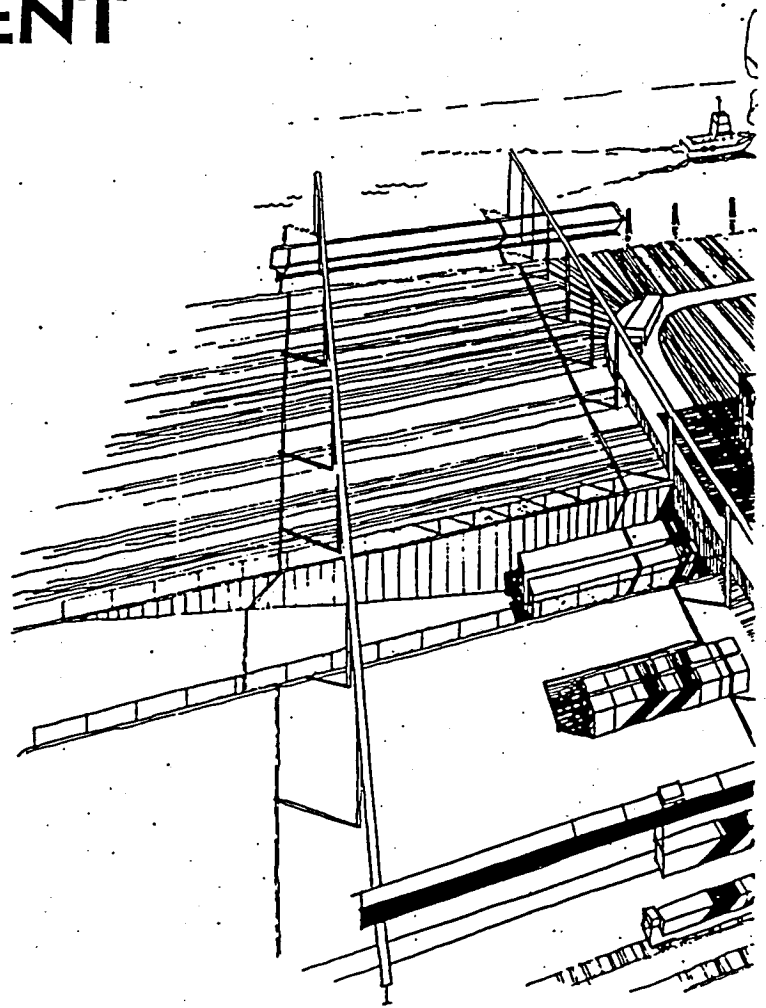
Workers are provided with appropriate personal protective gear and receive safety training. Most operators rotate workers on a regular basis and pay close attention to the ergonomics of each task.

WHAT'S A TRANSFER STATION & HOW IS IT DIFFERENT FROM A MRF?

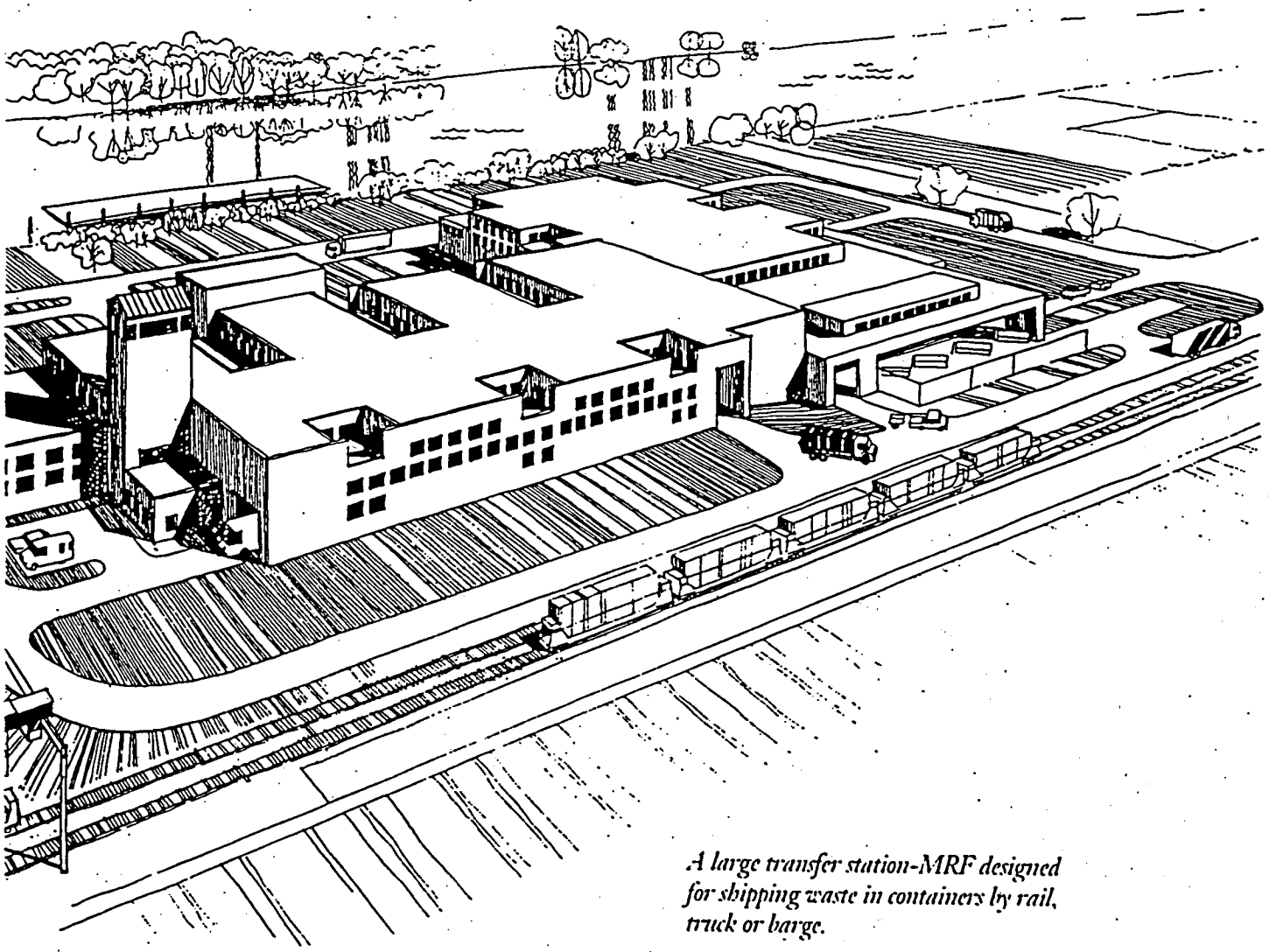
A transfer station is a facility where municipal solid waste is transferred from route collection vehicles to large trailers or containers for shipment. The mission of a transfer station is to economize shipment of waste to a disposal location. Transfer stations are popular because they save money in transporting quantities of waste over a distance. It's less expensive to ship one large load than send several small trucks to a distant landfill. A typical transfer tractor-trailer carries the equivalent of three to five route collection trucks.

The operation is simple. Municipal solid waste is received at the station from residential and commercial collection trucks and individuals. This waste is reloaded into transfer trailers or containers and then shipped for disposal by truck, rail or, in some cases, by barge. There is a wide range in facility sizes.

The most common direct loading arrangement is to drop waste from above. Collection trucks back in and dump waste directly into an open top trailer or container below. When it's not feasible to have a lower level for the transfer truck, the waste is dropped on a flat floor called a tipping floor. Then it is pushed against a wall, called a push wall, lifted and dumped into the top of the trailer or container.



At large stations garbage is dropped into a depressed floor area. The "pit" allows several activities. Waste can be accumulated for a short period of time, balancing the surge of material received during peak hours with the constant, slower loading process. A bulldozer pushes the waste toward a chute at the end of the pit where it drops into the trailer. The treads of the dozer also break up the



A large transfer station-MRF designed for shipping waste in containers by rail, truck or barge.

waste, increasing the density of the shipped material.

Sometimes the waste is compacted to optimize the amount in each load. The loading process is similar when compactors are used. Large compactors are top loaded. Smaller compactors are loaded using a push wall.

At some transfer stations operators sort their waste stream

to remove high quality recyclables or accept recyclables for transfer to a processing facility. While not as efficient as a MRF, the process provides recovery of some recyclables. Increasingly, transfer stations are being built or modified to sort or process waste, creating a type of transfer station-MRF.



WHAT DOES A MRF COST?

Development costs for a MRF include "hard" and "soft" costs. Hard or capital costs include land, building and furnishings, processing equipment and vehicles. Soft costs include site evaluations, surveying, soils investigation, permitting, and design and engineering for site work and buildings. Operating costs consist of staff wages, building operation, debt service and maintenance expenses. Environmental monitoring, safety reviews and mitigation costs are continuing expenses once the facility is running.

WHERE DOES THE MONEY COME FROM?

Like most construction projects, the initial cost of the development is borrowed and then repaid during the life of the operation. Public projects are typically funded through tax-exempt general obligation or revenue bonds. The bonds are paid off with revenue from taxes, disposal fees called "tipping fees" and from the sale of recyclables extracted at the MRF. Private projects built for public agencies are financed by banks or mortgage companies. Part of the security of the loan is the long term value of the contract which guarantees that a specified waste stream will come to the MRF. Merchant MRFs derive all their income from fees and the sale of recyclables.

Customizing this publication

A separate information sheet may be inserted into this booklet. A template for the insert is available for those who wish to provide information about a specific project or proposal. An identity, return address and bulk mail permit number may be applied to the back cover of the booklet.

Availability and distribution

This publication is designed to be printed as needed. Plate-ready film is available from various sources. Individuals, groups, private companies, agencies or government units may print the quantity they want. Pooling orders is encouraged to increase savings. For a sample booklet or information on copy sources contact:

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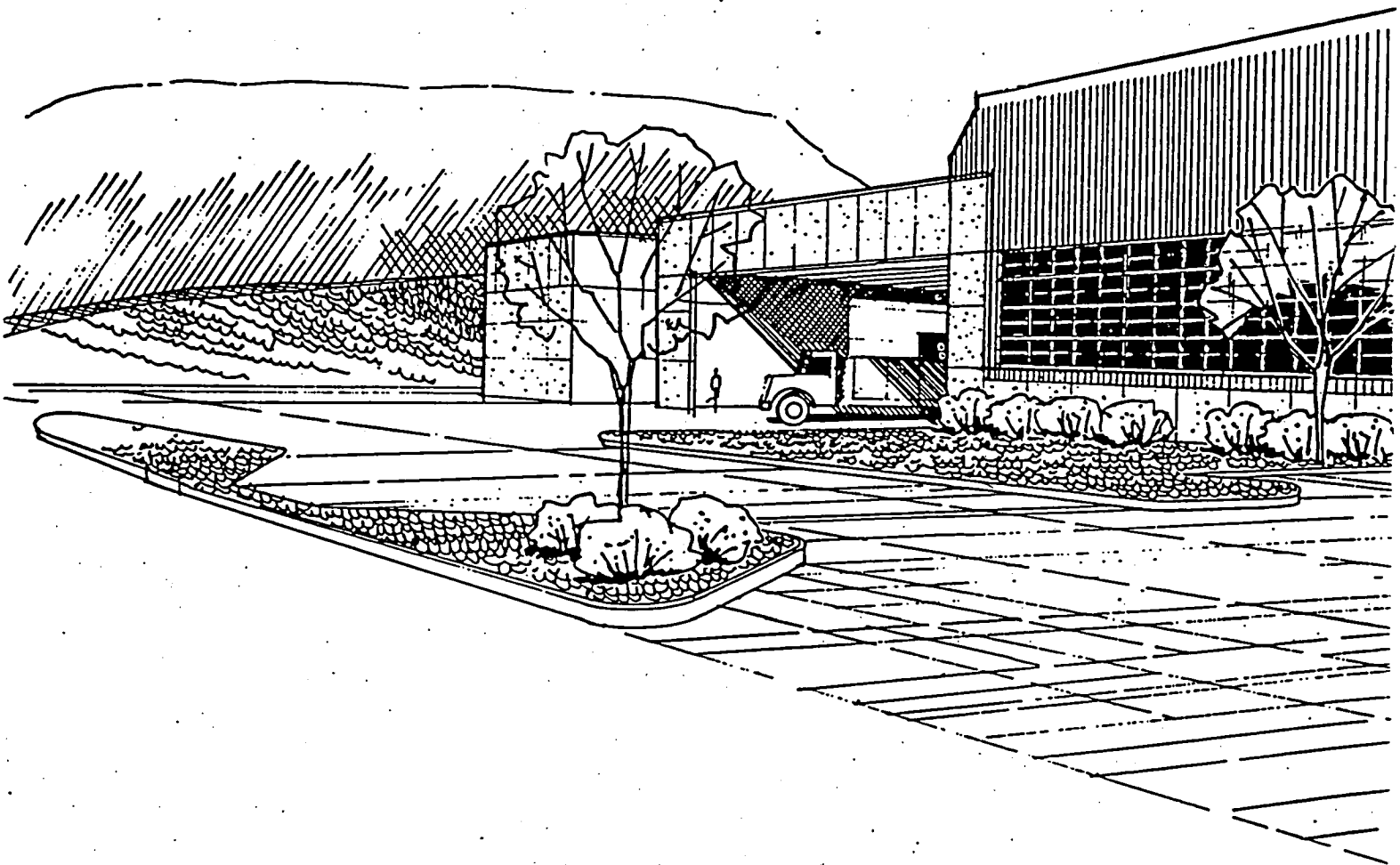
ABOUT THIS PUBLICATION

Funding for creation of this publication has been provided by a grant from the United States Environmental Protection Agency to Metro, Portland, Ore. This publication does not necessarily reflect the views of the Agency and no official endorsement should be inferred. Additional in-kind services have been provided by Metro. Metro does not own or operate a MRF, however, Metro does own a transfer station which operates as a combination transfer station-MRF.

Metro supports public awareness of all waste facilities with the goal of increasing recycling.

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STAFF REPORT

CONSIDERATION OF RESOLUTION NO. 94-1887 FOR THE PURPOSE OF AUTHORIZING THE ISSUANCE OF A REQUEST FOR PROPOSALS, AND AUTHORIZING THE EXECUTIVE OFFICER TO ENTER INTO A CONTRACT FOR SERVICES TO CREATE A BOOKLET "WHAT'S A HOUSEHOLD HAZARDOUS WASTE FACILITY?"

Date: January 10, 1994

Presented by: Katie Dowdall

PROPOSED ACTION

Adoption of Resolution No. 94-1887 would authorize Metro to produce a booklet "*What's a Household Hazardous Waste Facility?*" a companion booklet to "*What's a MRF?*" published by Metro in May 1993. The booklet is intended to provide the national public with information about household hazardous waste facilities. The Solid Waste Department would prepare and advertise a Request for Proposals and the Executive Officer would be authorized to enter into a Personal Services Agreement with a vendor to author and illustrate the booklet. This will be an extension of the original EPA grant. The original grant was for \$38,000 with actual cost totaling \$30,875.50, leaving a balance of \$7,124.50. The EPA will add \$20,000 to the remaining balance; with Metro's in-kind contribution of \$2,875, the total cost of producing "*What's a Household Hazardous Waste Facility?*" will be \$30,000. Total project costs for both booklets will be \$60,875.50.

FACTUAL BACKGROUND AND ANALYSIS

In May 1993 Metro produced the booklet "*What's a MRF?*" (MRF = materials recovery facility) with assistance from an EPA grant. The booklet was successfully completed and well received. Since publication of the booklet, we have received requests to produce a companion booklet about household hazardous waste, because with Metro's achievement in siting and building two state-of-the-art collection stations in the region we are ideally suited to write about these facilities.

Changes in federal law virtually guarantee that there will be a significant demand for household hazardous waste facilities to be built throughout the country in the near future; many will probably be built at MRF's and transfer stations. And, while these facilities are critical links in an integrated solid waste system, most people know very little about their function and operation. Because a lack of information often leads to negative responses from communities when such facilities are proposed, this booklet would be aimed at educating the public about household hazardous waste facilities to provide information that may defuse public objection.

This booklet will target a national audience and explain what household hazardous waste facilities are and what they do. It will be utilized by public agencies and developers as an information handout and distributed at community events and facility tours. We hope to alleviate concerns and fears about such facilities and, with information, help eliminate difficulties with siting and approval. This

will be a low cost opportunity for Metro to produce a valuable, high quality, national publication for use by other jurisdictions and private companies.

The booklet will be two-colored with text and illustrations similar to those in "*What's a MRF?*". The booklet will be consistent with the high quality graphic standards associated with Metro products. Metro will maintain graphic integrity and continuity. The booklet will be identified as printed on recycled paper with soy based inks. Approximately 1,500 booklets will be printed and shipped. Ten plate-ready films will be produced and made available to various sources for ease in reprinting the document. The original will remain at Metro; one complete set will be retained by the EPA.

An extension of the original EPA grant contract X820327-01-1 to June 30, 1994, is possible, if Metro applies for the funds. The original grant of \$38,000 had a balance of \$7,124 after all production costs were paid. The EPA has not requested the funds to be returned and instead has offered a grant extension to make an additional \$20,000 available that would provide funds to develop and produce the companion booklet. These two totals combined with Metro match of in-kind contributions totaling \$2,875, would increase the actual grant total to \$60,875. Metro's in-kind contribution would include graphic mechanicals, insert template design, production coordination, printing coordination, and administration in grant preparation, RFP development, and contract oversight. The EPA grant money will pay the printing and shipping costs of \$4,125 and the \$23,000 for the originating author's costs. The author's costs include research, writing, editing, review process, 13 illustrations and the production coordination.

BUDGET IMPACT

A budget amendment will be required, since this is not a budgeted item. The Solid Waste Department will prepare and submit a budget amendment including this item under separate action.

FY 1993-94

\$ 7,125	Balance remaining from original EPA grant for " <i>What's a MRF?</i> "
\$20,000	Grant extension/fund increase from EPA
\$2,875	Metro in-kind staff time contribution
\$30,000	Total cost of creating, producing, printing and shipping 1,500 " <i>What's a Household Hazardous Waste Facility?</i> " booklets

EXECUTIVE OFFICER'S RECOMMENDATION:

The Executive Officer recommends approval of Resolution No. 94-1887.

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