MONITORING PLAN & MAINTENANCE PLAN

ENHANCEMENT PLAN GOALS, OBJECTIVES, AND PERFORMANCE STANDARDS

ENHANCEMENT PLAN GOALS, OBJECTIVES, AND PERFORMANCE STANDARDS ARE OUTLINED IN TABLE 1-1 (BELOW). THE GOALS AND OBJECTIVES OF THIS PLAN ARE CONSIDERED ACHIEVED WHEN THE PERFORMANCE STANDARDS ARE SATISFIED.

MONITORING PLAN

AS-BUILT

FOLLOWING COMPLETION OF THE WORK SHOWN ON THIS PLAN, A QUALIFIED PROFESSIONAL SHALL PREPARE AN AS-BUILT OF THE COMPLETED WORK. THE AS-BUILT SHALL SUMMARIZE THE COMPLETED WORK AS WELL AS ANY DEVIATIONS FROM THE APPROVED VERSION OF THIS PLAN.

BASELINE MONITORING DATA SHALL BE COLLECTED AT THE TIME OF THE AS-BUILT (SEE "ANNUAL COMPLIANCE MONITORING" FOR FIELD DATA COLLECTION REQUIREMENTS). PERMANENT PHOTO POINTS SHALL BE ESTABLISHED AT THE TIME OF THE AS-BUILT TO PHOTOGRAPHICALLY DOCUMENT REPRESENTATIVE CONDITIONS WITHIN BUFFER AREAS. BASELINE MONITORING AND PHOTOGRAPHS SHALL BE SUBMITTED WITH THE AS-BUILT.

THE AS-BUILT AND BASELINE MONITORING DATA SHALL BE SUBMITTED TO THE CITY OF MERCER ISLAND NO LATER THAN 30 DAYS FROM THE DATE THAT THE WORK SHOWN ON THIS PLAN HAS BEEN COMPLETED.

ANNUAL MONITORING

FOLLOWING ACCEPTANCE OF THE AS-BUILT BY THE CITY OF MERCER ISLAND, ANNUAL COMPLIANCE MONITORING SHALL BE COMPLETED FOR A PERIOD OF FIVE (5) YEARS. ANNUAL COMPLIANCE MONITORING SHALL BE COMPLETED BY A QUALIFIED PROFESSIONAL AND SHALL COMPRISE A SITE INVESTIGATION IN AUGUST OR SEPTEMBER AND REPORTING TO THE CITY OF MERCER ISLAND BY NOVEMBER 30 OF EACH MONITORING YEAR.

MONITORING SHALL COMPRISE A QUANTITATIVE ASSESSMENT OF CONDITIONS WITHIN BUFFER AREAS FOR PURPOSES OF EVALUATING THE CURRENT YEAR'S SUCCESS STANDARDS. AT THE TIME OF EACH MONITORING, THE FOLLOWING INFORMATION SHALL BE COLLECTED WITHIN BUFFER AREAS AND ASSESSED RELATIVE TO THE SUCCESS STANDARDS ESTABLISHED FOR THE PROJECT:

THE CONDITION OF INSTALLED PLANT STOCK INCLUDING SURVIVORSHIP, HEALTH, AND VIGOR. THE RATIONALE FOR POOR CONDITIONS, IF PRESENT, WILL BE DETERMINED.

A DIRECT COUNT INVENTORY AND ASSESSMENT OF INSTALLED PLANT STOCK SHALL BE USED TO EVALUATE PLANT STOCK CONDITIONS. IN ADDITION, PHOTOGRAPHS OF BUFFER AREAS SHALL BE TAKEN FROM THE PERMANENT PHOTO POINTS ESTABLISHED DURING THE AS-BUILT.

THE RESULTS OF EACH MONITORING ASSESSMENT SHALL BE SUMMARIZED IN A WRITTEN REPORT AND SUBMITTED TO THE CITY OF MERCER ISLAND NO LATER THAN NOVEMBER 30 OF THE RESPECTIVE MONITORING YEAR.

CONTINGENCY PLAN

SHOULD ANY COMPLIANCE MONITORING ASSESSMENT REVEAL THAT THE PERFORMANCE STANDARDS FOR THE RESPECTIVE YEAR ARE NOT SATISFIED, THE PERMITTEE SHALL WORK WITH THE CITY OF MERCER ISLAND TO DEVELOP A CONTINGENCY PLAN TO ADDRESS THE DEFICIENCY(IES). CONTINGENCY PLANS CAN INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING ACTIONS:

- ADDITIONAL PLANT INSTALLATION:
- 2. EROSION CONTROL;
- 3. HERBIVORY PROTECTION:
- 4. MODIFICATION TO THE IRRIGATION REGIME; AND/OR 5. PLANT SUBSTITUTIONS OF TYPE, SIZE, QUANTITY, AND LOCATION.

SUCH CONTINGENCY PLAN SHALL BE SUBMITTED TO THE CITY OF MERCER ISLAND BY JANUARY 31 OF ANY YEAR WHEN DEFICIENCIES ARE DISCOVERED. UNLESS OTHERWISE APPROVED BY THE CITY OF MERCER ISLAND, ACTIONS SPECIFIED ON AN APPROVED CONTINGENCY PLAN MUST BE COMPLETED WITHIN 60 DAYS. IF THE FAILURE IS SUBSTANTIAL, THE CITY OF MERCER ISLAND MAY EXTEND THE COMPLIANCE MONITORING PERIOD FOR THE ENHANCEMENT WORK.

MAINTENANCE PLAN

THIS SECTION PROVIDES A GENERAL OVERVIEW OF THE MAINTENANCE PROGRAM NECESSARY TO ENSURE THE PERFORMANCE STANDARDS ESTABLISHED FOR THIS PLAN ARE SATISFIED.

GENERAL MAINTENANCE

INSTALLED PLANTS SHALL BE MAINTAINED AT REGULAR INTERVALS DURING THE MONITORING PERIOD TO PROMOTE THE SUCCESSFUL ESTABLISHMENT AND VIGOROUS GROWTH OF THE INSTALLED PLANT STOCK.

GENERAL MAINTENANCE SHALL INCLUDE:

- 1. RE-APPLYING BARK MULCH TO MAINTAIN A 6" MINIMUM APPLIED THICKNESS - YEAR 1 ONLY.
- 3. THE PRUNING OF INSTALLED PLANTS TO REMOVE DEAD WOOD AND PROMOTE VIGOROUS PLANT GROWTH AND PROPER FORM.
- 4. THE REPLACEMENT OF PLANTS THAT APPEAR TO BE IN DISTRESS AND/OR
- 5. THE REMOVAL OF TRASH, LITTER, AND/OR OTHER NON-DECOMPOSING

GENERAL MAINTENANCE WORK SHALL OCCUR MONTHLY DURING THE GROWING SEASON AND/OR AT A FREQUENCY OTHERWISE NECESSARY TO ENSURE THE SUCCESSFUL ESTABLISHMENT AND VIGOROUS GROWTH OF THE INSTALLED PLANTS.

TABLE 1-1: GOALS, OBJECTIVES, MONITORING SCHEDULE, & PERFORMANCE STANDARDS

GOAL	OBJECTIVE	SCHEDULE	PERFORMANCE STANDARDS
TO SUCCESSFULLY ENHANCE ON-SITE WETLAND AND BUFFER AREAS USING NATIVE PLANT SPECIES.	TO INSTALL AND SUCCESSFULLY ESTABLISH 60 NATIVE CONIFER TREE SPECIES.	AUGUST OR SEPTEMBER OF YEARS 1, 2, 3, 4, & 5 FOLLOWING PLANT INITIAL INSTALLATION	 100% SURVIVAL BY INSTALLED PLANT STOCK AFTER THE FIRST GROWING SEASON (YEAR 1). THIS STANDARD CAN BE MET THROUGH PLANT ESTABLISHMENT OR REPLANTING, AS NECESSARY, TO ACHIEVE THE REQUIRED PLANT NUMBERS. 85% SURVIVAL BY INSTALLED PLANT STOCK AFTER THE FIFTH GROWING SEASON (YEAR 5).

PLACE TOP OF ROOTBALL 1 INCH ABOVE THE LEVEL OF NATIVE SOIL. BEFORE MULCH, POTTING SOIL SHOULD BE VISIBLE MULCH AT BASE OF PLANT (6" MINIMUM THICKNESS) ANNI MARKATANA **CUT CIRCLING ROOTS** AND SPREAD OR BACKFILL WITH NATIVE "BUTTERFLY" ROOTBALL. SOIL. COMPACT BY HAND. NATIVE SOIL MIN. 1.5 TIMES THE WIDTH OF THE ROOTBALL

TREE INSTALLATION DETAILS

GENERAL NOTES:

- 1. WORK SHALL CONFORM TO ANY AND ALL APPLICABLE PERMITS AND/OR APPROVED CONSTRUCTION DRAWINGS.
- . WORK SHALL BE COMPLETED BY PERSONS EXPERIENCED IN THE ENHANCEMENT WORK SHOWN ON THESE DRAWINGS.
- BEFORE THE START OF CONSTRUCTION, A PRE-CONSTRUCTION MEETING MUST BE HELD BETWEEN MERCER ISLAND, THE OWNER, AND THE PLAN DESIGNER.
- . A COPY OF THESE APPROVED DRAWINGS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
- SITE CONDITIONS MAY VARY BASED ON SEASON AND/OR TIME OF YEAR. THE CONSTRUCTION CONTRACTOR SHALL ACCOMMODATE REALIZED AND ANTICIPATED SITE CONDITIONS WHEN COMPLETING THE WORK SHOWN ON THESE DRAWINGS.



Know what's **below. Call before you dig.**

UNDERGROUND UTILITY LOCATIONS SHOWN ARE APPROXIMATE. UTILITY LOCATIONS AND CHARACTERISTICS SHOWN ON THIS DRAWING, IF ANY, ARE BASED ON THE FIELD LOCATION OF THE APPARENT SURFACE EVIDENCE OF EXISTING STRUCTURES. THE UNDERGROUND ROUTING AND CONDITION OF BURIED UTILITIES HAS NOT BEEN VERIFIED OR CONFIRMED ADDITIONAL UTILITY LOCATION AND MAPPING MAY BE REQUIRED. FIELD LOCATE, VERIFY DEPTH OF, AND ADEQUATELY PROTECT ALL UTILITIES PRIOR TO THE START OF WORK.

Planting Plan, Notes, Details, & **Monitoring Plan**

DATE: 03/04/2015

DRAWN BY: EARC

CHECK BY: ES

JOB NUMBER: 14-206 DESIGN BY: ES

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