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TO: Jim Morgan
From: MGW
5 pages

ST JOHNS LANDFILL
COVER VEGETATION PLAN

SHRUB TEST PLOT REPORT

(FES Contract Amendment #3: Tasks 1, 2, & 3)

Submitted by:

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ST JOHNS LANDFILL VEGETATION MANAGEMENT PLAN
SHRUB TEST PLOT ESTABLISHMENT REPORT
FES Contract Amendment #3: Tasks 1, 2, & 3)
January through March 1993

PROJECT OVERVIEW

The establishment of shrub test plots and a bioswale test plot was recommended in the St Johns Landfill Cover Vegetation Management Plan prepared for METRO by the Fishman Environmental Services Design Team in August 1992. The planting of shrubs/small trees will, if successful, increase both the structural and species diversity of proposed vegetation on the capped portion of the landfill. The shrub test plot consists of three linear transects (T-1, 2, & 3) designed to: measure the effect of landscape position on plant survival and determine the most successful and least cost method of plant propagation. The bioswale test plot (T-4) was designed to determine whether plantings of herbaceous and woody plants could provide low cost slope stabilization and treatment of surface water runoff.

During the late fall of 1992, Mark Wilson and Leslie Tose assessed the availability of six native shrub and small tree species for planting as both nursery grown containers and as propagules in the four shrub test plots [See As-Built Drawing submitted to METRO in January 1993]. The following species were ordered as nursery containers or collected as propagules and then planted within the four test plots:

Species Name - Code/Common Name

Amelanchier alnifolia -AMal (Western Serviceberry)
Rosa nutkana -ROnu (Nootka Rose)
Salix scouleriana -SAsc (Scouler's Willow)
Sambucus cerulea -SA (Blue Elderberry)
Sambucus racemosa -SA (Red Elderberry)
Symphoricarpos albus -SYal (Snowberry)

All propagule collection and planting was done by volunteers supervised by Mark Wilson (MGW), Leslie Tose (LT) and Jim Morgan (METRO).

WOODY PLANT ACQUISITION

Purchased plant materials were supplied as either one gallon size containers or 1 to 3 foot bare root nurserystock from two Oregon native plant nurseries. Stem and root cutting propagules from pre-identified wild stock were collected January 30th through February 12th, 1993. (Propagule species identification keys, collection locations, and methodology are listed in the APPENDIX.) After collection all stem cuttings were refrigerated at temperatures between 35-40 degrees (F) and plants harvested for root cuttings were divided and stored in damp peat moss until time for planting.

PLANTING

Several days prior to planting MGW & LT marked all planting locations with survey tape and flagging. One day prior to planting all ***Rosa nutkana*** **(Nootka Rose)** stem cuttings were soaked overnight in a solution of Root-tone in order to encourage root formation. On February 13, 1993 volunteers planted three shrub test plots and initiated plantings in the fourth (the bioswale test plot). On March 3, 1993 the plantings in the bioswale area were completed by MGW, LT, and Jim Morgan. A table illustrating plant species identification codes, color of identification flagging, and number of each type of propagule planted is shown in Figure #1.

PLANT PROTECTION RECOMMENDATIONS

As some or all of the woody shrub & trees could possibly be browsed on by deer or eaten by other mammals temporary plant protection is recommended. The shrub transects (T-1,2, & 3) can be easily covered with either Ree-may, a spun polyester row crop cover or 1/2" mesh bird netting. Either product should be firmly secured to the ground on the outside edge of the plantings. The bioswale test plot plantings will be more difficult to protect. Because a minimum monetary investment of a few purchased plants have been planted in this area, this area could be left unprotected to measure browsing levels or a deep mulch of cereal grain straw could be laid to provide some minimal protection at low cost. Ree-may will provide greater protection but will be difficult to secure. Both Ree-may and bird netting are available from the following wholesale nursery supply companies in the Portland metro area: Teufels, Inc./Portland/(503) 646 1111; Nurseryman's Supply/ Boring, OR/(503) 663 0307; OBC Northwest/Canby, OR/(1-800) 477 4744.

FIGURE 1

SHRUB TEST PLOTS

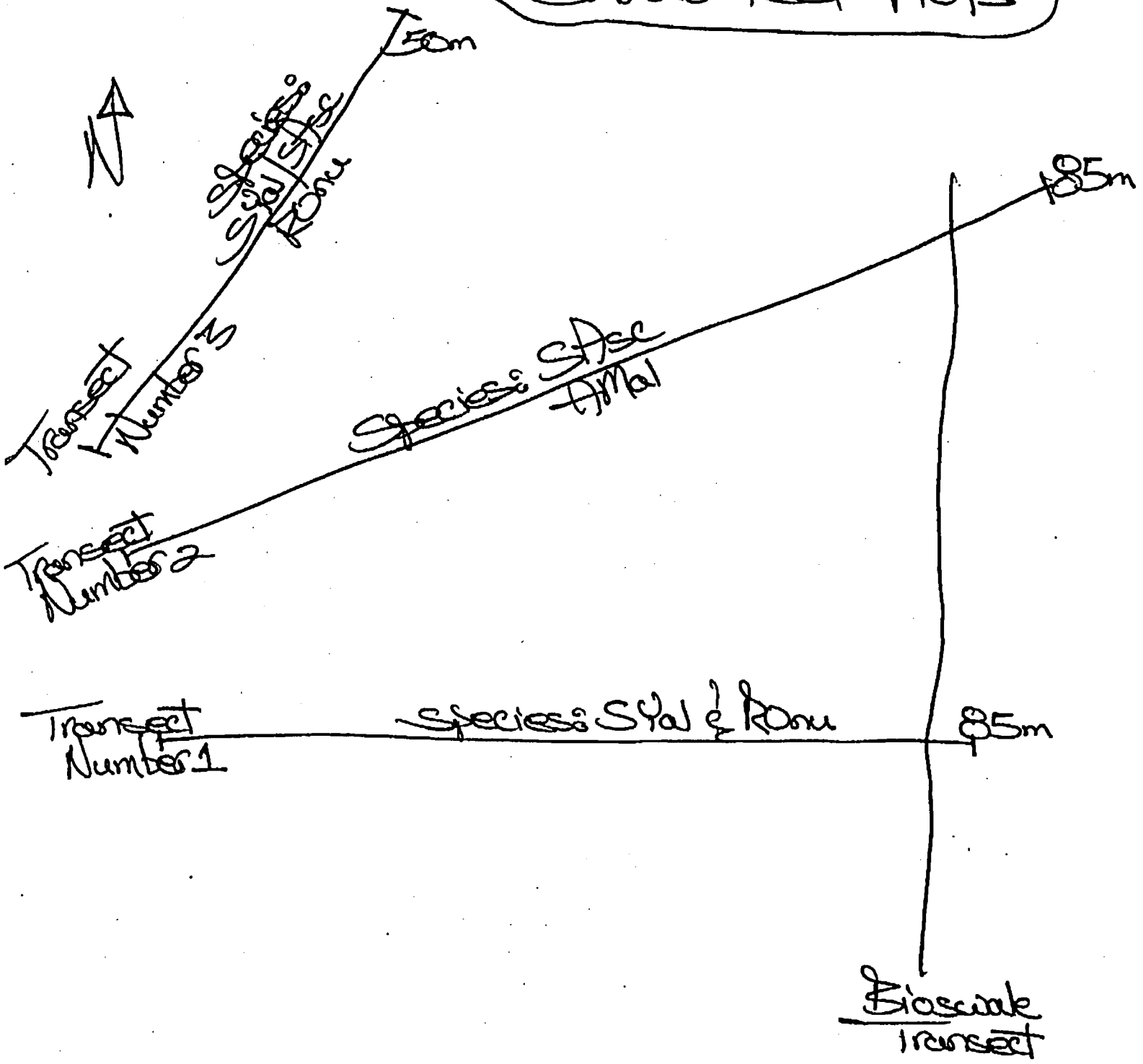
Transect #1 (T-1)		
Species Code	Color ID*	Total Number/Type of Propagule
ROnu	Red flag	22 one gallon containers 44 Stem cuttings
SYal	Yellow flag	22 one gallon containers 44 root cuttings
Transect #2 (T-2)		
Species Code	Color ID*	Total Number/Type of Propagule
AMal	Red flag	44 bare root seedlings
SAsc	Blue flag	22 bare root seedlings 44 stem cuttings
Transect #3 (T-3)		
Species Code	Color ID*	Total Number/Type of Propagule
ROnu	Red flag	13 one gallon containers 26 stem cuttings
SAsc	Blue flag	26 stem cuttings
SYal	Blue flag	13 one gallon containers

* Colored identification flagging is located on transect line. Two cuttings and one container or bare root plant are planted approximately two feet on either side of flag.

BIOSWALE TEST PLOT

Transect #4 (T-4)		
Species Code	Color ID	Total Number/Type of Propagule
AMal	Yellow tape	6 one gallon containers
ROnu	Red flag	15 one gallon containers 80 stem cuttings
SA	Pink tape	50 stem cuttings
SAsc	Blue flag or tape	6 bare root seedlings 20 stem cuttings
SYal	Green tape	15 one gallon containers 50 root cuttings

Site Map: Subarea 1 Shrub Test Plots



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