RESTORATION/MONITORING/SPECIFICATIONS/MAINTENANCE

PROJECT RESTORATION

THE GRIFFITH PROPERTY IS A SHORT PLAT SUBDIVISION THAT INCLUDES CREATING 7 NEW LOTS LOCATED THROUGHOUT A FORESTED SITE. THE PROPERTY IS 3.7 ACRES WITH APPROXIMATELY 50 PERCENT OF THE AREA TO REMAIN AS OPEN SPACE. A WETLAND STUDY FOR THE PROJECT WAS PROVIDED BY ECOPACIFIC ENVIRONMENTAL SERVICES (WETLAND DELINEATION REPORT – 148 AVENUE PROJECT SITE, ECOPACIFIC 11/21/05). THERE IS A REGULATED STREAM AND AN ASSOCIATED WETLAND ALONG THE SOUTH SIDE OF THE PROPERTY. THE STREAM IS A PERENNIAL DRAINAGE TRIBUTARY TO KELSEY CREEK AND RATED AS TYPE B. TYPE B STREAMS HAVE A PRIMARY SETBACK BUFFER OF 25 FEET. THE ASSOCIATED WETLAND IS RATED AS TYPE A WITH A PRIMARY BUFFER OF 50 FEET. THE STREAM, ASSOCIATED WETLAND, AND BUFFER AREAS ARE BEING PRESERVED AS A NATIVE GROWTH PROTECTION AREA (NGPA). THERE IS NO FISH USE IN THIS PORTION OF THE STREAM.

IN ORDER TO PROVIDE SANITARY SEWER FOR RESIDENTIAL LOTS, A NEW SEWER LINE INSTALLATION WILL REQUIRE CROSSING THE STREAM AND WETLAND TO CONNECT WITH AN EXISTING MANHOLE ON THE SOUTHWEST SIDE OF THE SITE. THE LINEAL LENGTH OF THE PROPOSED CROSSING THROUGH THE NGPA IS APPROXIMATELY 180 FEET. AS CONDITIONED BY THE CITY OF BELLEVUE (7/22/09 LETTER TO MR. EVAN MCMULLEN), ALL SEWER LINE WORK WITHIN THE NGPA WILL BE HAND–EXCAVATED. THE SEWER INSTALLATION REQUIRES A MINIMUM EXCAVATION DEPTH OF 3 FEET WITHIN A 15–FOOT WIDE SEWER EASEMENT. THE STREAM, WETLAND, AND BUFFER AREA IMPACTS WILL BE KEPT TO A MINIMUM AND WILL BE A TEMPORARY DISTURBANCE.

THE NEW ROAD (NE 15TH PL.) WILL BE CONSTRUCTED DIRECTLY ADJACENT TO A PORTION OF WETLAND BUFFER. RESTORATION PLANTINGS WILL BE ADDED TO THE EDGE OF WETLAND A'S BUFFER ALONG THE NE 15TH PL. AFTER CONSTRUCTION IS COMPLETED.

THE PRIMARY PURPOSE OF THIS PLAN IS TO RESTORE THE ON–SITE WETLAND, STREAM, AND BUFFER AREAS THAT WILL BE DISTURBED BY THE SEWER INSTALLATION. THE RESTORATION WILL COMPENSATE FOR RELATED IMPACTS BY REPLACING TOPSOIL AND PLANTING WITHIN THE SEWER EASEMENT. PLANTING DETAILS AND NOTES ARE SHOWN ON THE WETLAND AND BUFFER RESTORATION PLAN, SHEET 1 (TRIAD ASSOCIATES, 2009). THIS RESTORATION PLAN INCLUDES THE TYPICAL COMPONENTS OF A FINAL MITIGATION PLAN INCLUDING MAINTENANCE AND MONITORING PROGRAMS. THE INTENT OF THE PLAN IS TO FACILITATE REASONABLE DEVELOPMENT OF THE GRIFFITH PROPERTY AND MAINTAIN OR IMPROVE THE CONDITIONS OF THE ON–SITE STREAM CORRIDOR AND WETLAND.

MITIGATION GOALS

- MINIMIZE POTENTIAL IMPACTS TO EXISTING STREAM AND WETLAND HABITAT & FUNCTION BY INSTALLING THE SEWER LINE AT MINIMUM DEPTHS WHERE FEASIBLE.
- IMPROVE OR MAINTAIN EXISTING STREAM AND WETLAND HABITAT & FUNCTION BY PLANTING NATIVE SHRUB AND GROUNDCOVER SPECIES WITHIN DISTURBED AREAS.
- MAINTAIN EXISTING STREAM AND WETLAND HYDROLOGY BY REPLACING NATIVE SOIL AND COVER TO PRE–INSTALLATION ELEVATIONS WITHIN THE SEWER EASEMENT.

PERFORMANCE STANDARDS

- PROVIDE STREAM, WETLAND, AND BUFFER RESTORATION OF THE SEWER UTILITY INSTALLATION.
- ESTABLISH AT LEAST 4 NATIVE SHRUB SPECIES & 4 NATIVE GROUNDCOVER SPECIES.
- PROVIDE AT LEAST 80 PERCENT COMBINED COVER OF INSTALLED SHRUB AND GROUNDCOVER PLANTS BY THE END OF THE 3 YEARS OF MONITORING.
- MAINTAIN LESS THAN 10 PERCENT NON–NATIVE, INVASIVE PLANT COVER IN PLANTED AREAS BY THE END OF THE 3 YEARS OF MONITORING.

PERFORMANCE SECURITY

PER THE CITY'S CRITICAL AREAS CODE (LAND USE CODE 20.25.110), A PERFORMANCE SECURITY OR OTHER INSTRUMENT IS REQUIRED TO GUARANTEE MITIGATION SUCCESS. GENERALLY, RESTORATION COSTS ASSOCIATED WITH INSTALLATION, MAINTENANCE, AND MONITORING ARE USED FOR PERFORMANCE SECURITY. ACTUAL COSTS MAY VARY DEPENDING ON SEVERAL FACTORS, INCLUDING; 1) SOURCE OF PLANT MATERIAL, 2) SITE PREPARATION WORK, 3) CONTRACT LANDSCAPER, AND 4) CONSULTANT HIRED FOR MONITORING. AN ESTIMATED COST OR CONTRACT BIDS FOR MITIGATION ENHANCEMENT WORK MAY BE USED TO DETERMINE A PERFORMANCE SECURITY. ALTERNATIVELY, THE CITY MAY PROVIDE A BOND WORKSHEET CALCULATION METHOD TO DETERMINE SECURITY.

SCHEDULE

THE PREFERABLE TIME TO IMPLEMENT THE PLANTING PORTION OF THIS PLAN IS DURING THE FALL/WINTER SEASON. THE PROPONENT ANTICIPATES IMPLEMENTING THIS PLAN DURING THE FALL/WINTER OF 2010. INSTALLING THE SEWER LINE OR ANY SURFACE GRADING ACTIVITIES WITHIN WETLAND AREAS SHOULD OCCUR PRIOR TO WET SEASON CONDITIONS. A QUALIFIED PROFESSIONAL (PROJECT ECOLOGIST) WILL PROVIDE NECESSARY CONSTRUCTION OVERSIGHT TO MINIMIZE DISTURBANCE TO NATIVE VEGETATION.

PRE–CONSTRUCTION MEETING

A PRE–CONSTRUCTION MEETING WILL BE HELD ON–SITE WITH APPROPRIATE PARTIES THAT MAY INCLUDE PROJECT ECOLOGIST, LANDSCAPE ARCHITECT, LANDSCAPE CONTRACTOR, PROJECT PROPONENT, AND CITY REPRESENTATIVE. DURING THIS MEETING, THE SITE CONDITIONS AND RESTORATION PLAN WILL BE REVIEWED SO THAT ALL PARTICIPANTS UNDERSTAND THE GOALS, SPECIFICATIONS, PLANTING SCHEDULE, AND EXTENT OF PREPARATION AND PLANTING. IF NECESSARY, PLANT SUBSTITUTIONS WILL BE APPROVED AT THIS TIME.

CONSTRUCTION OBSERVATION

FOLLOWING THE PRE–CONSTRUCTION MEETING, THE WETLAND, STREAM, AND BUFFER AREAS, EXISTING VEGETATION/TREES TO REMAIN, AND SPECIFIC PLANTINGS WILL BE STAKED OR MARKED AS NEEDED. THE PROJECT ECOLOGIST WILL FLAG EXISTING TREES/VEGETATION TO REMAIN ALONG THE SEWER EASEMENT.

TOPOGRAPHIC ELEVATIONS REPRESENTED ON THIS PLAN ARE BASED UPON TOPOGRAPHIC MAPS SUPPLIED BY TRIAD ASSOCIATES. FINAL ELEVATIONS MAY VARY DEPENDING ON SITE–SPECIFIC CONDITIONS. IT IS THE RESPONSIBILITY OF THE (UTILITY) CONTRACTOR TO VERIFY PRE–CONSTRUCTION TOPOGRAPHIC ELEVATIONS AND TREE LOCATIONS FOR ACCURACY PRIOR TO EXCAVATION. THE PROJECT ECOLOGIST'S ROLE IS TO OVERSEE IMPLEMENTATION OF THE PLAN AND TO INSURE THAT ALL SPECIFICATIONS ARE MET.

THE PROJECT ECOLOGIST WILL OBSERVE SITE PREPARATION AND PLANTING PHASES.

COMPLIANCE MONITORING

THE (UTILITY) CONTRACTOR WILL NOTIFY THE PROJECT ECOLOGIST AND PROJECT PROPONENT WHEN GRADING WILL BEGIN TO INSTALL THE SANITARY SEWER LINE. THE LANDSCAPE CONTRACTOR WILL NOTIFY THE PROJECT ECOLOGIST AND PROJECT PROPONENT WHEN PLANTING WILL BEGIN AND WHEN IT HAS BEEN COMPLETED. THE PROJECT ECOLOGIST WILL COMPLETE A REVIEW OF THE PLAN AND INSPECT THE MITIGATION AREAS TO ASSESS COMPLIANCE. THE PROJECT ECOLOGIST WILL PROVIDE CONSTRUCTION OVERSIGHT DURING GRADING AND PLANTING ACTIVITIES CONTAINED IN THE PLAN. A REPORT OF COMPLIANCE, INCLUDING ANY DEFICIENCIES AND RESOLUTIONS, WILL BE PREPARED FOR THE CITY WITHIN 30 DAYS AFTER PLANTING IS COMPLETED. ASSUMING INSTALLATION OCCURS AS PLANNED, THE FIRST COMPLIANCE MONITORING EVENT WOULD OCCUR LATE IN 2010 OR EARLY IN 2011 TO VERIFY COMPLETE PLAN IMPLEMENTATION. SUBSEQUENT MONITORING, REPORTING, AND MAINTENANCE WILL FOLLOW THE MONITORING PROGRAM DURING THE 3 YEARS AFTER THE INSTALLATION. LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR PLANT INSTALLATION AND MAINTENANCE A FULL YEAR AFTER THE APPROVED INSTALLATION.

MONITORING PROGRAM

AN ECOLOGIST (QUALIFIED PROFESSIONAL) WILL MONITOR THE MITIGATION AREA FOLLOWING INSTALLATION, FOR A MINIMUM OF 3 YEARS. FIELD OBSERVATIONS OF THE WETLAND, STREAM, AND BUFFER RESTORATION WILL BE AT THE END OF THE GROWING SEASON (9/1 TO 9/30) ANNUALLY FOR YEARS 1 THROUGH 3.

AT THE OF THE GROWING SEASON DURING THE MONTH OF SEPTEMBER, MONITORING WILL BE AS FOLLOWS:

- COUNT ALL INSTALLED SHRUBS IN THE RESTORATION AREAS FOR MORTALITY/SURVIVAL AND ESTIMATE OVERALL COVER PERCENTAGE.
- ASSESS THE HEALTH OF ALL INSTALLED PLANTS IN THE MITIGATION AREAS FOR ANY POTENTIAL DISEASE OR INFESTATION.
- IDENTIFY SIGNIFICANT COVER OF WEEDS, BY SPECIES, AND REQUIRE MAINTENANCE OR REMOVAL IN ORDER TO PROMOTE THE GROWTH AND SURVIVAL OF ALL INSTALLED PLANTS.
- PHOTOGRAPH THE MITIGATION AREAS FROM AT LEAST THREE LOCATIONS. THE LOCATION AND DIRECTION OF EACH PHOTOGRAPH SHALL BE CONSISTENT AMONG MONITORING PERIODS, BE REPRESENTATIVE OF RESTORED AND ENHANCED AREAS, AND BE REPRESENTED ON A MAP (I.E., PROPERLY LOCATED AND LABELED).

SUBMIT THE RESULTS OF ANNUAL MONITORING TO THE CITY OF BELLEVUE WITHIN 30 DAYS FOLLOWING FIELD MONITORING.

CONTINGENCY PLAN

AT THE DIRECTION OF THE PROJECT ECOLOGIST, THE PROPONENT WILL REPLACE ALL SHRUBS THAT ARE DEAD OR DYING EACH YEAR DURING THE REMAINING PORTION OF THE 3–YEAR MONITORING PERIOD. SHOULD THE DESIRED MITIGATION GOALS AND PERFORMANCE STANDARDS NOT BE ACHIEVED, A DETERMINATION WILL BE MADE BY A CITY REPRESENTATIVE, THE PROJECT ECOLOGIST, AND THE PROJECT PROPONENT TO IMPLEMENT A CONTINGENCY PLAN. THE ECOLOGIST WILL ASSESS REASONS FOR REPEATED FAILURE AND MAKE RECOMMENDATIONS TO THE CITY.

POTENTIAL CONTINGENCY IS TWO–FOLD, INCLUDING (1) TO REPLACE PLANTS THAT HAVE NOT SURVIVED AT ACCEPTABLE PERFORMANCE STANDARDS DURING THE 3–YEAR MONITORING PERIOD, AND (2) TO DETERMINE AND RECTIFY THE CAUSE OF SIGNIFICANT MORTALITY (50 PERCENT OR GREATER) OF ANY RESTORATION AREA OR PLANT SPECIES. PLAN DESIGN AND IMPLEMENTATION WILL PROCEED WITH CITY APPROVAL, AND IF NEEDED, ADDITIONAL MAINTENANCE AND MONITORING.

SPECIFICATIONS

SITE PREPARATION

A PRE–CONSTRUCTION MEETING WILL BE HELD WITH PARTICIPATING CONTRACTORS, CITY REPRESENTATIVE, AND PROJECT ECOLOGIST BEFORE WORK COMMENCES IN WETLAND AND STREAM MITIGATION AREAS. THE APPROVED PLAN WILL BE REVIEWED SO THAT ALL PARTICIPANTS UNDERSTAND THE GOALS, SPECIFICATIONS, AND THE EXTENT OF CLEARING, GRUBBING, AND PLANTING. BECAUSE THIS PLAN IS A RESTORATION PROJECT INVOLVING SPECIFIC CLEARING AND GRADING FOR SEWER INSTALLATION, CONSTRUCTION OVERSIGHT FROM THE PROJECT ECOLOGIST IS NECESSARY.

THE (UTILITY) CONTRACTOR WILL BE RESPONSIBLE FOR AVOIDING DISTURBANCE TO EXISTING VEGETATION TO REMAIN. THE PROJECT ECOLOGIST WILL ALSO ASSIST BY FLAGGING THE VEGETATION TO BE SAVED AND/OR VEGETATION TO BE REMOVED. AS CONDITIONED BY THE CITY, SURFACE GRUBBING AND SEWER LINE INSTALLATION WILL BE HAND–EXCAVATED.

STREAM AND WETLAND GRADING

EARTHWORK RELATED TO THIS PLAN IS LIMITED BUT WILL REQUIRE GRADING AND EXCAVATING IN THE STREAM AND WETLAND AREAS PRIOR TO THE WET, WINTER SEASON. CONSTRUCTION MUST BE PERFORMED ACCORDING TO CITY STANDARDS, CODES, AND PERMIT CONDITIONS. IF NECESSARY OR REQUIRED BY CITY PERMIT, EROSION CONTROL MEASURES WILL BE INSTALLED ON THE DOWNSLOPE SIDE OF CLEARING WORK. THE PROJECT PROPONENT IS RESPONSIBLE FOR OBTAINING REQUIRED PERMITS BEFORE THE START OF CONSTRUCTION. STREAM, WETLAND, AND BUFFER AREAS WILL BE RESTORED IMMEDIATELY AFTER THE SEWER LINE IS INSTALLED. RESTORATION PLANTING WILL OCCUR AS SOON AS POSSIBLE DEPENDING ON SEASONAL WEATHER CONDITIONS.

SPECIFIC GRADING AND SEWER INSTALLATION DETAILS ARE SHOWN ON ENGINEERING DRAWINGS PROVIDED BY TRIAD ASSOCIATES. THE CONSTRUCTION SEQUENCE FOR THE RESTORATION WORK IS AS FOLLOWS:

1. INSTALL SEWER LINE OR EXCAVATE DURING THE SUMMER MONTHS, PREFERABLY IN SEPTEMBER. A PROJECT ECOLOGIST WILL BE ON–SITE WHEN THE SEWER LINE CONSTRUCTION BEGINS IN THE NGPA. ON–GOING CONSTRUCTION COORDINATION WILL SERVE TO MINIMIZE STREAM AND WETLAND DISTURBANCE.

2. DURING EXCAVATION, THE TOPSOIL 12 TO 18 INCHES DEEP WILL BE STOCKPILED SEPARATELY, AS SIDE–CAST MATERIAL, TO PRESERVE ROOTS AND SEEDS. THIS SOIL WILL BE REPLACED IN ORIGINAL LOCATIONS, AS BEST AS POSSIBLE, AS THE TOPSOIL LAYER AFTER THE SEWER LINE IS INSTALLED.

3. TO REDUCE GROUNDWATER BLOCKAGE OR DIVERSION AROUND THE SEWER LINE, PEA GRAVEL OR OTHER SIMILAR NATURAL MATERIAL WILL BE USED AS BEDDING AROUND THE PIPE TO ALLOW UNRESTRICTED WATER MOVEMENT.

4. IF APPROPRIATE HYDROLOGY AND TEMPERATURES ARE PRESENT, THE EMERGENT PLANT TUBERS AND SPRIGS WILL BE PLANTED WITHIN 24 HOURS.

5. THE SEWER LINE ALIGNMENT IS PROPOSED TO MINIMIZE INTRUSION IN THE NGPA AS FEASIBLE. NATIVE VEGETATION COVER REMOVED FOR CONSTRUCTION WILL BE EQUALLY REPLACED.

6. IF AREAS DISTURBED WITHIN THE SEWER LINE EASEMENT REQUIRE SEEDING, ALL SEED MIXES WILL BE COMPRISED OF NATIVE HERBACEOUS SPECIES AND APPROVED BY THE PROJECT ECOLOGIST.

PLANTING SPECIFICATIONS

THE PLANTS IN THE WETLAND AND STREAM RESTORATION AREAS MUST BE INSTALLED ACCORDING TO THIS PLAN. INSTALL SHRUBS AND EMERGENTS INDIVIDUALLY AS INDICATED ON THE WETLAND AND BUFFER RESTORATION PLAN (SHEET 1) AS ACCURATELY AS POSSIBLE. IT IS RECOGNIZED THAT ACTUAL PLANTING LOCATIONS MAY VARY FROM THOSE SHOWN DUE TO APPROXIMATE LOCATIONS OF EXISTING VEGETATION TO REMAIN. HOWEVER, PLANT LOCATION AND SPECIES CHANGES WILL REQUIRE APPROVAL FROM THE PROJECT ECOLOGIST.

ALL PLANTS AND PLANTING ACTIVITIES SHALL CONFORM TO NORMAL LANDSCAPE INDUSTRY STANDARDS. ONLY SOUND, HEALTHY, VIGOROUS PLANTS FREE OF DEFECTS, DISEASE, AND INFESTATIONS SHALL BE USED. PLANT MATERIALS WILL BE NATIVE TO THE PACIFIC NORTHWEST, PREFERABLY FROM THE PUGET SOUND REGION AND LOCALLY GROWN, CONTAINERIZED UNLESS OTHERWISE SPECIFIED. PLANT MATERIALS WILL BE HEALTHY, IN VIGOROUS GROWING CONDITION, FREE FROM DISEASE INFESTATION, AND CORRECT SIZE, NAME, AND VARIETY. PLANT SPECIES AND QUANTITIES ARE TO BE APPROVED BY THE PROJECT ECOLOGIST PRIOR TO INSTALLATION. PLANT SUBSTITUTIONS WILL BE SUBJECT TO APPROVAL BY THE PROJECT ECOLOGIST PERFORMING CONSTRUCTION MANAGEMENT AND THE CITY OF BELLEVUE.

SHRUBS WILL BE A MINIMUM HEIGHT OF 2 FEET AND IF DECIDUOUS, HAVE A MINIMUM OF THREE CANES.

LIVE STAKE CUTTINGS WILL BE GROWN OR COLLECTED IN THE PACIFIC NORTHWEST. CUTTINGS WILL BE A MINIMUM OF 4' IN LENGTH AND AT LEAST 1/2" DIAMETER.

PLANTING WILL OCCUR BETWEEN OCTOBER AND MARCH WITH THE LATE FALL TO EARLY WINTER PERIOD BEING THE PREFERRED TIME. THE PROJECT ECOLOGIST WILL INSPECT PLANT MATERIAL AND APPROVE THE PLANTING LOCATIONS OF ALL PLANTS AND PLANT GROUPINGS PRIOR TO PLANTING.

PLANT INSTALLATION

DIG, PACK, TRANSPORT, AND HANDLE ALL PLANTS WITH CARE TO ENSURE PROTECTION FROM INJURY. STORE PLANTS IN A MANNER THAT WILL NOT ALLOW THE ROOTS TO DRY OUT. KEEP PLANTS MOIST AND SHADED UNTIL THE ACTUAL TIME OF INSTALLATION. BEFORE AND AFTER PLANTING SATURATE THE SOIL IN THE PLANTING AREA TO PREVENT CAPILLARY STRESS. PLANTING IN THE WETLAND AND RIPARIAN AREAS MAY NOT NEED WATERING DEPENDING ON TIME OF YEAR, WEATHER CONDITIONS, AND DEPTH TO SHALLOW GROUNDWATER.

LIVE STAKE CUTTINGS WILL BE INSTALLED 4' ON–CENTER WITH 3 CUTTINGS AND AT A MINIMUM DEPTH OF 1'. CUTTINGS MUST BE KEPT COVERED AND MOIST DURING STORAGE AND TRANSPORT. PREFERABLY, CUTTINGS WILL BE INSTALLED WITHIN A 24–HOUR PERIOD FROM HARVEST BUT NOT MORE THAN 48 HOURS FROM HARVEST. LIVE STAKE CUTTINGS WILL ONLY BE USED PLANTING OCCURS BETWEEN OCTOBER 1ST AND MARCH 1ST. PLANT SPACING FOR LISTED SPECIES IS TO BE RANDOM (NATURALISTIC) AND NOT N A GRID PATTERN. USE PLANTING DETAILS SHOWN ON SHEET 1WITH THE FOLLOWING ADDITIONAL NOTES:

1. EXCAVATE PLANTING PITS AS SHOWN IN PLANTING DETAILS. REMOVE ANY NATIVE SOIL THAT CONTAINS BLACKBERRY ROOTS. PLANT SHRUB 1/2 INCH HIGHER THAN DEPTH GROWN AT NURSERY AND LOOSEN ROOTBALL OF CONTAINER PLANTS PRIOR TO PLANTING.

2. BACKFILL PLANTING PITS WITH WEED FREE NATIVE TOPSOIL OR AMENDED COMPOST SOIL. ADD SOIL MOISTURE RETENTION AGENT, SUCH AS HYDRATED SOILMOIST, OR APPROVED EQUAL. ALSO IN SAME AREAS ADD FERTILIZER – USE SLOW–RELEASE, HIGH NITROGEN (21–3–7) CONTENT (FERTILIZER TABS – 21 GRAMS; 4 PER TREE, 2 PER SHRUB). FOLLOW MANUFACTURER APPLICATION RATES FOR SOILS MOISTURE RETENTION AGENT AND FERTILIZER. DO NOT ADD ANY CHEMICALS TO PLANTINGS ON LOWER FLAT AREAS ADJACENT TO THE STREAM CHANNEL OR IN THE WETLAND.

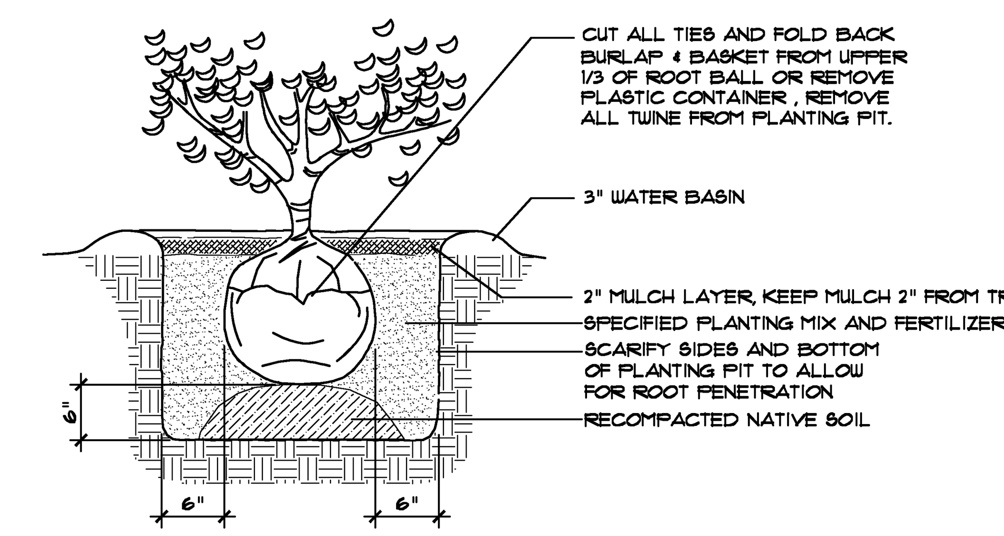
3. IF NECESSARY, WATER EACH PLANT THOROUGHLY AFTER PLANTING. SLOPE AREA PLANTINGS WILL REQUIRE MORE ATTENTION TO WATERING FOR MITIGATING POTENTIAL DROUGHT CONDITIONS.

MAINTENANCE

MAINTENANCE WILL BE CONDUCTED ON A ROUTINE, YEARLY BASIS FOR 3 YEARS FOLLOWING INSTALLATION. THE NEED FOR MAINTENANCE WILL BE EVALUATED BY A QUALIFIED PROFESSIONAL. THE MONITORING PROGRAM'S SCHEDULE WILL ASSURE MAINTENANCE AND SUCCESS CRITERIA ARE ACCOMPLISHED PRIOR TO OR AT THE END OF THE MITIGATION PERIOD. CONTINGENCY OR REMEDIAL MEASURES WILL BE IMPLEMENTED ON AN AS–NEEDED BASIS AT THE DIRECTION OF THE PROJECT ECOLOGIST OR CITY REPRESENTATIVE. MAINTENANCE OF THE RESTORATION AREAS INCLUDES THE FOLLOWING:

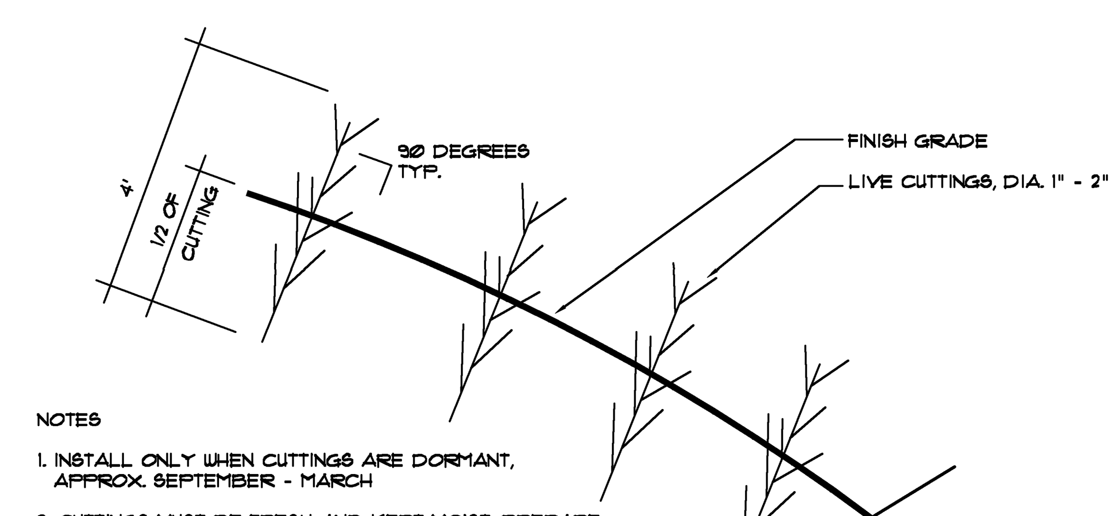
- IRRIGATE OR WATER 1 TO 2 INCHES WEEKLY FROM JULY 1 THROUGH SEPTEMBER 30 DURING THE FIRST TWO YEARS AFTER THE PLANTS ARE INSTALLED, OR AS NEEDED.
- MAINTENANCE MEASURES INCLUDE RESETTING PLANTS TO PROPER GRADE AND UPRIGHT POSITIONS. WEED CONTROL SHOULD BE PERFORMED BY HAND REMOVAL, INSTALLATION OF WEED BARRIER MAT WITH MULCH RINGS, OR SELECTIVE WEED–WHACKING. IF WEED–WHACKING IS PERFORMED, EXTREME CARE WILL BE TAKEN TO PREVENT DAMAGE TO DESIRED NATIVE SPECIES PLANTED OR VOLUNTEER ESTABLISHED.
- REMOVE WEEDS FOR 3 YEARS AFTER INSTALLATION. WEED MAINTENANCE IS NOT ANTICIPATED BUT WILL OCCUR PRIOR TO JUNE 1 ON A YEARLY BASIS. WEEDS MAY INCLUDE NON–NATIVE VEGETATION SUCH AS HIMALAYAN BLACKBERRY (RUBUS DISCOLOR), REED CANARY GRASS (PHALARIS ARUNDINACEA), EVERGREEN BLACKBERRY (RUBUS LACINIATUS) SCOT'S BROOM (CYTISUS SCOPARIUS),),ENGLISH IVY (HEDERA HELIX), MORNING GLORY (CONVOLVULUS ARVENIS), JAPANESE KNOTWEED (POLYGONUM CUSPIDATUM) ETC.

MAINTENANCE IS TO BE PROVIDED BY PROJECT'S LANDSCAPE CONTRACTOR FOR ONE YEAR FOLLOWING CONSTRUCTION/INSTALLATION BEGINNING AT FINAL ACCEPTANCE OF THE PLAN. TO MAINTAIN THE HEALTHY GROWTH OF RESTORATION PLANTINGS, THE FOLLOWING ACTIONS MAY BE REQUIRED: REPAIR TREE STAKES, RE–SET PLANTS TO PROPER GRADE, CONTROL INVASIVE PLANTS, AND PROVIDE ADEQUATE WATER APPLICATION THROUGH THE FIRST TWO YEARS AFTER INSTALLATION.



TYPICAL SHRUB PLANTING DETAIL

NOT TO SCALE



NOTES

1. INSTALL ONLY WHEN CUTTINGS ARE DORMANT, APPROX. SEPTEMBER - MARCH
2. CUTTINGS MUST BE FRESH AND KEPT MOIST. PREPARE & INSTALL WITHIN 24 HOURS.
3. DO NOT SPLIT CUTTINGS DURING PLACEMENT.

LIVE STAKE PLANTING DETAIL

NOT TO SCALE

PLAN PREPARED IN CONJUNCTION WITH GARY SCHULZ, WETLAND ECOLOGIST
7700 S LAKERIDGE DRIVE
SEATTLE, WA 98178
206.772.6514

© 2009 TRIAD ASSOCIATES

REVIEWED BY: DATE:

NO	DATE	BY	APPR	REVISIONS
2	3/10/10	DL		PER CITY COMMENTS

TRIAD ASSOCIATES
Land Development Consultants
12112 115th Ave. NE
Kirkland, WA 98034-6929
425.821.8448
425.821.3481 fax
800.488.0756 toll free
www. triadassociates.net

RICHARD A. TOMKINS, PE — PROJECT MANAGER
ROBERT E. WALLIS, PLS — PROJECT SURVEYOR
RICHARD A. TOMKINS, PE — PROJECT ENGINEER
DENISE LIFTIN 11/16/09 — LANDSCAPE ARCH DATE
SCALE: HORIZ: 1"=30' VERT. N/A

GRIFFITH
1405 148TH AVE NE
09-114656 GE

CITY OF BELLEVUE, WASHINGTON

UTILITY GRID # GRID J-6

WETLAND AND BUFFER RESTORATION PLAN NOTES AND DETAILS

JOB NUMBER: 05-289

SEC 27 TWP 25 RGE 5 SHT 10 OF 10

dliftin, Mar 08, 2010 – 9:33am
E:\PROJECTS\05289\dwgfiles\Final\Clearing_and_TESC\Landscape\05289-wl1.dwg, TDS10, 05289-BS1 3d05289PSV 05289-TO1 05289ESV 05289TSV 3d05289PNT 05289-TRBS1 05289-FG1,