



CITY OF PORTLAND ENVIRONMENTAL SERVICES



1120 S.W. Fifth Ave., Room 400, Portland, Oregon 97204-1972
(503) 823-7740, FAX (503) 823-6995

March 14, 1995

Patrick T. Lee
Planning and Capital Development Division
Metro Greenspaces Program
600 NE Grand Avenue
Portland, OR 97232-2736

Re: Revised Final Report, Restoration Grant No. 902790

Dear Mr. Lee,

Persuant to your request, please find attached the revised final report for the above mentioned grant. If you have any questions, contact me at 823-7745.

Sincerely,

Richard O. Lapp
Engineering Associate

attachment

cc: Marion Yee, Grants and Contracts Compliance

GABRIEL PARK GREENSPACES RESTORATION PROJECT

• FINAL REPORT •

January 26, 1995

Revised March 14, 1995

written by Rick Lapp

Project Description

Gabriel Park is located on the south side of SW Vermont Street between SW 37th Avenue and SW 45th Avenue. The park covers approximately 90 acres, most of which are lawns, baseball fields, tennis courts, and picnic areas. Roughly twenty percent of the park is forest with small drainages and streams flowing from east to west. Vermont Creek originates outside the southeast corner of the park, and flows east through the park until it flows under SW 45th near SW Nevada Court, and flows along SW Vermont St. approximately three quarters of a mile where it joins Fanno Creek.

The park is bounded primarily by developed R7 (Single Family Dwellings, 7000 square foot minimum lot size) residential neighborhoods that use surface storm drainage. The majority of roof drains flow into the street where they collect in storm drains. The east side of the park has approximately 50 acres of drainage that culminate at a 24 inch outfall just inside the park at SW 37th, north of SW Nevada Court.

The above mentioned drainage flows westerly for approximately 1500 feet, where it joins Vermont Creek. A strip, ranging from 100 to 250 feet wide on each side, of this drainage is saturated most of the year. This drainage area is of primary concern to this project, because the drainage channel had become deeply incised, and contributed sediment into Vermont Creek.

This project will eliminate the existing erosive conditions and further reduce/remove total suspended solids (TSS) and other pollutants of concern in the storm water from entering Vermont Creek from this intermittent tributary. This project will also provide educational opportunities for schools in the area and the public.

The project goals have been carried out through lining the incised channel with medium (8 inch diameter) to large (4 foot diameter) boulders over a crushed gravel base. The low flows will be diverted to a wet meadow area via a buried pipe with a distribution manifold discharge. Higher flows will bypass to the newly lined channel.

The meadow and adjacent areas have been planted with native grasses, flowers, shrubs, and trees. There will be three types of plant communities: Woodland Edge, consisting of shrubs and trees; Swale Community, consisting of shrubs and grasses; and Meadow, consisting of grasses and forbs. The Meadow Community has been specifically designed to replicate the Deschampia Wet Meadows once prevalent throughout the Willamette Valley.

There is an area towards the west side of the park where the park baseball fields drainage system flows. This area was planted in Swale Community plantings as part of this project.

Work Tasks and Timelines

The design of the project was produced by the Bureau of Environmental Services in collaboration with Mike Faha & Associates, Landscape Architects. The plants for the project were purchased, nurtured and maintained by the Bureau of Parks and Recreation, Horticultural Services Division. Rock and pipe work was done by Jim Cassetta Construction. Landscape installation was done by neighborhood volunteers.

Timelines were as follows:

Design and public comment	Fall 1992 - Spring 1994
Construction	Summer 1994 - Fall 1994
Landscape Installation	Fall 1994
Ongoing Maintenance and Monitoring	Fall 1994 - Fall 1999

Project Budget

Local Share:

Pre-Design/Project Management	\$27,691.70	
Design/Project Management	\$57,645.39	
Survey	\$ 669.76	
Drafting	\$ 3,541.27	
Inspection	\$ 2,726.26	
Construction Management	\$ 5,628.08	
Testing	\$ 314.49	
Other Construction Activities	\$16,313.15	
Contractor Support	\$ 7,990.10	
Construction	\$52,602.20	
Other Project Activities	\$ 5,747.59	
Landscape Materials	<u>\$16,174.32</u>	
	<u>\$197,044.31</u>	92.4% of project cost

Metro Grant Share:

Landscape Materials	<u>\$16,174.32</u>	7.6% of project cost
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Project Staff / Workers / Volunteers

Bureau of Environmental Services:

Project Manager, Russ Lawrence
Design Project Manager/Grant Manager, Rick Lapp
Drafting, Don Troxell
Public Involvement, Diana Hinton
Education Specialist, Lynn Vanderkamp
Fanno Basin Manager, Steve Hawkins

Parks Bureau:

Gabriel Park Operations, Bob Downing
Planning, Mary Ann Cassin and Ben Shoop
Plant Nursery/Layout, Jim Schiller

Landscape Design, Mike Faha & Associates

Horticulture Specialist, Mark Wilson

Workers and volunteers are too many to number in this report. Landscape planting took place on five different days, with turn outs from ten people to 40 people of all ages.

Benefits of the Project

- Improved storm water quality.
- Slower storm water flows, and little to no erosion from the storm water drainage channel.
- Improved lawn-to-forest transition zone.
- Education opportunities for both students and neighbors of the park through classroom activities and information signs to be installed at the project location.
- Improved wildlife habitat.
- Reduce hazards for park users by raising the bottom of the storm water channel (which was as deep as eight feet in places).
- Planted approximately 17,000 trees, shrubs, grasses, forbs and flowers (not including seeded plants).

How the Project relates to the Greenspaces Program

This project creates natural habitat in an area that is undergoing rapid urbanization. It has created a wet meadow and rehabilitates a stream corridor. This is concurrent with the Program goal of demonstration projects involving the restoration and/or enhancement of wetland and wildlife habitat areas, streams and riparian corridors. The education opportunity portion of the project is one of the most important benefits in that there are a number of schools within the area, and the easy access to the site by the public.

What Worked/What Didn't/Helpful Hints

Partnering with the Parks Bureau worked well to get neighbors and student groups together for planting. Having the Parks Bureau grow the plant materials saved money by enabling us to purchase the plants at cost. Planting the landscape by neighbors, students and others created a feeling of ownership for those who participated.

Maintenance and Monitoring Program

To guarantee the survival of the planted materials, we have installed an irrigation (sprinkler) system around the perimeter of the project. Funding has been provided to the Parks Bureau to irrigate the site, remove nuisance plants, and replace failed plant materials for a two year establishment period. Sediments will periodically be removed from the inlet system, and the clean outs will be flushed as required to maintain an even flow to the wet meadow. After the establishment period, BES will turn the project maintenance over to Parks. Photo visits will take place quarterly for a period of five years, at which time a final report will be submitted outlining the project.



CITY OF PORTLAND ENVIRONMENTAL SERVICES



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January 26, 1995

Mel Huie
Project Manager
Metropolitan Greenspaces Program
METRO
600 N.E. Grand Avenue
Portland, OR 97232-2736

Re: Greenspaces Restoration Grant, Contract No. 902790, Final Report

Please find enclosed the final report for the Gabriel Park project. I have ordered photographs and slides, and should deliver them to you by the end of the first week in February.

Please call me at 823-7745 if you have any questions.

Sincerely,

Rick Lapp
Engineering Associate

attachment

cc: Marion Yee, Grants and Contract Compliance

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January 26, 1995

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Benefits of the Project

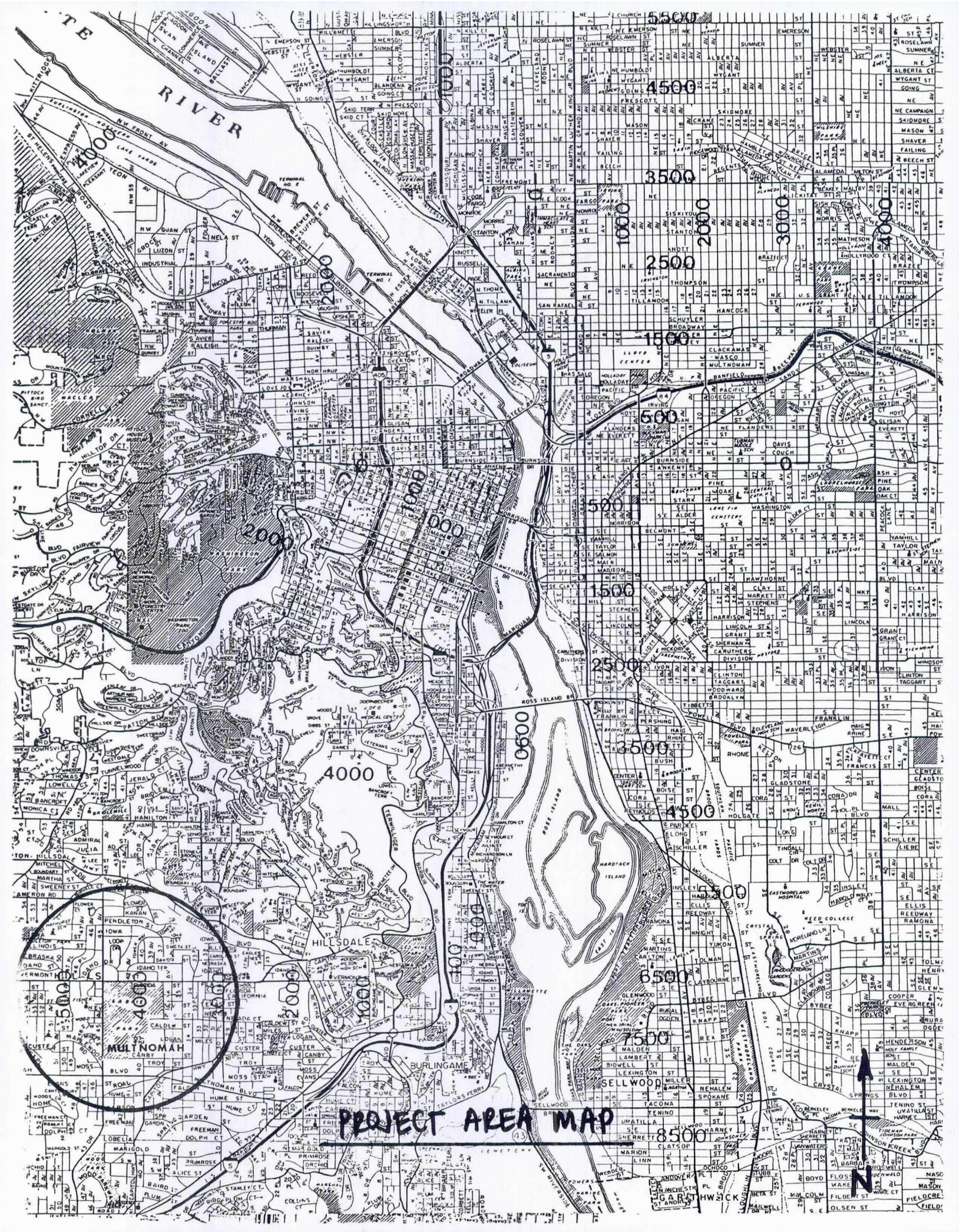
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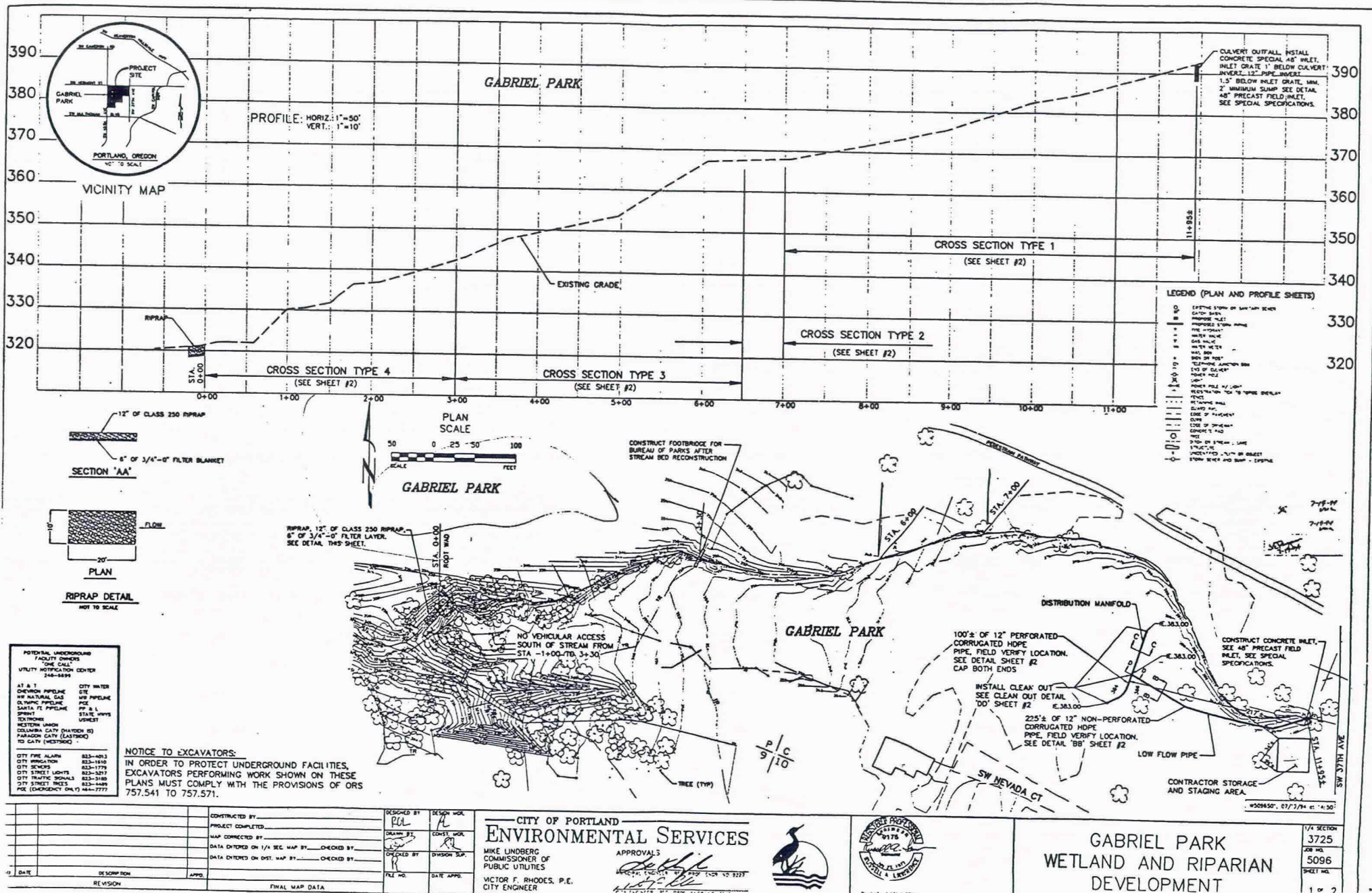
How the Project relates to the Greenspaces Program

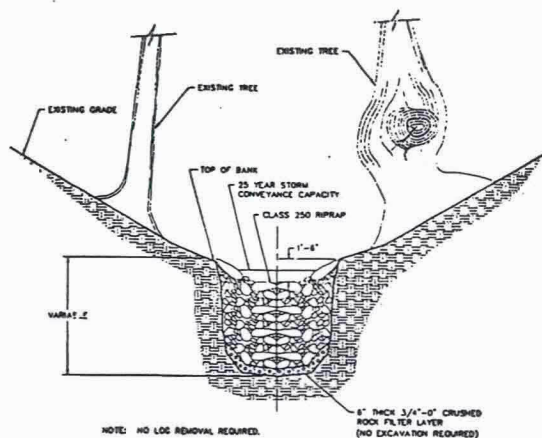
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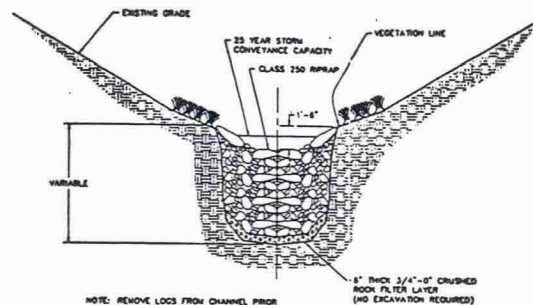
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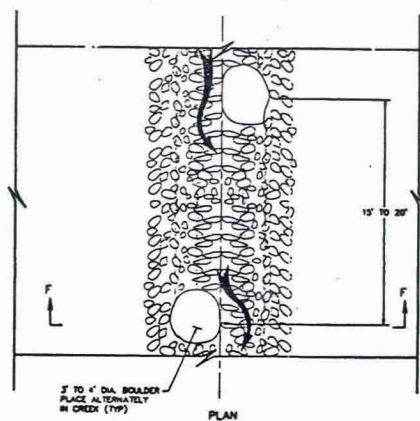




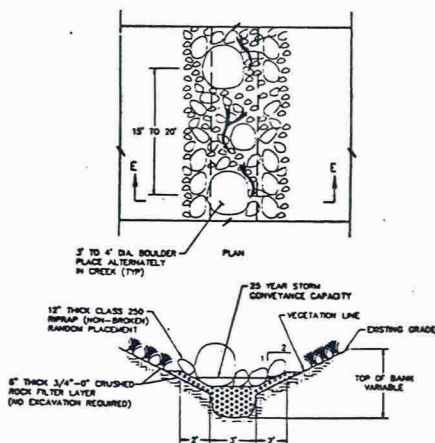
CROSS SECTION HH
STREAM SECTION TYPE 4
STATION 0+60 TO 3+10



CROSS SECTION GG
STREAM SECTION TYPE 3
STATION 3+10 TO 6+00

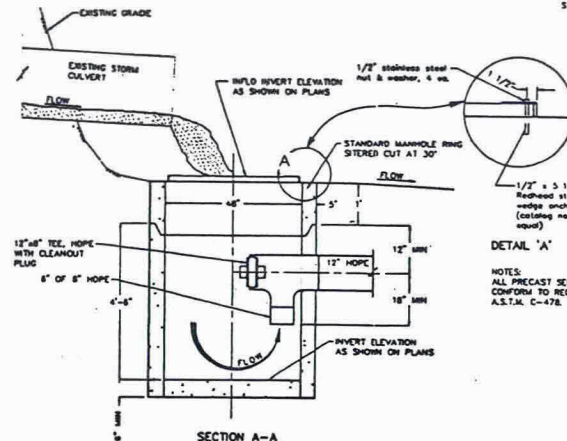
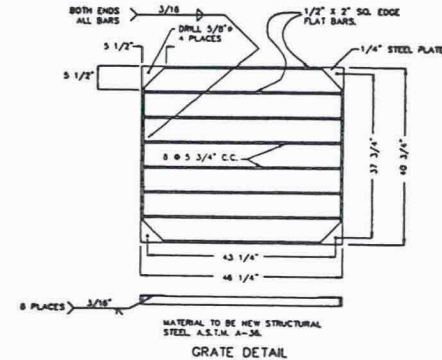
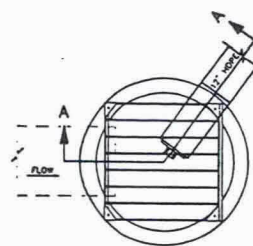


CROSS SECTION FF
STREAM SECTION TYPE 2
STATION 6+00 TO 7+00

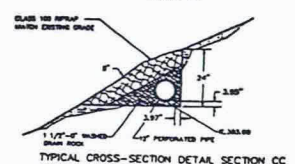
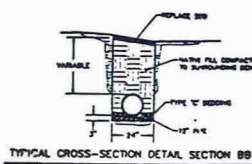
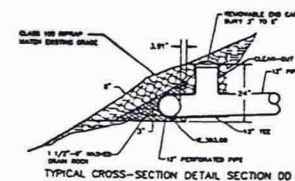


CROSS SECTION EE
STREAM SECTION TYPE 1
STATION 7+00 TO 12+00

SCALE 1/4"=1'



48" PRECAST FIELD INLET
NOT TO SCALE



CONSTRUCTED BY	DESIGNED BY	DESIGN NO.
PROJECT COMPLETED	ROL	/L
MAP CORRECTED BY	DRAWN BY	CONS. NO.
DATA ENTERED ON 1/4" SEC. MAP BY	CHECKED BY	
DATA ENTERED ON DIST. MAP BY	CHECKED BY	

CITY OF PORTLAND
ENVIRONMENTAL SERVICES



GABRIEL PARK
WETLAND AND RIPARIAN
DEVELOPMENT

1/4" SECTION
JOB NO.
5096
SHEET NO.

372	200 MC
509	200 MC
3	0

INVOICE

CITY OF PORTLAND

OFFICE OF FINANCE AND ADMINISTRATION
GRANTS RECEIVABLE

CONTACT: GRANTS ANALYST
Marion Yee
(503)823-6863

CUSTOMER: Metropolitan Service District
Attn: Mel Huie, Proj. Mgr.
600 NE Grand
Portland, OR 97232

INVOICE NO. 85-02369

PLEASE PAY TO:

CITY TREASURER
203 CITY HALL
PORTLAND, OREGON 97204

FOR PROPER CREDIT: PLEASE INDICATE THIS INVOICE NUMBER ON YOUR REMITTANCE **85-02369**

DESCRIPTION	DATE OF ISSUE 12/15/94	INVOICE NO. 85-02369	AMOUNT DUE								
<p>Bureau of Environmental Services</p> <p>Grant ID# E10 Gabriel Park Restoration For costs incurred from Spring and Fall 1994 plants</p> <p>Grant Identifier 10120-1-0235/902790</p> <table><tr><td>Authorized Amount</td><td>20,000.00</td></tr><tr><td>Previously Billed</td><td>6,277.75</td></tr><tr><td>Total This Billing</td><td><u>9,896.57</u></td></tr><tr><td>Contract Balance</td><td>3,825.68</td></tr></table> <p>BES - Ric Lapp Gabriel Park restoration.</p>			Authorized Amount	20,000.00	Previously Billed	6,277.75	Total This Billing	<u>9,896.57</u>	Contract Balance	3,825.68	9,896.57
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Previously Billed	6,277.75										
Total This Billing	<u>9,896.57</u>										
Contract Balance	3,825.68										
TOTAL DUE FOR INVOICE NO. 85-02369			\$9,896.57								

PURSUANT TO SEC. 5.48.040 OF THE CITY CODE, ACCOUNTS NOT PAID WITHIN THIRTY(30) DAYS
AFTER THE DATE OF INVOICE, SHALL BE FORWARDED TO THE CITY ATTORNEY FOR COLLECTION.

Request for Reimbursement/Greenspaces Demonstration Grant Program

BILLING FORM

Organization City of Portland, Bureau of Environmental Services

Address 1120 SW 5th Ave., Room 400, Portland, OR 97204-1972

Phone (503) 823-7745

Project Title Gabriel Park

Metro Contract No. 902790

Local Project Manager Richard Lapp

Signature of Local Project Manager 

Date December 13, 1994

Personnel Costs

1. a) Describe Personnel Costs, Date(s) Service Provided and Who Provided Them. Attach Receipts.

No personnel cost reimbursement is requested.

- Were the personnel services provided by a state of Oregon certified Disadvantaged/Women Owned Enterprise/Minority Business Enterprise? Enclosed is a copy of the certified list.

YES _____ NO _____

Additional Comments:

- b) Document Local Match (Volunteer Hrs. @ \$4.75/hr, submit your own time sheets)
- c) Reimbursement Request from Metro (local match must be at least 50% of this request):

Materials, Plants and Supplies

1. a) Describe the materials, plants and supplies you purchased. Where did you buy them? Attach Receipts.

See attached plant list. The plants were purchased from the City of Portland, Bureau of Parks and Recreation, Horticultural Services, Wetland Plants Nursery.

Did you purchase the materials, plants and supplies from a state of Oregon certified Disadvantaged/Women Owned Enterprise/Minority Business Enterprise? Attached is the state certified list.

YES _____ NO X _____

Additional Comments:

- b) Document Local Match:

50% of attached plant list total.

- c) Reimbursement Request from Metro (local match must be at least 50% of this request):

\$ 9896.57

(continued)

Billing Form (page 3)

Equipment Rental

1. a) Describe the equipment rented and the work done. Who did you rent from? Attach receipts.

No equipment cost reimbursement is requested.

Did you rent the equipment from a state of Oregon certified Disadvantaged/Women Owned Enterprise/Minority Business Enterprise?

Attached is the state certified list.

YES _____ NO _____

Additional Comments:

- b) Document Local Match:

- c) Reimbursement Request from Metro (local match must be at least 50% of this request):

Professional Services (only nonprofits eligible for reimbursement)

1. a) Describe the service and cost. Who provided the services? A maximum of 10 percent is reimbursable. Attach receipts.

No Professional Service cost reimbursement is requested.

Was the service provided by a state of Oregon certified Disadvantaged/Women Owned Enterprise/Minority Business Enterprise? Attached is the state certified list.

YES _____

NO _____

Additional Comments:

b) Document Local Match:

c) Reimbursement request of Metro:

MAIL THIS FORM TO: Mel Huie, Project Manager
Metropolitan Greenspaces Program
Metropolitan Service District
2000 S.W. First Ave.
Portland, Oregon 97201
(503) 220-1186

PORTLAND PARKS AND RECREATION

PARK OPERATIONS



6437 SE DIVISION STREET, PORTLAND, OREGON 97206

TELEPHONE (503) 823-1600

FACSIMILE (503) 823-2246



CHARLIE HALES, COMMISSIONER

CHARLES JORDAN, DIRECTOR

Plants Supplied for Gabriel Project Spring and Fall 1994

Qty	Description	Each	Amount
Trees			
10	Abies grandis	20.00	200.00
134	Acer circinatum	30.00	4,020.00
8	Acer macrophyllum	12.00	96.00
73	Alnus rubra	15.00	1,095.00
34	Fraxinus latifolia	12.00	408.00
2	Prunus emarginata	10.00	20.00
8	Pseudotsuga menziesii	10.00	80.00
13	Thuja plicata	3.00	39.00
10	Tsuga heterophylla	20.00	200.00
Shrubs			
16	Amelanchier alnifolia	2.50	40.00
325	Cornus stolonifera	2.50	812.50
5	Holodiscus discolor	12.00	60.00
418	Mahonia nervosa	3.00	1,254.00
8	Oemleria cerasiformis	12.00	96.00
26	Physocarpus capitatus	2.50	65.00
135	Polystichum munitum	3.00	405.00
7	Ribes sanguineum	12.00	84.00
530	Rosa nutkana	2.50	1,325.00
27	Salix lasiandra	2.50	67.50
155	Salix scouleriana	2.50	387.50
6	Sambucus racemosa	2.50	15.00
1618	Symphoricarpos albus	2.50	4,045.00
Wetland Plants			
100	Camisia gamish	.85	85.00
1215	Carex obnupta	3.00	3,645.00
1000	Eleocharis palustris	.15	150.00
86	Iris tenax	1.25	107.50
6224	Juncus effusus	.10	622.40
1000	Juncus ensifolius	.25	250.00
475	Juncus tenuis	.25	118.75
			<hr/> 19,793.15

GABRIEL PARK—RESTORATION Year 2

Photos A-J Examples of Stream Bed Conditions

Photos 5/18/93 Before Construction, After Boundaries Set #1-25

Photos 2/4/94 After Clearing #1-25

Photos 12/13/94 After Stream Work and Planting #1-25

